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Example

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CONTENTS

Basic information	2
CONTENTS	6
Globalization and geographical education, Rositsa Vladeva, Ivailo Vladev	7
Training in electronic environment – a challenge for geographical education, Rositsa Vladeva, Penka Ruseva	17
An example didactic model for learning in an interactive environment, Petinka Galcheva, Ivailo Traykov	24
Options for the formation of value orientations in the geography and economics training in 10 th grade, Gergana Hristova	30
The teaching content in geography and economics in 5 class as a factor for the formation of cartographic knowledge and skills, Dimitar Dimitrov	36
Model for formation of social and civic key competences in geography and economics training in the first high school stage, ZlatinaDimova	41

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Globalization and geographical education

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***Abstract:** The study attempts to analyze global education and its contemporary dimensions. Its nature and features are revealed. The projections of global education in Europe and Bulgaria are highlighted. At the same time, the main directions of the globalization of education are analyzed, which are compared with the global education. The place of geographical education in the modern dimensions of global education is proved.*

***Keywords:** global education, globalization of education, geographical education*

Introduction

In the conditions of increasing globalization, the world is facing the solution of a number of geoglobal problems of our time. Attempts to solve them have a direct impact on the education system. It is one of the most important for modern society, because through it one invests in all spheres of material and spiritual life of mankind for different future periods of time depending on the importance of the realized directions of the leading educational policies.

Materials and Methods

The purpose of this study is to analyze the impact of globalization on modern education and geographical education as part of it.

The research methods used are analysis of literature sources and comparative analysis.

Results and Discussion

Globalization

One of the essential characteristics of the modern development of society is its globalization. It is known as international integration on a large scale in all areas of the economy, culture and society. Globalization is a complex process that determines the comprehensive changes in our time. Globalization presupposes relative „infinity“ and action beyond distances in seemingly divided worlds of continents and countries [2].

The processes of globalization should be studied in the context of the connection of geoglobal problems with some aspects of economic and social life in global, regional and national aspects [8]. From a socio-economic point of view, globalization is characterized by changes in economic structures, leading

to the consolidation of the international market and the creation of conditions for growth in the world economy. This is related to new aspects in the development of human resources, politics and culture, which follow the economic globalization trends.

It is especially important to analyze the individual dimensions of globalization in order to gain a more concrete idea of its essence. According to the American sociologist Chase-Dunn, five clearly identifiable aspects of globalization can be distinguished. They are visualized in Figure 1.

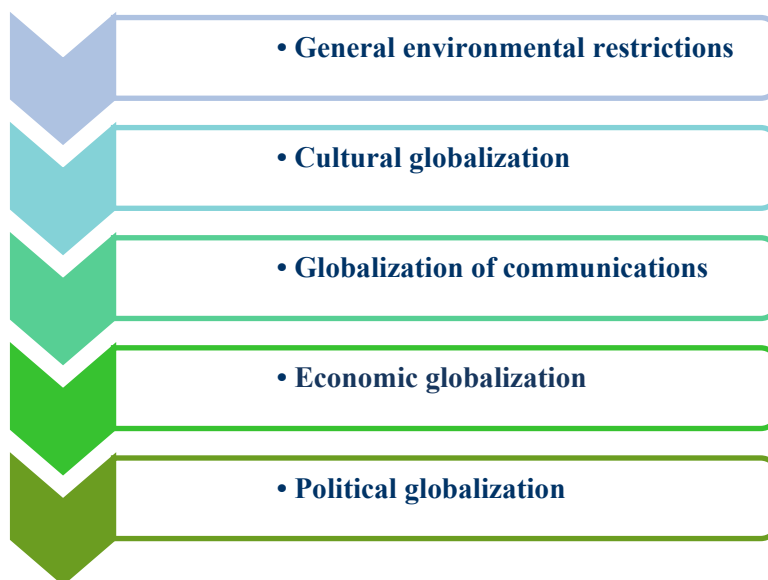


Figure 1. Aspects of globalization, Source: Ch. Chase-Dunn, 1999

Common environmental constraints include global environmental threats posed by ecosystem vulnerabilities and the globalization of environmental risk. Cultural globalization is associated with cultural phenomena for the dissemination of individual values of Western origin to all large groups of the world's population, the recognition of individual rights and identities, and efforts to protect human rights. Communication globalization is caused by the new era of information technology development, and economic globalization is formed on the basis of economic connections covering the entire earth's space between markets, finance, goods, services and networks created by transnational corporations. The essence of political globalization is in the institutionalization of international political structures [3].

The analysis and comprehension of globalization as a process gives grounds for outlining its main characteristics (Fig. 2). The first main feature is related to the novelty of globalization as a phenomenon that should not be identified with previous processes in the development of human society. The complex-integrative character is substantiated with the scope of the social processes in a state of globality while strengthening the degree of integration and interdependence. As a result of its manifestation, global institutional structures of transnational character are being formed to overcome the traditional geographical, economic, political and cultural borders. The unevenness of its course is determined by the form of government, the type of political system and the degree of economic development.

Globalization manifests itself as a process in which the collective and individual identity of the people round the world is changed with the help of the mass media. It can also be characterized as an objective and dynamic process related to the expansion and interaction of economic, political, social and cultural relations between individual regions and countries in them. It acts as a process of intensification of the relations between human communities and their activities, pressing the real subjects of power to the contradiction of the market economy and social policy. This opposition is reflected in all spheres of public life [11].

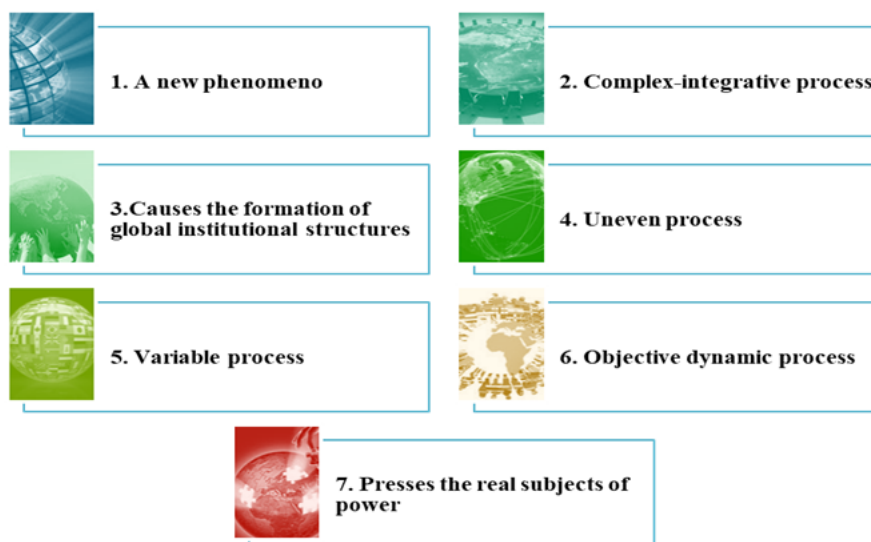


Figure 2. Basic characteristics of globalization, Source: N. Popov, 2009

Global education

In line with the globalizing world, global education is constantly changing and developing. Global education is provoked by the global society and economy with its geo-global problems, which pose new challenges to young people. They are related to the need of realizing and evaluating their role in a global aspect to take initiatives and offer sensible solutions to overcome some of the global problems in the name of a preserved future world.

On the one hand, global education aims to contribute to personal development by responding to the needs of students and young people to have social and civic competencies that are useful to them in the global world. On the other hand, insofar as education has a public function, it meets the needs of society by preparing young citizens who adequately meet the challenges, not only professionally, but also in civic and political terms and actively participate in changing society.

The term „global education“ has been used in English-speaking countries since the 1970s. Americans were the initiators of the promotion of global education, creating the American Forum for Global Education in 1970 in the form of a non-governmental organization that develops the idea of global education in the United States and worldwide.

Based on the idea of the American Forum for Global Education and under the auspices of UNESCO, an international conference entitled „Bridges to the Future“ was held in New York in 1995, at which the ideas of global education were recognized as the most important direction for the development of modern pedagogical science and practice and a goal that must be taken into account in the preparation of the young generations for life in the rapidly changing world in the conditions of growing geo-global problems and global crises.

In Central European countries, for global education has been spoken of since the early 1990s. At the beginning of the 21st century, activities intensified and in 2002 the first European Congress on Global Education was held in Maastricht (Netherlands), at which a strategy for its development was adopted [6].

According to the definition in the Declaration on Global Education adopted at the Congress, it opens the minds and hearts of young people to realize the realities of the globalized world and encourages them to build a fairer and more sustainable future. Global education includes education for development, education for human rights, education for sustainable development, education for peace and conflict prevention and intercultural education, and is a global dimension of civic education [16].

The North-South Center for Global Education, also known as the European Center for Global Interdependence and Solidarity, is identified as the organization that coordinates activities with the Council of Europe. It was created by the Council of Europe to promote cooperation and solidarity between the northern and southern countries on the continent and to improve opportunities for realization of global education and public awareness. Its headquarters is located in Lisbon.

In May 2011, the Committee of Ministers of the Council of Europe adopted the Recommendation on Education for Interdependence and Solidarity, which is the first European normative standard for global education [12].

Important guidelines for the development of global education in Europe are set out in the Declaration on the Promotion of Citizenship and the Common Values of Freedom, Tolerance and Non-Discrimination through Education, adopted in Paris in 2015 by EU Education Ministers and the Commissioner for Education, culture, youth and sports. It promotes intercultural dialogue through all forms of learning in cooperation with other policies and stakeholders, quoting EU documents with good reason for it - the Europe 2020 strategy, Horizon 2020, Erasmus + and others.

The declaration emphasizes the urgent need for cooperation, coordination, exchange within the EU for the acquisition of social, civic and intercultural competences by children and young people through the promotion of democratic values and fundamental rights, social inclusion, non-discrimination and active citizenship [5].

In 2015, the third European Congress on Global Education was held in Zagreb. It discusses the idea of using the term „global civic education“ instead of the term „global education“ and sets goals to achieve linked to:

- Analysis of competencies and methodological framework in global civic education;
- identifying priorities and mechanisms for strengthening of global civic education;
- identifying the contribution and benefits of global civic education to achieve the Sustainable Development Goals in Europe.

The period of development of global education in Europe after 2015 is associated with the realization of international initiatives and the implementation of international directives. One such initiative is the Global Schools project, which started in 2015 as a European project implemented in 10 EU countries by 17 partners, led by the Autonomous Province of Trento and co-financed by the Development Education Program and Awareness Raising of the European Commission. It aims to integrate global education as a horizontal theme and approach for all existing subjects in primary school curricula in the partner countries.

Important guidelines for the realization of the ideas of global education are also indicated in the UN Program for Sustainable Development until 2030, adopted in September 2015. It is the first global strategy agreement of its kind and includes a set of 17 global goals for sustainable development (Fig. 3) and 169 related sub-objectives, which mobilize all countries and stakeholders in their efforts to achieve them by updating the domestic policies of all countries to accomplish common global priorities.


1. Poverty eradication	7. Renewable energy	13. Combating climate change
2. End of hunger	8. Secure work and economic growth	14. Life under water
3. Good health	9. Innovation and infrastructure	15. Life on earth
4. Quality education	10. Reducing inequalities	16. Peace and justice
5. Gender equality	11. Sustainable cities and communities	17. Partnerships for the purposes
6. Clean water and sanitary conditions	12. Responsible consumption	

Figure 3. UN Global Goals for Sustainable Development, Source: Transforming our world: the 2030 Agenda for Sustainable Development

The UN Development Program is based on an approach that respects human rights, as well as the principles of universality, comprehensiveness and shared responsibilities. The focus of development policy is to intensify the interconnections between the three „pillars“ of sustainable development: economic, social and environmental in all countries and is globally oriented. A number of new activities

for social and economic change are included in the implementation of a more holistic approach to achieving the transformative effect of development policy on a horizontal level [17].

In order to achieve global goal 4 for quality education in 2015, the Education 2030 Directive was adopted, which is an integral part of the sustainable development agenda and gives a comprehensive vision of the new educational agenda. In the document the global goal of education is formulated and the seven sub-goals related to it - 4.1, 4.1, 4.3, 4.4, 4.5, 4.6, 4.7 and means of implementation proposed by the Working Group of Sustainable Development goals at the General Assembly of the United Nations. What is new in the strategy is the emphasis on greater and wider access, equality and inclusion, quality and learning outcomes, and lifelong learning.

Directly related to global education is sub-objective 4.7. According to her, by 2030 it is necessary to ensure that all learners acquire the knowledge and skills needed to promote sustainable development through education for sustainable development and sustainable living, human rights, gender equality, promotion of the culture of peace and non-violence, global citizenship and the appreciation of cultural diversity and the contribution of culture to sustainable development. It states that the knowledge, skills, values and attitudes required of citizens to lead productive lives, make informed decisions, take an active role at local and international level in addressing global challenges can be acquired through education for sustainable development and global civic education, which includes education for peace and human rights education, as well as intercultural education and education for international understanding [10].

Through the mentioned basic competences, the global education helps to realize the differences in the living standards of people on the planet and raises issues for social responsibility in order to minimize existing differences (Figure 1). It points to a self-assessment of everyone's personal participation in activities that are the cause of some of the geo-global problems and awareness of personal responsibility for the development of civic consciousness. In this way, global education closely linked to the human rights, sustainable development, peacekeeping, conflict prevention and tolerance between cultural differences. It provides an opportunity for young people to realize and understand the nature of geo-global problems, their direct impact on individual countries and the personality of each person to realize and be ready to exercise their civil rights and obligations to preserve peace and resources on the planet and establishment of Sustainable Development.

The main goal of global education is to help students form the following competencies:

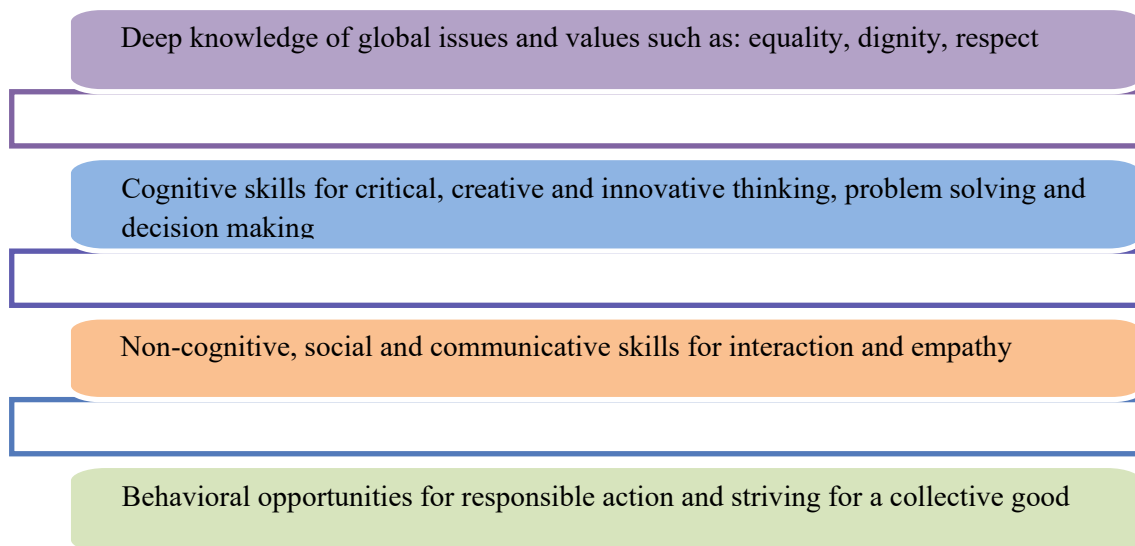


Figure 4. Basic competences formed through global education, Source: Obrazovanie 2030. Ramka za deistvie, 2015

The basic approach underlying global education differs from traditional approaches in that it offers cognitive and emotional learning opportunities. The originality of the approach to global education is confirmed by its dimensions, which can be defined as: thematic, spatial, temporal and dimension of teaching as a process (Figure 5).

The thematic dimension of global education is reduced to the content range of the main groups of analyzed topics: poverty and social justice, human rights and cultural diversity; peace and environment.

Their discussion helps to establish the leading regularities and realize the impact that the daily choices of students have on them in a regional and global aspect.

The spatial dimension allows understanding the connections between geoglobal problems and processes at local, regional and global level. In this way, through the expanding territorial scope can address issues in a global context and emphasize the need for change, starting from the local level to the global level. Linking the spatial with the time dimension allows the analysis of geoglobal processes and problems not only in territorial terms, but also in time, to identify trends, search for causes and realization of projections in the future.

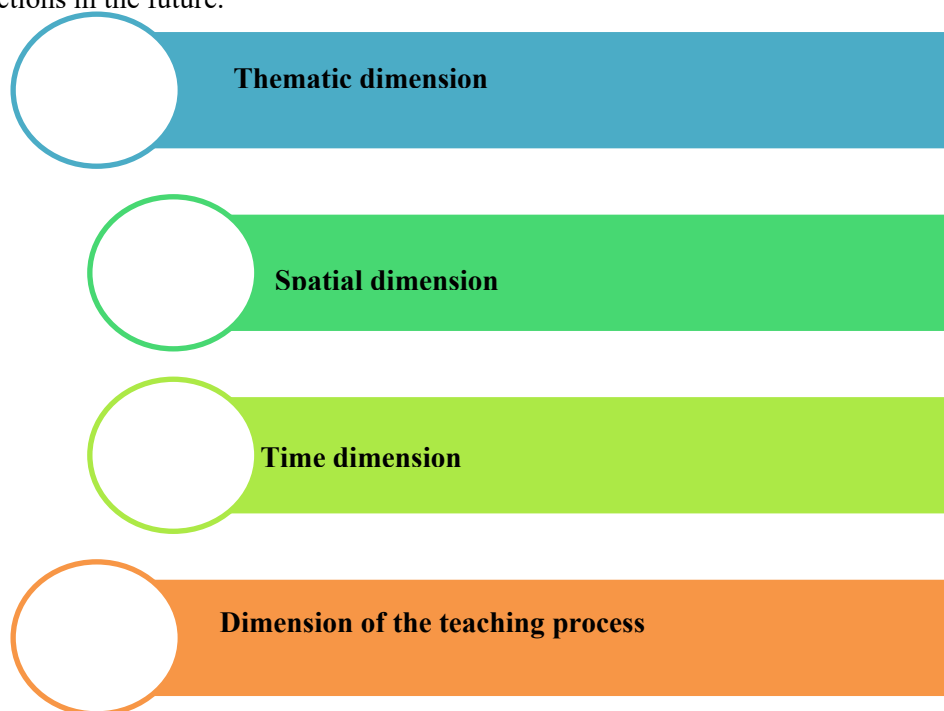


Figure 5. Dimensions of the educational approach to global civic education, Source: Xiks, D., K., Holdan, 2007

The dimension of teaching as a process is related to the methodology of training on the geoglobal issues of the modernity. The functions of the teacher should be reduced to the activity of a moderator who directs discussions, stimulates research and shares knowledge with students. It requires equality between teacher and students, as well as the active participation of students through creative research, critical analysis, teamwork, development of presentations and projects [19].

The analysis proves that the ideas embedded in global education are important, relevant and innovative, but even more important is the experience of individual countries in their implementation. This is mostly related to designing according to educational traditions and policies, cultural-historical and economic differences.

In most countries in Europe, the ideas of global education are realized in the form of school subjects. In the UK, a new school subject, Education for Citizenship, was introduced in 2000, containing many elements of global education. In Russia, 10 national centers of global education are being established, consisting of pedagogical institutes, schools and training centers.

The ideas of global education are also being implemented in Asian countries. In Japan, this was at the request of leading corporations in the period 1980-1990 and took the form of „Education for Global Competitiveness“. This helps to understand the ideas of global education and improve the methods of learning a foreign language. At the same time, the deep-rooted traditions of the national culture in the country do not allow the rapid spread of an independent school subject.

In South Korea, in 2001, an optional subject „Education for International Understanding“ was added to the national curriculum under the influence of the established Asia-Pacific Center for International Understanding under the auspices of UNESCO.

In the Australian Union, global education is supported by the government and a number of non-governmental organizations and activities are limited to the development of teaching materials, inclusion

in curricula of leading topics within the subject of global education - future, thinking, communication and others.

Globalization of education

The impact of globalization on modern society is measured not only with the global education, but also by the process associated with the globalization of education. In the field of education of individual countries, the process of globalization has a wide range of impacts on national educational policies and is defined as the *globalization of education*. This process can be manifested in the following areas:

- Emphasis on education as a mechanism for economic growth;
- Joint activities of intergovernmental, governmental and international non-governmental organizations in the field of education;
- Influence of information technologies and the global information network;
- International evaluation in the field of education;
- The influence of multinational corporations on global and regional education policies [14].

Thus, the globalization of the world economy puts before young people the need of their active participation in the growing process of globalization of education [13].

At the same time, countries around the world are striving to develop a knowledge-based economy and this has a direct effect on educational policies and university and school curricula. In this way, the role of education in promoting economic growth is assessed by paying increasing attention to educational institutions that form specific practical competences for development of potential to facilitate future economic growth. This leads to the convergence of curricula and their adaptation to specific scientific aspects with opportunities to influence economic growth.

Computerized and mobile technologies, pharmaceutical and biotechnologies and others can be mentioned as globalizing sectors of the economy, which have a technological or scientific basis and require specific scientific knowledge and skills. For countries that develop or intend to invest in the development of these technologies should know the latest developments in science and their impact in curricula as a medium or long-term strategy for successful participation in these sectors.

Another aspect of the manifestation of global education is related to the growing role of information technology and the global network over the science and education. The potential impact of this resource on scientific and educational programs comes down to the rapid sharing of scientific information and ideas across a wide range of universities and educational institutions, as well as multinational corporations that provide educational services and curricula and resources to schools and educational ministries across world.

ICT helps to increase the amount and accessibility of learning resources and to realize personalized learning tailored to the needs of the individual student. They provide opportunities for rapid information sharing and interaction between learners regardless of their location.

The impact of ICT on the globalization of education is expected to continue to increase, as traditional fact-based curricula are being replaced by more flexible curricula focused on the acquisition of specific skills [4].

Another important area of globalization of education is the development of large-scale international assessment projects such as the Trends in International Mathematics and Science Study in 4th Grade (TIMSS) and the Program for International Student Assessment (PISA).

The International Mathematics and Science Skills Survey for 4th Grade Students (TIMSS) is supported by the International Association for the Assessment of Educational Achievement (IEA). TIMSS takes into account trends in student achievement and studies the differences between national education systems in more than 60 countries to help improve teaching and learning around the world.

The Program for International Student Assessment (PISA) was developed by the Organization for Economic Cooperation and Development (OECD) in the 1990s as a periodic internationally standardized assessment of 15-year-old students. It arises in response to the need to develop indicators to compare the quality of education in different countries. It was launched in 2000 and includes 43 countries. PISA is conducted over period of three years and the assessment covers three areas of knowledge: reading, mathematics and science.

By reporting the results of the international evaluations outlines the global trend towards greater emphasis on the standardization of education in the studied areas and convergence of the objectives of the curricula in different countries [1]. This, in turn, can act as a catalyst for change and convergence with countries to make changes to their educational systems in order to overcome the weaknesses or shortcomings identified as a result of their participation in international evaluations [15].

Despite of the considered directions that drive the globalization of education, there are other factors that oppose this process, such as educational traditions and different interpretations of centralized curricula based on local culture.

Design in geographical education

In the conditions of development of the Bulgarian education the ideas of the global education can be realized through various types of activities such as development of curricula for obligatory and elective courses, which include topics from the global education [18].

Apart from being independent courses, topics from global education that concerns certain geo-global issues can be successfully integrated into the curriculum of school subjects such as world and personality, geography and economics, history and civilization, biology and health education and others. Example topics related to the global education with application in geography and economics training can be: social justice, responsibility for environmental protection, tolerance of differences, rational use of exhaustible natural resources, global citizenship, intercultural communication, sustainable development and other.

The ideas of global education can be projected into geographical education in a variety of extracurricular activities. Regardless of the organizational form, the following aspects of it, visualized in Figure 6, should be taken into account when implementing the exemplary topics from the content scope.

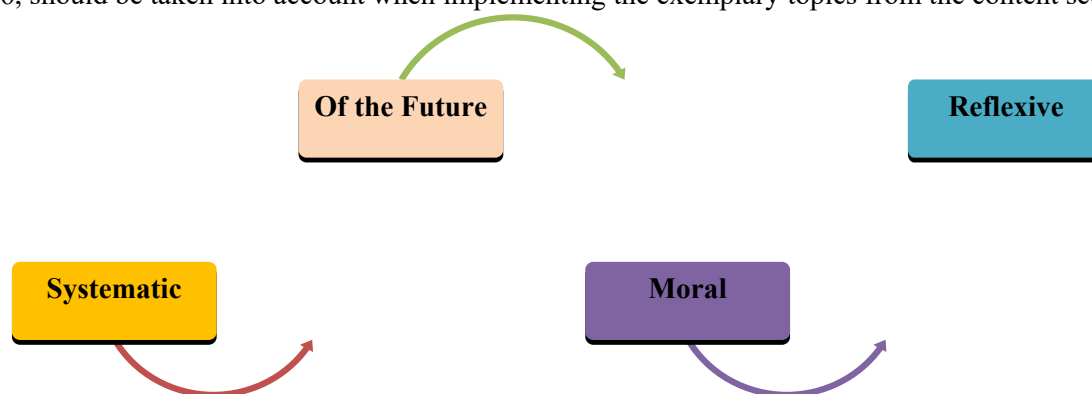


Figure 6. Aspects in the implementation of global education, Source: I. Kurdyumova, 2010

The system aspect is based on the geoglobal problems of the interconnected systems of ecological, cultural, economic, political, technological nature in different territorial dimensions and is very close to the topics related to the geography of the continents and countries.

The aspect of the future binds current actions and consumption patterns that determine the future and proves the present-future relationship. In this way, students can discover a new point of view over geo-global problems and to establish new alternatives for solving them. It could be taken into account when forecasting the studied natural-geographical and socio-economic processes through project activity.

The moral aspect is particularly important because it is at the heart of global education and is linked to the common moral values of people who are not influenced by their cultural identity, gender, religion, nationality or socio-economic status. This aspect must be taken into account when developing topics from the curriculum concerning the person and his activity in different territorial scope.

The reflective aspect allows young people to get closer to reality and realize that the world consists of diverse views, values and perspectives for solving global problems. Its implementation contributes to the formation of skills for analyzing problems from different position and for the formation of patterns of behavior for decision-making by adapting to change and significant participation in civil global society [9].

Geographical education has the potential to realize all dimensions of global education. The activities for designing global education can be applied in the development of geographical content in connection with its thematic dimension in: consideration of the problems of poor countries in the world, disrespect for human rights and freedoms and proving the rich cultural and historical heritage and the contemporary cultural diversity, in analyzing the need to preserve world peace and the ideas of sustainable development regarding natural and demographic resources.

The holistic nature of geographical science provides opportunities in front of geographical education to realize the spatial dimension of global education and prove geographical patterns at the global, regional and local levels. When synchronizing with the time dimension of global education, certain trends and patterns in the development of socio-economic geographical processes can be established. The dimension related to the teaching process and methodology of training on the geo-global problems of modernity is in the process of development. In it, the leading role is played by the geography teacher, who realizes his new role, creates conditions and directs the students' activity to creative research, critical thinking, project activity for overcoming the geo-global problems of the modernity.

The indicated opportunities for realization of changes in the educational discourse in the process of geography and economics training with an emphasis on the importance of values, attitudes and communication skills contribute to the value development of students in the context of globalization.

Conclusions

Based on the above we can summarize:

- Globalization is one of the essential characteristics of the modern development of society.
- Global education is provoked by the global society with its geo-global problems, which pose new challenges to young people.
- Global education includes education for development, education for human rights, education for sustainable development, education for peace and conflict prevention and intercultural education and is a global dimension of civic education.
- The basic approach underlying global education differs from traditional approaches in that it offers cognitive and emotional learning opportunities.
- The globalization of education emphasizes education as a mechanism for economic growth, stimulates the joint activities of organizations in the field of education, explores the impact of the information technology and the global information network.
- The globalization of education contributes to the introduction of international evaluation in the field of education and strengthens the influence of multinational corporations on global and regional educational policies.
- Geographical education has a content basis and potential for realizing all dimensions of global education.

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Training in electronic environment – a challenge for geographical education

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Abstract: *This research is an attempt to actualize the terms, that have to do with learning in an electronic environment and an analysis of the challenges related to studying geography in the first stage of high school, that have emerged in the country because of the COVID-19 pandemic. The advantages and the disadvantages of learning of geography in an electronic environment in the first stage of high school are pointed out as a part of the hybrid learning environment.*

Keywords: *teaching geography in a hybrid learning environment*

Introduction

Modern society and the processes in it create certain conditions and demand the conditions needed for the functioning of the education system. At this modern stage, they have to do with looking for possibilities for building the bases of the economy of knowledge, the development and the transformations in school education as a priority of society. The exigence's towards education have been raised as a main tool for development and future realization of the individual and they inevitably put forward the problems about its quality understood as a complex of organization-functional and content parameters that satisfy the main needs, necessities and expectations of the consumers of education services and products as well as of society as a dynamic socio-economic organism [5]. That requires a synchronization of the educational goals and priorities, actualizing the law base and an attempt to raise the status of Bulgarian teachers.

In terms of times, all of the aspects mentioned have a long-term time range and require a slide-rule and complex actions. At the same time, some of them can be realized during emergency circumstances that affect the whole social and economic life. The pandemic situation caused by COVID-19 in the country and how it has affected the education system and the geography education can be pointed out as such an example.

Materials and Methods

The goal of the current work is to make an attempt to update the main terms that are related with teaching in an electronic environment and an analysis of the challenges geography teaching in the first stage of high school that emerged because of the COVID-19 pandemic.

The used methods of study are analysis of literature sources and comparative analysis.

Results and Discussion

Learning in electronic environment

The situation of students learning in an electronic environment during March – December 2020 has led to a very fast transition from traditional to online-based teaching. That sets the need of an update of the pedagogical set of terms that are related to conducting teaching in an electronic environment from a distance in order for them to be used correctly.

In contemporary pedagogical literature, three main types of learning environments are described: traditional learning environment, asynchronized electronic learning environment and synchronized electronic environment [7]. As the specifications of the traditional learning environment aren't an object of our study, we will focus on the other two.

In the synchronized electronic learning environment, the students and the teacher work together at the same time but at different places. The synchronized activities create the feel of a virtual community but it requires a good coordination between the teacher and the students when planning the schedule and the working methods [4]. The independence of the location and the active interaction can be pointed out as advantages of the synchronized electronic environment. Its disadvantages have to do with the need of a supply of suitable devices and a high-quality internet connection as well as the possibility of turning the students into passive listeners and observes and a loss of interest.

The asynchronized environment provides real-time education while the participants use it in a convenient time for them. The most common type of interaction in the electronic learning environment is asynchronized [3]. The advantages of the electronic asynchronized environment are related to the possibility of the participant in the learning process to participate independently of the location and the time and they have an access to a large quantity of information. The correct use of diverse tools in it can increase the motivation for studying by consistent update of the classes. This type of teaching makes the access easier for students in a nonequivalent situation. There also are some disadvantages: the need of means for creating an internet platform; possible health issues and tired eyes; the need of a good self-discipline of the students for doing the required activities without constant supervision; the lack of social contact; the lack of competence of some teachers for working with electronic tools.

At this stage, the introduction of a mixed or a hybrid learning environment is needed. This type of learning is called „mixed learning” (blended learning or hybrid learning) and is defined as learning that combines the traditional face-to-face learning with computer activities (online leaning). The hybrid learning environment is a combination of many pedagogical approaches and integrated methods of interaction in order to provide material in a synchronized and in an asynchronized format. The hybrid learning environment is a combination of many learning approaches that can include a combination of face-to-face classrooms, self-teaching and online classrooms. The hybrid form of learning is defined as a combination of the best studying principles in a traditional and an online learning environment for improving the results in an affordable way [1]. The advantages of learning in a hybrid environment are presented in Figure 1.

The new functions of the teacher are of great importance when teaching in a hybrid environment. They are related to the guiding, correcting, additive and the assessment function of the principles of working in the new environment, the constant monitoring of the learning process, the possibility for developing and using one's own resources and realizing a present and distanced support. In this environment, the authority of each teacher will depend not just on their subject, pedagogical and methodical competence but also on at what degree the use modern informational and communicational technologies for collecting, processing and teaching the lessons [2].

No matter the learning environment, it should provide the tools of realizing all of the main key competences for learning during one's whole life from the European referent framework [6]. One of the most affected from the conditions of conducting the education process outside its traditional environment, is the social competence that requires constructive work with other people. The technological, didactical and the methodological resources of mixed learning simplify creating the conditions for the formation and the development of social competence which is strongly limited in the electronic environment but not all teachers are capable to take advantage of this potential. One of the most effective ways for developing social competences during mixed learning is team working, including online co-operation and using different strategies for working in groups. Team work is a condition for effective communication based on

interaction, which is a key concept for the interactivity of the learning environment and leads to an effective development of social competences.

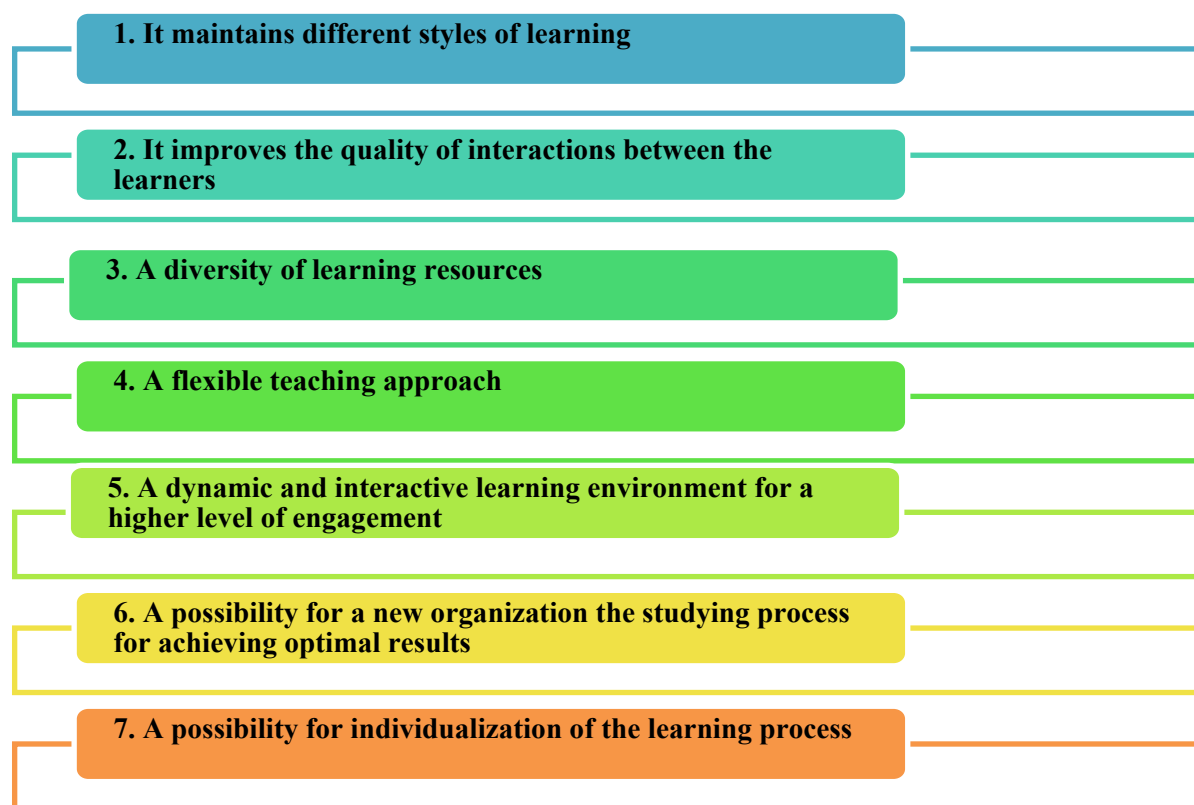


Figure 1. The advantages of learning in a hybrid environment, Source: Boddy, Ch., Ch. Detellier, S. Duarte, et al., 2013

The real situation in Bulgaria

Modern changes of democratization and liberalization of the social system in our country have lead to a serious transformation of each aspect of our lifestyles, stimulated by the progress of contemporary multifunctional technologies. Informational and communicational technologies are a part of the technological spectrum. Their use and realizing of different elements of an online-based learning is nothing new for the educational system. The use of them has lead to a significant process of transformation – organizational and individual, which is based exceptionally on the spread and the application of large quantities of information.

The new information environment created new conditions and give Bulgarian teachers a new role. New technologies create new challenges for the preparation of the teachers which have to do with the achieving of a more flexible and more efficient process of education in terms of time. It gives the possibility for applying an integrated complex of different forms and methods, compared to traditional learning. The complex of methods includes mostly one with an interactive nature, the choice of which is defined based on the specifics of the content studied and the compilation of cognitive and functional competences of the concrete students. The forms used can also be diverse and focused on the group forms when creating separate virtual spaces as a place for an exchange of and the generation of ideas.

The wide access to information can be both an advantage and a disadvantage. The huge information database that can be used for an analysis of the conditions for the development of a certain problem area can be viewed as an advantage. In order to achieve objective results, the information in it should be analyzed thoroughly and to be connected with the concrete cognitive goals of the study. When those conditions are not fulfilled and the information is interpreted randomly, it and its large quality can be a disadvantage.

Learning in an electronic and a hybrid learning environment require organizational changes which should be regulated in law acts. This requires a full transformation of the of the normative school base and defining the conditions for conducting a hybrid complex of attended and distanced process of learning for all school subjects.

And what is the reality of this situation of learning in a hybrid environment? The school and the education system are still not ready to realize the full potential of modern technology. In spite of the increased professional competences of teachers, some of them don't have sufficient pedagogical and methodological preparation for the use of information and communication technologies and difficulties wish finding high-quality digital resources and software. At the same time, there is still a technological barrier for many teachers, that stops them from entering the digital world and they use the method of trying and making mistakes in order to establish their own method of teaching. This leads to lapses in the digital skills of teachers and a lack of clarity about the educational goals and the ways of their fulfilment. Some teachers take into account the need of a pedagogical influence on the usage and the development of the technologies for online learning themselves.

The circumstances and the contemporary studies in the field of pedagogics and methodics set the focus towards looking for possibilities for improving the quality of the educational preparation of pedagogical specialists in the context of using information and communication technologies in teaching and working in a digital environment [8].

Geography education in a hybrid environment

The learning contents for geography gives the possibilities to use diverse resources in the process of learning in order to help about the longevity of the knowledge obtained and improving the motivation for studying, as well as achieving the results expected for the traditional and the hybrid learning environment. In the last decade, electronic resources have been used with a priority. Teachers have acquired experience in working with teaching platforms, electronic textbooks and diverse materials on the Internet.

In order to make an analysis and to point out some problems of geography education in an electronic environment from a distance, as a part of the hybrid learning environment, we are going to use the experience from the tuition at the first stage of high school. The learning contents for Geography and Economics in the ninth grade includes learning the chapter „Regional Geography” and „Economy of Bulgaria” for the tenth and the eleventh grade.

While teaching the students in the conditions of the COVID pandemic, the platform Discord and the applications Google Classroom and Google Forms have been used. This platform and these applications allow the realization of the learning process to carried out both synchronized and asynchronized from a distance in an electronic environment. With the applications mentioned, we can use diverse and effective forms and methods of teaching and to help for improving the students' motivation for studying and improving their personal qualities such as responsibility, orderliness, discipline as well as forming digital skills and competences the regular use of which leads to turning them into a behavioral pattern. Through them, the independent cognitive activity of the students is improved.

The study contents in the ninth grade when assimilating the chapter „Regional Geography” allows the use of traditional and interactive methods of teaching. In an electronic environment, as a part of the hybrid learning environment, the most effective from the traditional methods are: frontal discussion, interviews, visualization with maps, analysis of statistic data. Interactive teaching methods are more efficient – discussion, debate, solving cases, playing games, brainstorming.

The right choice of methods leads to a more successful obtaining of knowledge about the geographic regions of the world and the key countries and it helps to realize the practical use of geographic knowledge. Most of the activities are about solving tasks with a research and creative nature which leads to discovering problems and establishing ways for overcoming them by discovering the causal links and regularities.

Studying in an electronic environment, as a part of the hybrid learning environment, allows the use of forms of teaching – involving the whole class, in groups and individually. Experience proves that the group and the individual form give better results because each student is engaged in the said activities and has to present the result in a certain form for a limited period of time and give immediate feedback.

This type of teaching creates favorable conditions for the productive carrying out of the lessons, for activities and control, which are harder to accomplish with the traditional way of teaching and require more of the teacher's time for an analysis and render an account of the results.

Some of the statements above are a result of an analysis of lessons about the Western and the East European region, China, India, the USA, Italy and Russia. The geographic characteristic of those countries created possibilities for creating and presenting of multimedia products, for carrying out discussions about the problems cause by the COVID epidemic, for solving cases about strategies for an economic development of the countries observed, for carrying out a geography conference on the topic „Measures

for overcoming the consequences of the COVID epidemic in the countries studied and suggesting and defending models for their overcoming”.

When studying the economy in Bulgaria in the tenth and the eleventh grade, the working methods of teaching in an electronic environment, as a part of the hybrid environment, are:

- creating an informational database by working with Internet sites of the National Institute of Statistics, sites of the ministries, of different regions and municipalities;
- analyzing and presenting the processed information in the form of messages, posters and leaflets;
- creating projects on a previously given topic and algorithm and defending them in the separate classroom;
- creating maps of the dynamics of the studied economic processes and phenomena – graphs, schemes, diagrams (Figure 2).

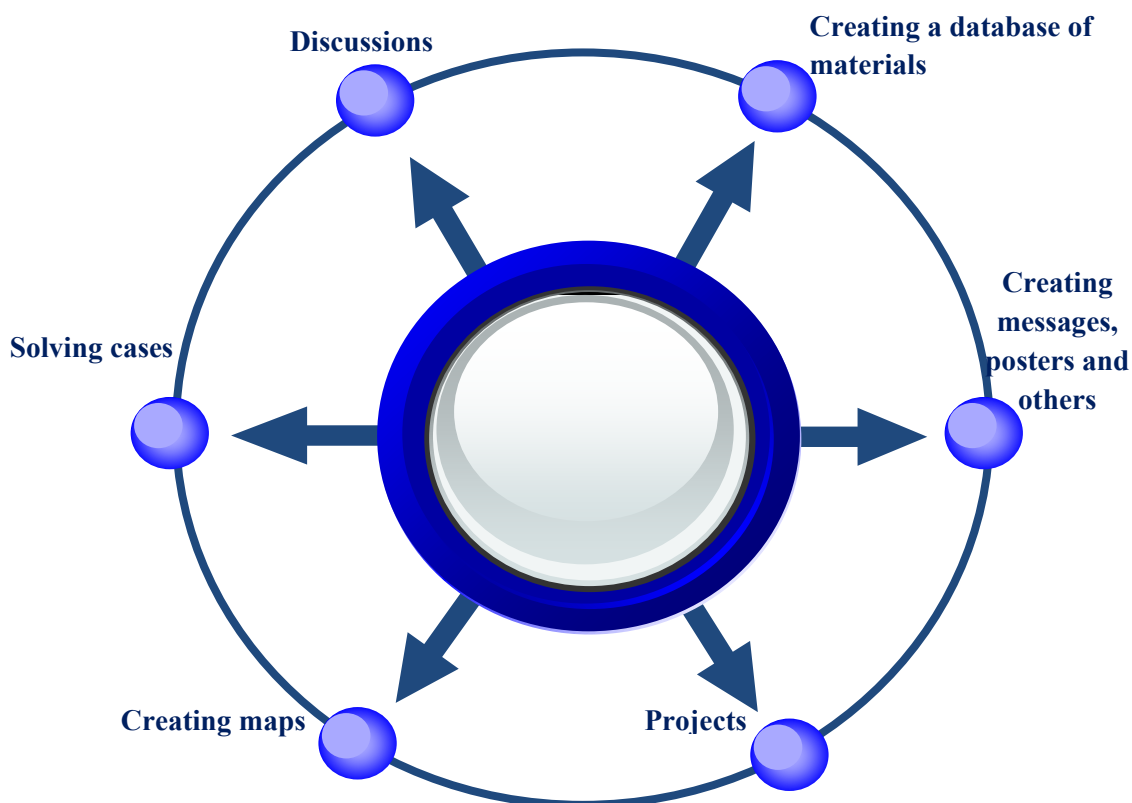


Figure 2. Prevailing methods of teaching Geography and Economics in the first stage of high school in an electronic environment as a part of the hybrid learning environment

Solving cases about tobacco production has a motivating impact and gave good results as well as solving a case on the topic: „Whoever plants mulberries, won’t lose coins, but whoever feeds silkworms, won’t lose any capital.” In them, students demonstrated that they have assimilated knowledge about the characteristics of plant-growing and stock-breeding and that they know the problems of their development and suggested and defended their own statements. The lessons about transport also gave good results – a discussion on the topic „The transport of the future in Bulgaria” and about the tourist market when studying about tourism (Figure 2). The results of them prove that the students have come to know the good sides of learning in an electronic environment because for the examples about transport or about the tourist market, they gave their own statements of different locations and realized that they can be useful for the country wherever they are in the world.

In order to record the results achieved from the Geography and Economics teaching in the first stage of high school in an electronic environment as a part of the hybrid learning environment, we used tests. The tests were either written by the teacher, or pre-made ones from teacher’s books or from electronic textbooks which were transferred into a Google form. This way of examination makes it easier from the teacher because it has an auto-check and statistic processing of the data. The method of creating and conducting tests through the application makes the analysis easier but has its risks for the teacher in terms of objectively assessing the students.

The conditions that caused teaching Geography and Economics in an electronic environment from a distance, as a part of the hybrid learning environment, have practically proven that studying in an electronic environment can partially replace traditional learning for a short period of time. With short periods of learning in an electronic environment, it's the advantages of studying in an electronic environment that stand out the most (Table 1.).

Table 1. Advantages and disadvantages of the tuition in Geography and Economics in the first stage of high school in an electronic environment, as a part of the hybrid learning environment

ADVANTAGES	DISADVANTAGES
A possibility to complexly use a large number of diverse resources	A higher lever of pressure and stress for the teachers when working from home at the online sessions
Improving the competences of students, teachers and parents for working with informational communicative technologies	A lack of a direct contact which limits social interactions
Teaching students organizational qualities for a more efficient time management	Limiting the exercise schedule of both the teachers and the students and creating predispositions for health problems
Flexibility and adaptiveness to the needs and the abilities of each student	The necessity of ensuring a sufficient number of computer configurations
An eased access to a certain type-setting of materials	Not each topic of the learning contents for Geography and Economics can be learned in an electronic environment, especially the lessons for activities and revisions
A possibility for carrying out communication with students and teachers, as well as individual consultations	A feeling of isolation and loneliness which impedes the creative development of the students
Widening the borders of geography learning from the classroom to each home	Replacing the irritating factors in the classroom with ones from the home environment
Creating conditions for compassion with the teachers and a possibility for an exchange of good practices and resources	Working in an electronic environment is quite a challenge for some of the teachers that have less competences for working with informational and communicational technologies.

Facing new conditions, for a short time, teachers have mobilized themselves and have realized individual and professional development in terms of using information and communication technologies in the teaching process for Geography which would be possible after years of hard work in the real conditions of the classroom lesson system.

The experience from the activities conducted in an electronic environment has shown the large horizons of the diverse resources of maps which can't be used rationally due to the lack of time in the traditional learning process. It gave teachers a new role and showed them the lack of the possibility to communicate face to face with their students. Maybe this way all of the participants in the learning process will realize the value of live communication and the advantage of exchanging opinions and attitudes towards the analyzed geographic topics.

The acquired collective experience proved the possibility for the unity of Geography and Economics teachers in terms of overcoming the new challenges for proving the collective professional competence. This raised the status of Geography teachers and of Bulgarian teachers as a whole in society.

It's expected that the longer the periods of learning in an electronic environment are, the more its *negative sides*, mentioned in Table 1, will show. The efforts of all the participants in the learning process

should be aimed at limiting their influence and gradual overcoming. The main problem with a possible long-term teaching for Geography and Economics in an electronic environment from a distance is about overcoming the feeling of isolation and the limited social communication. It could be partially solved by searching and rediscovering new dimensions of geography knowledge that is directed towards some practical application.

Conclusions

Based on the said above, we can generalize:

- Studying Geography and Economics in an electronic environment, as a part of a hybrid learning environment, creates possibilities for presenting the dynamics of the spatial geographic processes and phenomena, which leads to creating the conditions for learning thought experience.

- When needed to be used, the optimal version of teaching Geography and Economics is switching between periods of teaching in an electronic environment with ones of teaching in a real environment as a part of the hybrid learning environment.

- Society is still not ready to replace geography teachers with a mobile device. A part of the new functions, mainly the habitual and the coordinating, which were invisible until now, turned out to be very important for the cognitive development of students for many parents.

- Learning in an electronic environment, as a part of the hybrid learning environment, has given a base for many questions, the answers of which will be give by time and by in-depth analysis for weighing out the profits and the loses for all – the students, the teachers, the parents and society as a whole.

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An example didactic model for learning in an interactive environment

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Abstract: *The current report presents the developed by us example didactic model for learning Chemistry and Environmental Protection. The model is deduced on the basis of theoretical research and a conducted pedagogical experiment with students from 9th grade of the High School of Mathematics "Dr Petar Beron", Varna.*

Keywords: *interactive educational environment, interactive methods and forms*

Introduction

The competency-based education approach for organization of the educational process, laid down in the *Pre-school and School Education Act* and the *State Educational Standards*, presupposes fundamental changes in the organization of the educational process, its management, and the roles of the subjects participating in it. The main goal of the training becomes not the absorption of a specific amount of knowledge by students but the acquisition of skills that will allow them to set their own objectives, to show independence, creativity and initiative, and to be able to apply what they have learned from class in both typical and unusual situations.

The role of the teacher also changes. He or she ceases to be a primary source of knowledge. His or her main task becomes to motivate students to master new approaches to learning and action, to organize and consult about their independent activities, in the course of which they realize their own interests and abilities and, as a result, form and develop essential key competencies.

Everything said so far can be successfully realized in an interactive educational environment with the use of interactive technologies.

The present report aims to exhibit an illustrative model of learning in an interactive environment developed by us. The model is deduced on the basis of theoretical research and a conducted pedagogical experiment. The study focuses on the invariant model of an interactive lesson in teaching the school subject Chemistry and Environmental Protection.

Theoretical statement

The interactive educational environment is „a way to organize the environment and interpersonal relationships on the principles of child-centred learning.” [1]

D. Todorina points out that „the interactive educational environment is established in the educational space in accordance with the current educational trends: an outgrowth of the impact on the personality on a subject-object basis into a subject-subject interaction; shifting the centre of gravity from giving knowledge in a pre-prepared form to its self-mastery through new knowledge, new activity, new communication; a new culture of learning through a new theory of the subject based on multifaceted contacts with the environment and inclusion in the unity of the products and mechanisms of thinking and activity.” [3]

More significant characteristics of the interactive educational environment refer to „changing the roles of the trainer and the trainees; increased activity of learners, incl. through group/teamwork; the role of the intermediary (when available) as facilitating and supporting the school work; interactive work methods and techniques (based on interaction); specific organization of time and space – arrangement of different activities in a logical sequence; for individual work, work in pairs and groups; positive, supportive and stimulating microclimate (interpersonal relationships); permanent feedback”. [2, 3]

The interactive educational environment presupposes the highest degree of use of interactive teaching methods.

There is no uniform definition and classification of interactive methods in the pedagogical literature. Based on the studied interpretations and our own pedagogical experience, during the pedagogical experiment, we have created and used the following definition of interactive methods:

Interactive methods are a system of rules and procedures for the acquisition of knowledge and the formation of skills/competencies, which are characterized by:

- communication not only between a teacher and a student but also between students themselves;
- cooperation and mutual assistance;
- open communication;
- development of critical thinking and independence in students;
- the active role of the student;
- encouraging cognitive interests and student motivation.

Discussion

The pedagogical model developed and applied by us includes learning objectives, incoming diagnostics to establish the attitude of students to the school subject and learning with interactive methods, selection of learning content, methods and forms for the realization of teaching in an interactive environment, organizing and conducting training in an interactive educational environment (Structure of the interactive lesson), expected learning outcomes, and final diagnostics to establish the achieved results.

The structure of the model and the relationships between its individual components are presented in Figure 1.

The main goal we set with the implementation of learning in an interactive environment is to create such conditions in which a student can discover, acquire and construct knowledge, discern his or her success and intellectual development, which makes the educational process more productive.

In order to achieve the ultimate goal, a specific set of tasks should be solved:

- development of lesson fragments and methodological units with the application of interactive technologies and their approbation in school practice;
- involvement of students in the learning process to master new learning material not as passive listeners but as active participants;
- development of cognitive interests in the process of independent acquisition of knowledge with the help of various sources of information;
- building skills for teamwork in solving tasks;
- development of skills for working with information and communication technologies (ICT) in processing, delivering and presenting the results of cognitive and practical activities;
- creating psychological and pedagogical conditions for the development of initiative, creativity, striving for self-improvement.

- purposeful and systematic work for the formation of students' key competencies, enshrined in the *European Qualifications Framework (EQF)* and the *Pre-school and School Education Act (PSA)*;
- diagnostics of the results of the implemented training in an interactive environment

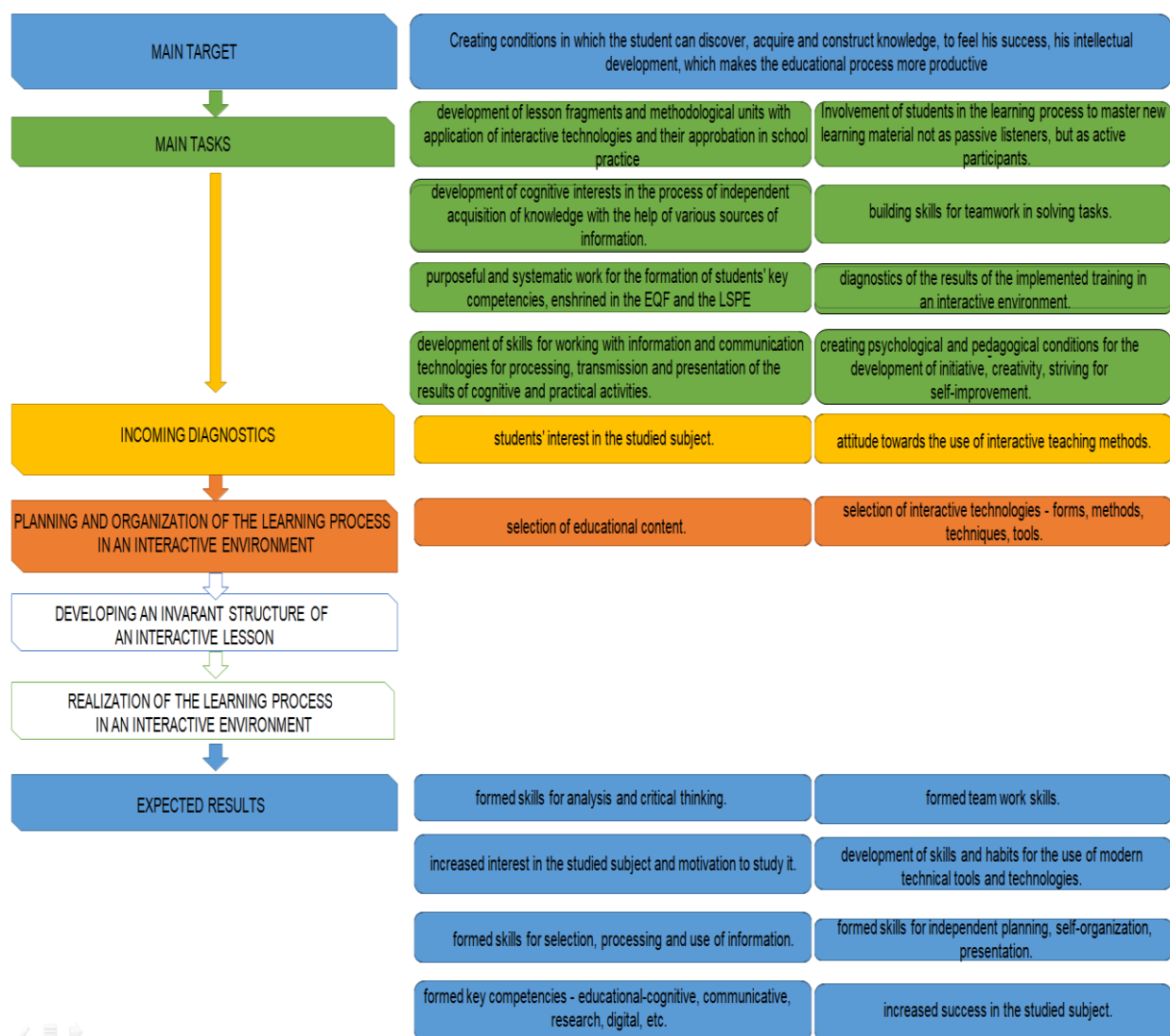


Figure 1. Example model of a realization of training in an interactive educational environment

The incoming diagnostics aims to establish the attitude of the students to the learning process, the interest in the school subject and the motivation for studying it, as well as the need to employ interactive methods in the lesson activity. A survey and oral interview with 106 students from 9th grade of the High School of Mathematics „Dr Petar Beron“, who participated in the pedagogical experiment, showed that 79% of respondents enjoy working in an interactive educational environment and that stimulates their motivation to study the school subject. The planning and organization of training in an interactive environment include:

- selection of methodological units for the implementation of interactive learning (determined by the specific learning content)
- research and selection of interactive methods, techniques and tools suitable for the selected learning content;
- preparation of the educational space (creation of conditions favourable for dialogue and active independent work in the classroom);
- building student motivation and readiness for teamwork in the learning process;
- planning situations that encourage students to combine efforts to solve a task;

- development of communication rules;
- determining the duration of each stage of the lesson;
- development of assessment criteria of the products devised in the group and individual activities within the interactive lesson.

The selection of learning content and interactive technologies for its acquisition is determined by the specifics of the particular methodological unit. Illustrative interactive methods and techniques – applicable in the individual stages of the lesson – are proposed in the displayed invariant model of the interactive lesson. Its structure was developed and used by us during the course of the pedagogical experiment. The proposed methods and techniques are exemplifying; their utilization in every lesson is not mandatory.

Table 1. Illustrative didactic structure of a lesson in an interactive environment

Lesson stage	Didactic Tasks	Interactive methods and techniques	Additional Notes
1 st stage Knowledge Update	Organizing students for work; updating and consolidating the knowledge needed to achieve the objectives of the lesson.	Interactive techniques: <ul style="list-style-type: none"> • The three, four, five important things; • Lightning; • Avalanche; Game methods: <ul style="list-style-type: none"> • Chemical dominoes; • Chemical bingo; • Chain; • Find the mistake, etc. 	The interest and desire to participate in the work of the class can be provoked at the stage of updating. For this purpose, it is necessary to repeat old knowledge with the help of game methods and techniques. In this way, in a shorter time, basic knowledge that students have can be checked to assess what difficulties they may encounter in mastering the new learning content and whether they are ready to work purposefully in an interactive environment.
2 nd stage Student Motivation	Capturing the student's attention and awakening interest in studying the discussed topic.	<ul style="list-style-type: none"> • Interactive technique "I know, I want to know, I learned"; • Solving a puzzle or riddle; • Brainstorming; • Acting out sketches; • Reading excerpts from books or articles, etc. 	Motivation should be closely related to the topic of the lesson. Thus, students adjust psychologically to perceiving new learning content and solving problems. Students must have a personal interest in what is being studied. Without motivation, no effective learning process can be achieved. Various methods can be used to create problematic situations that awaken interest in the content and motivate students. To fulfil their initial purpose, interactive techniques need to be diversified in different lessons.
3 rd stage Announcing the topic and goals of the lesson	Deliberation on the objectives and the expected results of the lesson by the students.	<ul style="list-style-type: none"> • Problematic question or appropriate thought; • Interactive technique "Expectation"; • Exclusion brainstorming; • Searching for information; • Solving a puzzle or anagram, etc. 	Cooperation between students and teachers at this stage is accomplished by the teacher guidance so as to help students formulate the objectives of the lesson. After introducing the topic with the help of appropriate interactive technology, the teacher can encourage students to express their suggestions about what they expect to learn, how and why they need it. The teacher writes students' expectations on the whiteboard, and afterwards, taking into account the suggestions, he or she informs the class of the specific didactic goals.
4 th stage Organization	Organizing workgroups and providing necessary information	<ul style="list-style-type: none"> • Presentation; • Short story; • Case studies; • Handouts; • Forming groups 	The teacher explains the stages of the forthcoming work, briefs the students on the results presentation format and the assessment criteria. He or she divides the students into groups, allocates team members to roles and provides

	for task completion.	with the help of game methods – solving a puzzle, composing a text by keywords, etc.	the students with time to get acquainted with the given handouts.
5 th stage Acquisition of new learning content	Mastering the provided knowledge and skills and developing key competencies.	<ul style="list-style-type: none"> • Press conference; • Role-play; • Debate; • Didactic game; • Method of associations; • Discussion; • Project work; • Situation analysis, etc. 	<p>The main stage of the lesson involves the use of 1 to 3 interactive technologies, depending on the learning content and the expected results.</p> <p>Students work in groups and discuss the role of each participant in the completion of the whole task; they, likewise, observe the correct execution of their partners' separate tasks.</p> <p>Thus, teams need to do two main tasks simultaneously:</p> <ul style="list-style-type: none"> - Academic – achieving cognitive and creative goals. - Socio-psychological – implementing a particular culture of communication. <p>The teacher must supervise both the success of the assignment and the communication and cooperation. He is an organizer, assistant, discussion leader, and a consultant.</p>
6 th stage Results presentation and evaluation	Formation of skills for presenting results from theoretical research and practical activities.	<ul style="list-style-type: none"> • Essay • Presentation • Game • Physical model • Collage • Figure • Poster, etc. 	<p>The presentation of the results depends on the nature of the performed activity and students' creativity. When setting the tasks, the teacher should acquaint the groups with the assessment criteria.</p> <p>In summary, the criteria can reward abilities to gather information, as well as interpretation and presentation skills, depending on the particular performed activities and the expected results.</p> <p>Assessment is a powerful motivating component of the interactive lesson and must be flexible, impartial and fair. Depending on the goal and the chosen criteria, various assessment strategies (methods, techniques) can be chosen.</p> <p>The most commonly used assessment method in interactive lessons is scoring and team assessment. Assessed elements can be the following: participation (motivation, readiness for work), creativity, ability to analyze, present and support opinions, etc.</p>
7 th stage Reflection	Summary and analysis of achieved results.	<ul style="list-style-type: none"> • Discussion; • Decision tree; • Avalanche; • SWOT-analysis; • Interactive technique “I know, I want to know, I learned”. 	<p>Summarizing is an essential part of the interactive lesson.</p> <p>It should be organized in a way that allows students to understand the nature and the significance of what they have done, to compare the expected results with the real ones, to consolidate or update their knowledge, and to formulate conclusions. Through summarizing, new topics for discussion can be delineated and a plan for further action can be prepared.</p> <p>Reflection provides students with the opportunity to deliberate on what they have</p>

			<p>learned, to assess their own level of understanding the new material, and to outline actions for further progress. In addition, it allows them to evaluate the organization of the training and form an opinion about it. Reflection helps the teacher to ascertain students' attitudes towards learning and to make the necessary adjustments.</p>
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Conclusions

Training in an interactive environment is conducted with a pre-set goal. Therefore, after its completion, students are expected to achieve specific results. In the illustrative didactic model, the outcomes can be summarized; further enrichment and concretization of the results could be conducted in the real organization of the learning process in an interactive environment. The following are the results that we expect the students to achieve after the implementation of the developed model in the course of training:

- developed skills for analysis and critical thinking;
- increased interest in the school subject and motivation for studying it;
- developed skills for teamwork;
- developed skills for information selection, processing and utilization;
- further development of skills and habits for using modern technical means and technologies;
- developed skills for independent planning, self-organization, presentation;
- developed key competencies - cognitive, communicative, research, digital, etc.
- an increased success rate in the particular school subject.

The final diagnosis aims to evaluate the results of the proposed training model application and to contribute to its improvement. The results obtained so far show that 73% of students prefer to use interactive teaching methods in Chemistry and Environmental Protection classes.

As a result of the conducted pedagogical experiment, we came to the following conclusions:

Interactive learning requires a complete change in the principles of classwork, as well as significant preparation time for both students and teachers. It is necessary to start with the step-by-step inclusion of elements of this model, gradually reaching its full deployment.

For the effective use of interactive learning, without compromising the logic of the learning process and its quality, the following should be taken into account:

- to conduct an attentive selection of topics for work in an interactive environment, considering the nature of learning content, the capabilities of students, and the necessary means to complete the tasks;
- to set the students tasks for preliminary preparation in order to be able to fulfil all planned activities within the lesson;
- to provide students with time to think about the task so that they consider it seriously, not taking it mechanically or "playing" to complete it;
- to employ up to three interactive technologies during the main stage of mastering new knowledge in one lesson, and not all their diversity.

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Options for the formation of value orientations in the geography and economics training in 10th grade

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Abstract: *The value system is a coherent set of ethical values for a person. The personal value system provides the individual's inner knowledge of what is good, useful, important, beautiful, desired, constructive, and so forth. This knowledge is called values and develops the behavior of the personality. First of all, the school places the learning objectives, through which the educational results are actually realized and value orientations are formed.*

Keywords: *values, value system, value orientations*

Introduction

In today's fast-paced world of changing priorities and patterns of behavior, we often ask ourselves the questions: Did I do the right thing? What would others do in that situation? Will my action be evaluated positively by the society? The path to the answer to these and other possible questions everyone walks alone, intuitively relying on their life experience and established value system. The possible answers are not clear, which proves the variety of individual value systems that form the modern model of the social value system and have a direct impact on the educational system.

The process of teaching geography and economics, when planned and implemented with a view to the personal development of the individual student for the formation and development of his value system, can have a significant impact on his cognitive and emotional development.

The goal of our research is to make an attempt to differentiate between different groups of values and to indicate variants of activities for their transformation into value orientations through the teaching of geography and economics in the first high school stage.

Materials and methods

The main research methods are comparative analysis of scientific and methodological literature, survey method.

Results and discussions

Nature of values and value orientations

In the learning process, students are oriented and express relationships that arise based on the assessment of the world around them, the participants in the learning process, the learning content, and are influenced by the acquired knowledge and skills and abilities of the individual. In this way, the assimilation of values in school is associated with value orientations, which at a later stage become relationships, and the manifestation of value relations leads to the value development of students.

Value orientations and values are the basis on which the overall personal development of each person is built. These should be the patterns of behavior that each of us chooses in certain life situations [5].

The value orientations are the main criterion in a person's attitude to the world around him. They determine the social interaction between people, the struggle and coordination of their interests, requirements, regulate human behavior, determining the further development of the individual in society. For this reason, the value orientations of the individual and their development are the subject of social and psychological-pedagogical analysis. It is especially important in modern social conditions to distinguish the attitudes of life, on the basis of which to determine the ways for the formation of value orientations necessary for the harmonious development of the personality [1].

The individual values are determined not only by the personal beliefs and characteristics of each person, but also by the culture of the society in which the individual lives and develops. Perceived values of the culture in which a person lives complement his individual values and influence his behavior [3].

The values that everyone recognizes as their own are formed in early childhood. They are presented by some philosophers as eternal beings: Truth, Good, Beauty. Values are the most sustainable and defining personality guidelines and principles, as opposed to dynamic and changing goals, interests, motives, needs, deficits. [2] Their development continues throughout the life of the individual, but it is extremely important for a society that they are formed and developed throughout the course of study in the Bulgarian school so that they can be relevant and act as models of behavior throughout conscious life.

The curriculum in geography and economics in 10th grade as a content basis for the formation of value orientations

In recent years, the curriculum in geography and economics has undergone a transformation. Nevertheless, it provides exceptional opportunities for pedagogical professionals to form values in students. In each of the courses in geography and economics there are options to form or develop different groups of values, but the object of our study are the options for the formation of value orientations in the teaching of geography and economics in 10th grade.

According to the 10th grade Geography and Economics, „Geography and economics education in 10th grade is aimed at acquiring key competencies through mastery of knowledge, skills and attitudes related to the territory most closely related to the life of the student - home country“ [4]. In this way, the study of the native country completes the training in the subject, and it is the study of Bulgaria that is the ideal opportunity to form or further develop the values we have chosen.

From the very beginning of the training such an opportunity is provided through the educational content in the section „Natural environment of Bulgaria. Natural components“. Based on it, an option can be proposed for the application of a situational method - an incident in order to form in students geographical and in particular environmental values.

This method offers good opportunities for developing an abstract thinking in the students. In the technology of its realization the teacher presents the situation, purposefully leads the analysis and discussion while stimulating the participation of all students.

Incident: In case of carelessness on the part of the restaurants located in the City Garden of Shumen, a fire broke out in the late hours of the day. The fire is growing fast and all the trees are on fire. What will be the consequences for nature and for the life of the people in the city?

There is unanimity in the students' answers. 100% of students believe that there will be consequences for both nature and the lives of people in the city. Regarding the consequences for nature, the students formulated the following answers:

- *Heavy air pollution throughout the city because the trees are a source of oxygen;*
- *Almost all plant species will be destroyed;*
- *Once all the trees have been burned, the air in this area will be polluted for a very long time, because there will be no trees to clean it;*
- *Some of the animals that inhabit the city garden will die, probably squirrels;*

- *Surviving animal species will settle around residential buildings, which will lead to other problems. For example, larger surviving birds (crows) will destroy small ones that live in residential areas (sparrows, pigeons).*

100% of the students answered that the air in the whole city will be polluted. 66.66% answered that due to the lack of trees, the area will remain polluted for a very long time, and 41.66% of them suggest that the surviving animals will settle around the residential buildings. This proves that they have mastered the learning content. and have developed values with an environmental focus.

The presumed consequences for the people in the city, as a result of the fire, according to the students, will be:

- *People will develop various diseases of the respiratory and cardiovascular systems;*
- *Patients with pulmonary asthma and allergies will get worse;*
- *The city garden is a place where people from Shumen gather and walk. As a result of the fire, they will not be able to visit it;*
- *The owners of the restaurants located in the City Garden will go bankrupt.*

83.33% believe that the consequences for people will be different health problems. Only 12.5% predict that there will be economic consequences for the city.

Based on the answers given by the students, we come to the conclusion that they know how to guess what the environmental and health problems will be. Very few of them manage to analyze the situation and make a similar connection between an environmental problem and the resulting economic consequences. The rational use of natural resources, as well as the determination of the production and territorial structure of the economy, depends on the population. The number and dynamics of the population are indicators of the changes in the demographic development of our country.

In recent decades, many countries have been affected by the demographic crisis. Bulgaria is one of them and we think it is extremely important for young people to realize the consequences of it. They are the future of our country, and my main goal was to form patriotic values in them. For this reason, we experimented with the case study method in learning the content of the section „Population of Bulgaria“. The methodological requirements of the pedagogical technology for the realization of the case combine activities united in the following stages (Fig.1):

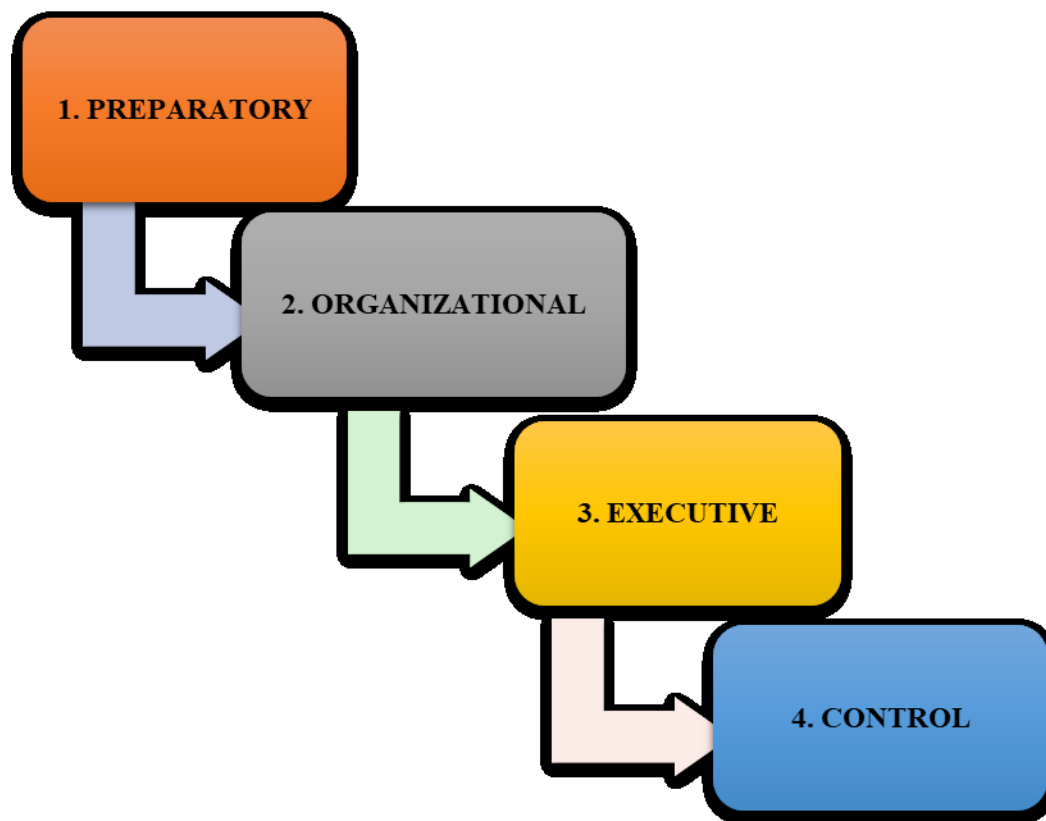


Figure 1. Stages of formation of the case study

Case: „Bulgaria's population is unevenly distributed. The highest population density was in 1880. - 81 p / sq.km, and in 2017 it is 63.9 p / sq.km. The birth rate in Bulgaria after the Liberation was 40 ‰, and in 2017. is only 9 ‰. At the same time, the mortality rate is high - 15.5 ‰, and the natural increase is negative. Due to the large influx of migrants to Western Europe and the United States in recent years, the population is aging. Bulgaria has been in a severe demographic crisis in recent years. **You are part of the government in Bulgaria, what demographic policy will you pursue to solve the demographic crisis in our country?**

Students' answers include the following statements:

- *To financially stimulate Bulgarian families to raise a second and third child;*
- *To stop the trend of „brain drain“;*
- *There must be educational reform, higher education must be at a higher level. In this way, more young people will continue their development in Bulgaria, not abroad;*
- *More and more people have reproductive problems. In vitro procedures should be free and thus we will have an increase in birth rates;*
- *An excellent health care will reduce mortality;*
- *The government must pay for the treatment abroad of Bulgarian citizens;*
- *Child benefits to be received by all Bulgarian children, but provided that their parents have at least secondary education;*
- *Measures to overcome the demographic crisis must be primarily economic;*
- *To increase incomes as well as jobs. When unemployment is low, there will be economic development, incomes will rise and people will not emigrate.*

The students have mastered the basic concepts such as: birth rate, mortality, natural increase, unemployment, demographic crisis, reform and others. They have reached basic patterns related to the demographic crisis, healthcare and education. Based on the above, we can say that there are formed patriotic values.

Another variant of activities that we believe is suitable for the formation of values is the development of an essay on a geographical topic. In 10th grade, while studying the section „**Settlements**“ after the lesson unit „Characteristics of a settlement through research“ the students were given the task to develop an essay on the topic: „**Why would / would not I live in a village?**“. Our main goal in setting this task is to determine whether students have formed certain moral values. In their presence - to work for their further development, and in their absence - for their formation. The task was set two years in a row in a different class of students. The answers presented by the students are schematically presented in **Figures 2 and 3.**

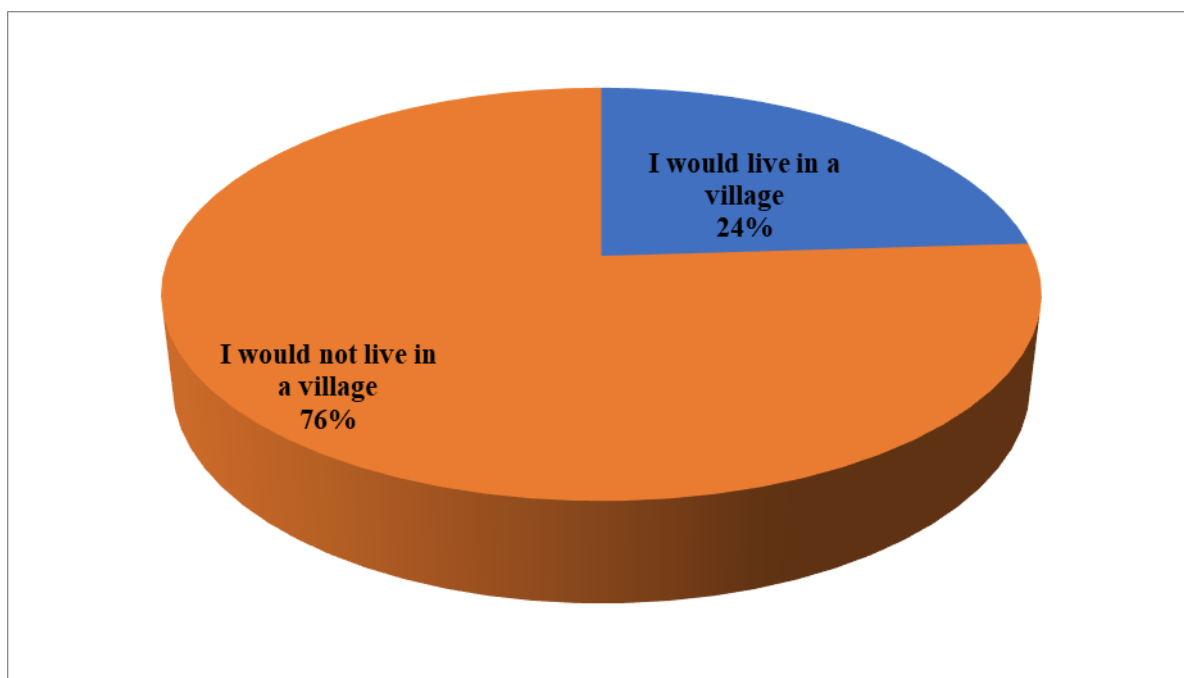


Figure 2. Students' answers in relative terms

As can be seen from Fig.1 students who were 10th grade in the school year 2018/2019. 76% of them categorically state that they would not live in a village. The arguments they present are:

- I would not live permanently in a village, because in small settlements the population is aging;
- I would not live in the countryside, because I will have to travel to school every day;
- I would not live in a village, there are no malls and entertainment in general;
- I would not live in a village, because in the small settlements the infrastructure is bad, there are not enough jobs for qualified staff and there are almost no young people.

However, 80.77% of the students who were in 10th grade in the 2019/2020 school year state that they would live in a village (Fig. 2). Only 19.33% want to live in the city:

- I would gladly live in the countryside. There the air is clean and life is generally calmer;
- I would gladly go to live in the countryside. We will have the opportunity to produce our own food that will be environmentally friendly;
- I would live in a village, because life there is quiet. There is also a better chance to protect ourselves from COVID-19;
- My family and I lived in a village three years ago. Believe me, life is real here. There are no malls and entertainment, but here you feel calm and happy;
- Rural life is a challenge for young people. But in addition to gatherings and parties, we must also think about the disappearing villages. We are the people who can change that. Come to the village, you will not go wrong;
- I would live in a village! One of the biggest advantages is the fresh air, the fresh products from the garden, which are without preservatives and dyes;
- I would live in a village, because this is very important for our future, because we must grow up in a good environment and most of all a real one.

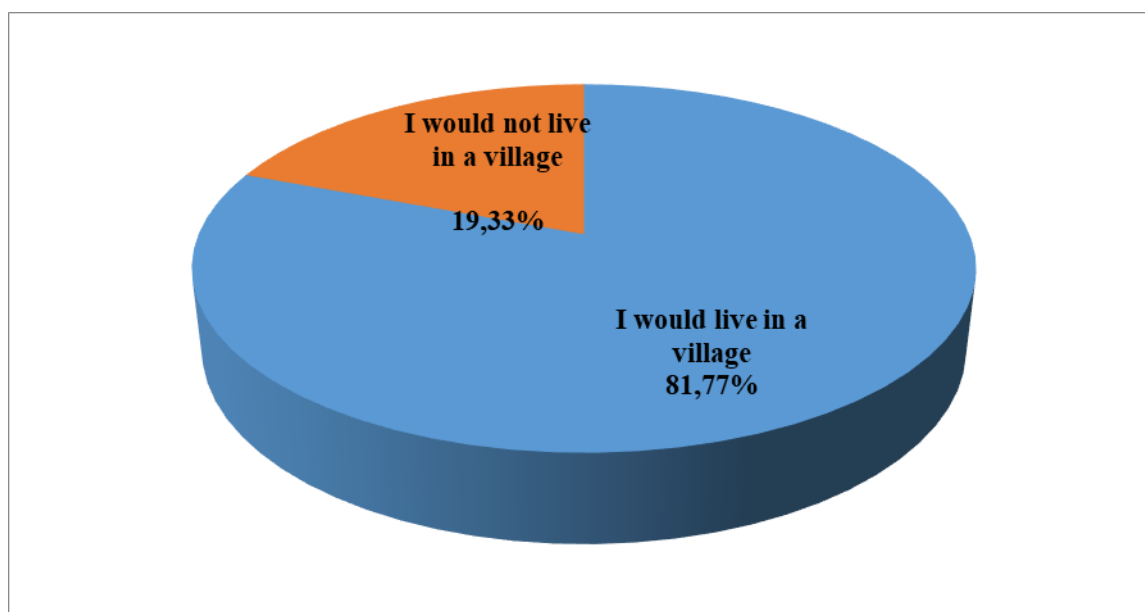


Figure 3. Student's answers in relative terms

The analysis of the results shows that the students' opinion on the question asked differs greatly during the two years of the experiment. In the first year of its implementation, 76% of adolescents do not want to live in a small town, and their arguments are lack of entertainment, difficult access to the Internet, poor infrastructure and more.

Based on their answers, we can say that it is necessary to further develop moral values. In the second year of the experiment, however, most of them categorically stated that they would live in the countryside. There is a change in priorities and they believe that the best and safest environment for them is the village. In our opinion, the results in the two years differ as a result of the pandemic. This proves that for the formation and development of different groups of values are important both the family and the educational environment, but also what is happening on a global scale.

The indicated variants of activities are exemplary. Many more and different ones can be formulated, which are aimed at the manifestation of value relations and the formation of value development of students in the process of teaching geography and economics in the first stage of high school.

Conclusions

- Education is not limited to the assimilation of the curriculum in a given subject, but in the Bulgarian school it is necessary to develop the value system of students.

- Value orientations are a building block in the personal development of students, determining their attitude to society and the world around them.

- The formation of values such as honor, pride, valor, compassion, honesty, patriotism, etc. should be one of the main goals of the Bulgarian teacher.

- Through the curriculum in geography and economics, students form and develop a value apparatus, as they learn to realize and interpret the consequences of their actions or inactions.

- On the basis of the conducted scientific experiments we claim that the students have mastered the study material well, but with regard to the groups of values considered by us, some of them need to be further developed.

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The teaching content in geography and economics in 5 class as a factor for the formation of cartographic knowledge and skills

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Abstract: *This article considers the curriculum in Geography and Economics in 5th grade as a factor in the formation of cartographic knowledge and skills. The modernization of the Bulgarian educational system inevitably raises the question of models, borrowing experience and reforming educational practice in view of the realities of the modern world. In this educational context, the study of the subject of geography and economics in Bulgarian schools has an important educational and pedagogical significance for the development of the younger generation, for its professional orientation and effective implementation.*

Geography has the potential to reveal to young people the peculiarities of natural and socio-economic territorial systems in the world, in different continents and regions. This determines its great importance for the formation of knowledge, skills, views and beliefs in adolescents, both for nature and for society.

Keywords: *pre-school and primary school education, assessment and competent application of the tests in Bulgarian language and literature, the achievements and weaknesses in the language preparation of the students*

Introduction

The modernization of the Bulgarian educational system inevitably raises the question of models, borrowing experience and reforming educational practice in view of the realities of the modern world.

The normative documents adopted within the European Union, as well as the UN documents in the field of education define two main goals of the educational policy - equal access to education and quality education. They can be identified as the main goals for the development of Bulgarian school education [5].

The two main goals of educational policy should not be considered in isolation from each other, much less opposed to each other - each of them can be fully understood only in relation to the other goal. Equal access means access to quality education, and it reveals its full potential only if every Bulgarian child can participate in it.

Quality education presupposes the creation of an environment for the development of all participants in the learning process. For students, this learning environment guarantees encouragement for

manifestation and maximum development of abilities and formation of functional literacy as well as overall development of the learner as a person.

Traditionally, the goals of school education have been defined as a set of knowledge, skills and habits that students must master. Today it turns out that this approach is insufficient – we need not only knowledgeable young people, but also ready to participate in building their future lives, able to solve problems of different nature. And this depends a lot on the acquired knowledge, skills and competencies, as well as on the personal qualities of each student.

In this educational context, the study of the subject of Geography and Economics in Bulgarian schools has an important educational and pedagogical significance for the development of the younger generation, for its professional orientation and effective implementation.

Geography has the potential to reveal to young people the peculiarities of the natural and socio-economic territorial systems in the world, in different continents and regions. This determines its great importance for the formation of knowledge, skills, views and beliefs in adolescents, both for nature and for society.

The sources of geographical information are diverse, but one of the most important is the geographical map. Knowing and using it fully contributes to the formation of a cartographic culture in students, which is associated with the practical significance of geographical knowledge and the possibility of its application in life. For this reason, it is necessary in the learning process to form a system of cartographic knowledge that includes concepts of the geographical map and skills to work with it to improve the quality of acquired knowledge and to promote the development of students' cognitive abilities

Materials and methods

In connection with the above mentioned, the purpose of this study is to make an attempt to analyze the curriculum in Geography and Economics in 5th grade to reveal its potential opportunities for the formation of cartographic knowledge and skills.

To achieve this goal, methods related to the analysis of literature sources, content analysis and comparative analysis have been used.

Results and discussion

In the system of geographical education, knowledge is the first main element of the curriculum, which ensures the formation of a scientifically correct picture of the world in the minds of students and a correct methodological approach to cognitive practice. Geographical knowledge serves as a basis for mastering the geographical educational content, it reflects the accumulated information about the interaction of nature, man and society and the regularities that their development obeys to [1]. Cartographic knowledge is an important element of geographical knowledge.

The second element of the curriculum in geography includes the system of intellectual and practical skills, which are a condition for the application of knowledge in solving specific practical tasks. They are necessary because, in psychological terms, knowledge of processes and phenomena is associated with mastering a system of actions that, depending on the degree of formation, become skills [1]. Cartographic skills can also be classified as such.

The cartographic skills in the process of teaching Geography and Economics can be related not only to the peculiarities of perception and interpretation of cartographic data, but can also be aimed at the realization of cognitive activity through practical and applied skills. The importance of their implementation can be expressed in the following main aspects:

- learners are taught how to apply knowledge and skills in practice;
- the learning process becomes more meaningful and interesting;
- knowledge and skills from various fields of human knowledge are acquired in a connected way;
- stimulates thinking [3].

The degree of acquisition of cartographic knowledge and skills is carried out through control. It is a key component of the learning-cognitive process. Its purpose, content, types, forms, means and time through which it is carried out should be perceived as a systematic mechanism for reporting, coordinating and controlling the joint activity of teacher and students in the learning process in the subject [2].

Control brings together a set of activities to identify the quantitative and qualitative characteristics of learning outcomes, helps to identify achievements and correct inconsistencies and serves to manage the learning process by creating feedback between teacher and students [4].

The teaching of Geography and Economics in the fifth grade and the cartographic knowledge and skills, are an important part of the geographical culture of the students. Part of the propaedeutic (introductory) knowledge and skills for working with the map are acquired during the primary stage of education, and are expanded and deepened in 5th grade with a more detailed study of its mathematical basis. Their formation in the process of teaching geography and economics is subject to conceptual approaches to school education:

- assimilation by the students of activities necessary for the formation of their geographically oriented perception of the world;
- mastering social experience and acquiring skills and competencies that favour practical activity in modern society.

Closely related to the main goal and the tasks arising from it are the specific *criteria*, which are related to the completeness of the mastered cartographic knowledge and their application, as well as the efficiency of the acquired skills. The main *indicators* are reduced to the volume and durability of cartographic knowledge and their practical applicability through the acquired cartographic skills.

The geographical map is the second language of geography. Like other specific codes for delivering and storing information - writing, numbers, musical notation, etc., the geographical map appeared in ancient times, has been developing and improving to this day and to one extent or another it is used in all areas of human activity. Therefore, the ability to navigate the map and the ability to apply information from the map are considered as elements of the general culture of the student, which is formed in the learning process and is closely related to the studied learning content.

The main goal of the course in Geography and Economics in 5th grade according to the curriculum is aimed at mastering basic knowledge, skills and acquiring key competencies related to the formation of the foundations of geographical culture for the surrounding area at global and regional level, as part of their general culture [10]. The nature of the general course brings to the fore the formation of systems of general concepts, global patterns and different ways of working.

The analysis of the curriculum shows that the curriculum related to the formation of cartographic knowledge is covered in 11 topics (some of them for new knowledge and some for activities). In the topics of the first section **Geographical Information** the theoretical knowledge about the content of the basic cartographic concepts is acquired. In the course of Geography and Economics in 5th grade a large number of key cartographic concepts are formed - geographical globe, geographical map, cartographic projections, mapping methods, types of geographical maps and their application, geographical grid system, latitude, longitude, geographical coordinates, scale, legend, and others shown in the figure 1.

- Recognition and use of the elements of the geographical map and globe;
- Recognition of the types of geographical maps and the main methods of mapping;
- Presentation of geographical information in a map, text, various graphic images or through Information and Communication Technologies [9].

The main application of the acquired theoretical cartographic knowledge and skills is most used in the lessons for activities - for reading a geographical map, for activities with scale and geographical grid system, observation and description of geographical objects, natural areas and others.

The purposefulness and complexity in terms of the acquisition of cartographic knowledge and skills are the basis for better education in 5th grade. The learning process focuses not only on their mastery, but also on the formation of ways of activities that put students in an active position [8].

The cartographic concepts focus on mastering and understanding their essential features; in the case of regularities - on the tracing of their spatial exhibition; in the case of the methods of activity - on the explanation of the way and the ability to perform at the beginning more slowly and uncertainly, and subsequently true and complete; in the leading ideas - on their formulation and explanation.

As expected results of the training on the topics in the section „Geographical Information“ students must learn the content of the concepts - geographical globe and geographical map, their essential features, to know the types of maps and basic methods of mapping, to know the elements of the geographical grid system - parallels and meridians, to know the numerical and linear scale. The skills for determining latitude and longitude, determining the geographical position of a point, characterizing the elements of the geographical grid system in a certain sequence, working with different types of scale and calculating distances on the map are set.

The formation of cartographic skills is related to the 8 lessons for activities set in the curriculum. They are aimed at acquiring the following skills by students:

- Using different ways for orienteering in nature;

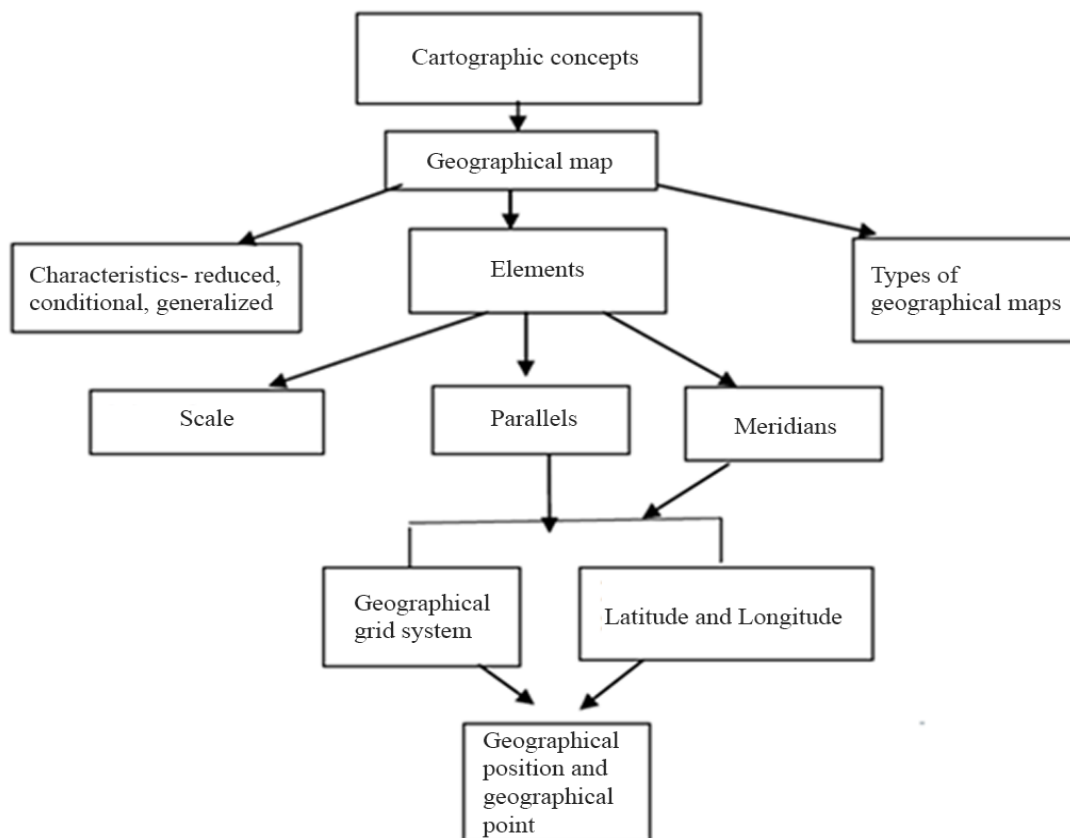


Figure 1. Basic cartographic concepts in the curriculum in geography and economics for fifth grad

The knowledge and skills that students must acquire in the formation of concepts related to cartography in fifth grade according to State Standards are shown in Table 1. [7].

Table 1. Cartographic concepts and skills for working with cartographic sources in the curriculum in Geography and Economics in 5th grade (Source: Popov, A., and team, Textbook in Geography and Economics for 5th grade, Sofia, Anubis, 2016 [6].)

Section, topic	Cartographic knowledge and skills	
	concepts	Skills
SECTION ONE GEOGRAPHICAL INFORMATION 1. Geographical globe and geographical map	Numerical scale, general geographical maps, thematic map	Defines what a geographical map and scale are. Reads symbols on a geographical map. Knows the methods for mapping (on the quantitative background, on the qualitative background, on the lines of movement, point method). Uses the elements of the geographical map (reads symbols, calculates distances, recognizes ways of mapping).
2. Geographical grid system	Geographical grid system, Longitude Latitude	Determines geographical coordinates on the map. Calculates distances using the numerical scale.
3. Geography detective /activity lesson/	-	Composes a short text in response to a geographical question (geographical investigation). Knows and uses scale; applies the concepts map, map elements.

The successful application of the curriculum for the formation of cartographic knowledge and skills from the curriculum for 5th grade implies: its careful study and highlighting the new moments; choosing a textbook that offers the best opportunities to achieve the goals; planning and optimal organization and implementation of the educational process in the specific school environment. The latter is related to the need for interaction between teacher and students emphasizing on: humanization - establishment of new social roles to achieve a kind of cooperation, partnership, mutual respect and exactingness to achieve the common goals; sociologizing - creating another environment for communication between the participants; technologization - use of modern educational technologies, based on the learning situation - learning task and relevant forms, methods and tools for its implementation.

Conclusion

1. The acquired cartographic knowledge and skills lay the foundations of the cartographic culture of the students, which develops throughout the course of study in Geography and Economics.

2. The use of testing as a method for control and assessment of cartographic knowledge and skills facilitates the receiving of the necessary feedback.

3. The method of testing with the application of properly developed test tasks ensures the objectivity of assessment in the subject, helps to form a positive motivation for learning and teaches students to be systematic, responsible and critical to their own preparation.

4. Regarding the new requirements for the results of teaching Geography and Economics and the use of innovative educational technologies, cartographic knowledge and skills are not only necessary but also an integral part of the learning process, contributing to the development of educational and research competence of students.

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Model for formation of social and civic key competences in geography and economics training in the first high school stage

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Abstract: *Educational reforms in recent years have necessitated the use of a variety of methods through which the key competences described in the European reference framework are formed. Through Geography and Economics training the eight groups of key competences are formed, including social and civic competences. The present study provides a model for the formation of social and civic competences in students through geography and economics training.*

Keywords: *key competences, social and civic competences, European reference framework*

Introduction

The dynamics of our daily lives force us to have skills, which make us to be more complete and active citizens of Bulgaria, Europe and the world. In the rapidly changing world, people need to have a large amount of skills and competences to develop throughout their lives. The formation of key competences as well as their development takes place throughout a person's life. In the educational policies of Bulgaria and many other countries, reforms have been made, which focus on competency-based education. The recommendation of the Council from 22.05.2018 on key competences, calls on „Member States to ensure that everyone will develop key competences throughout their lives by using a variety of learning approaches” that make it easier for students to live in the global world [13].

The purpose of this study is to try to analyze the essence and to emphasize the importance of key competences, in particular social and civic competences, by proposing a model for their formation through geography and economics training in the first high school stage.

Materials and methods

The main research methods are analysis of documentation, comparative analysis of scientific and methodological literature, survey method.

Results and discussions

Key competences

Competences are closely related to a higher degree of development of a group of abilities or assessment of a certain degree of perfection of skills [16]. In the last few years, a number of discussions have taken place about the basic competences that every person should have. The results of these discussions outline complexes of competences that are considered particularly important and significant for person's professional and personal realization. Gradually, as a result of the search for a "conceptual basis of school-based comparisons of achievements in international and national systems", the concept of *key competences* is imposed [9].

The following can be distinguished as key competences:

- Social – ability for social interaction, civic, psychological, pedagogical culture, skills for psychosocial adaptation, etc.;
- Professional – related to design-reflective skills, readiness to solve professional tasks with a high degree of difficulty, skills for application and development of innovations in the professional field;
- Communicative – language culture, language literacy and ability for productive dialogue and cooperation;
- Informational – for searching, processing and presenting information, computer literacy and handling of information technology products;
- Educational (academic) – ability for independent cognitive activity, desire for continuous self-education and self-improvement, for professional progress and research activity.
- Adopted in line with pan – European and national trends, the Concept for Lifelong Learning stands out two main groups of competences: professional and key [12].

Based on the thesis of dividing the content of the education in different categories such as „meta-subject” (includes all subjects and disciplines), „interdisciplinary” (includes certain subjects and educational areas) and “subject based” (for each subject separately), Hutorskoy organizes the competences hierarchically on three levels [6], indicated on Figure 1.

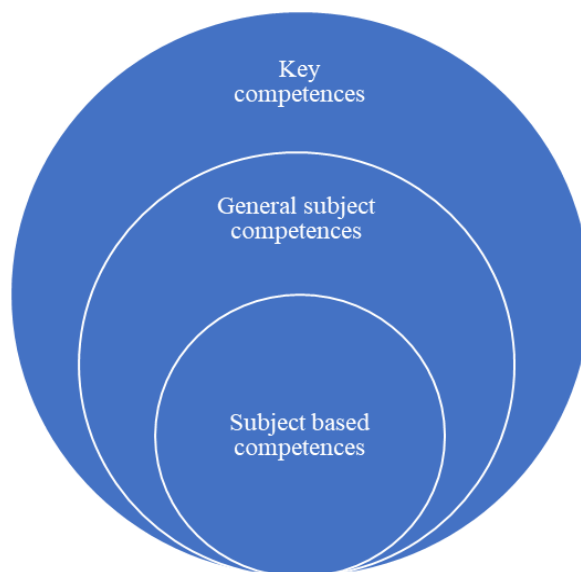


Figure1. Levels of Competences (based on Hutorskoy), 2005

In the European Reference Framework, the competences are defined as combination of knowledge, skills and attitudes. Knowledge is described as a composition of already established facts, data, concepts, ideas and theories that support the understanding of a particular area or subject. Skills are described as the ability and capacity of a person to perform processes and to use its existing knowledge in order to achieve results. Attitudes are described as a predisposition and way of thinking for taking action [9].

Leading European documents, such as the Lisbon Strategy and the European reference framework (2006), determine the following universal key competences:

- Communication in the mother tongue;
- Communication in foreign languages;

- Mathematical competence and basic competences in science and technology;
- Digital competence;
- Learning to learn;
- Social and civic competences;
- Sense of initiative and entrepreneurship;
- Cultural awareness and expression [7, 10].

For each of the key competences, the most important knowledge, skills and attitudes are listed. The idea of key competences is based on results-oriented training. Collaboration and learning through projects are approaches that support the learners training, increase their interest in the process of building key competences. Key competences are interdisciplinary and can be formed and developed in each and every subject, including geography and economics.

With the development of technology and the constant increase in the flow of information in the field of education, it is necessary to focus students' attention on activities that will form competent individuals with active civic self-awareness.

For full development of the student's personality and formation of a sense of respect for parents and relatives; own cultural identity, language and values; national values of the country and other civilizations – necessary for a responsible life in a free society, through education in the spirit of understanding, peace and tolerance, gender equality and friendship between all peoples [1].

On 18 December 2006, the European Parliament and the Council of the European Union adopted Recommendations on the key competences needed for satisfaction of personal and social fulfillment in the future knowledge-based society. This document, known as the „Key Competences Reference Framework“ identifies the eight groups of skills, knowledge and abilities, in general – competences [7]. It is clear that the possession of these competences is a good basis for the realization of a full life - both socially and personally. The learning to learn skill, accompanied by mathematical and digital literacy, provides a good basis for professional mobility and easy adaptation to the rapidly changing needs of the market and production. This reduces the risk of unemployment. The addition of both communication and social competences provides the possibility for full social realization of the individual as an active and responsible citizen with rational behavior in society. The formation and development of these competences is a long process. It covers the whole of conscious life of a person, but school education has a fundamental role in it [3].

In our opinion, for the purposes of this study we accept the statement that competences are a proven ability to use knowledge, skills and personal, social and / or methodological resources in work or study situations and in professional and personal development. For key competences we accept that they are „knowledge, skills and attitudes that help students to achieve personal fulfillment and at a later stage in their lives to find work and participate in society`s daily life” [8]. In this article we analyze a model for the formation of social and civic competences in the geography and economics training in the first high school stage.

Model for formation of social and civic key competences

In the present research an attempt will be made to indicate a model for the formation of social and civic competences in students and we will pay attention to the opportunities provided by the subject geography and economics for the formation of civic and social competence in adolescents.

Civic competence is the ability to act as responsible citizens and to participate fully in civic and social life based on an understanding of social, economic, legal and political concepts and structures, as well as global developments and sustainability [13].

Civic competence is based on knowledge of the basic concepts and phenomena related to individuals, groups, labor organizations, society, economy and culture. This means understanding the European common values expressed in Article 2 of the Treaty of the foundation of the European Union and in the Charter of Fundamental Rights of the European Union. [4, 5]. This competence includes awareness of current events and a critical understanding of major events in national, European and world history. It also includes awareness of the goals, values and policies of social and political movements, as well as knowledge and understanding of sustainable systems, in particular climate change and demographic change worldwide and the root causes that cause them. Knowledge of European integration and awareness of diversity and cultural identities in Europe and in the world are essential. This includes an understanding of the multicultural and socio-economic dimensions of European societies and the way in which national cultural identity contributes to European identity [7].

Civic competence skills are related to the ability to participate effectively, together with other people, in activities of general or public interest, including the sustainable development of society. This includes skills for critical thinking and integrated problem solving, as well as ability to argument decisions and to take a constructive part in community activities, also in decision-making at all levels, from local and national to European and international. It also includes the skill for consulting, for critical thinking and interacting with both traditional and new types of media, as well as to understand the role and functions of the media in democratic societies [13].

Establishing students' entry level on key competences through a survey

For the purpose of conducting a pedagogical experiment and a research on the opinion of students for the formation of key competences in students in the first high school stage, 104 students from 9th and 10th grade of PEG „Nikola Vaptsarov“ Shumen were interviewed and asked the following questions:

Indicate what the term „competence“ means to you:

A) Competence is associated with the individual's ability to function adequately in a professional environment, demonstrating behavior that meets expectations.

B) Competence is a set of knowledge (theoretical and practical), habits (intellectual and practical) and attitudes (value orientations and attitudes).

C) The competence owed by the person having the respective competence includes its personal attitudes towards the competence and its subject matter.

D) Competence is the ability to perform a job according to a predetermined standard.

E) Competence is a proven ability to use knowledge, skills and personal, social and/or methodological resources in work or study situations and in professional and personal development.

F) I cannot answer.

Before the conduction of the pedagogical experiment the answers of the surveyed students are different and are shown in fig. 2.

The majority of students (39%) state that: „Competence is a proven ability to use knowledge, skills and personal, social and / or methodological resources in work or study situations and in professional and personal development“. For 34% of the surveyed students, the competence is a set of knowledge (theoretical and practical), habits (intellectual and practical) and attitudes (value orientations and attitudes).

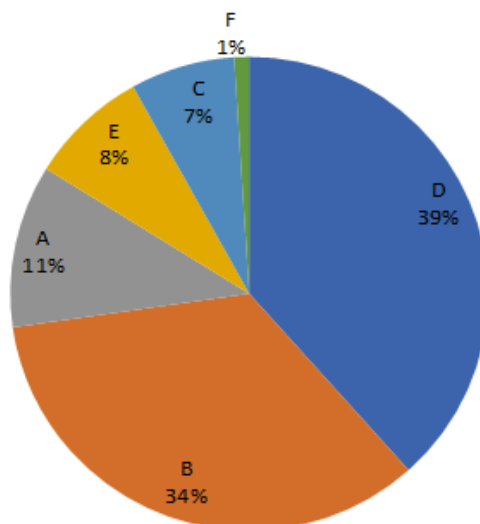


Figure 2. Relative share of the answers to the question: Indicate what the term „competence“ means to you

In addition to clarifying the concept of „competence“ the main purpose of the experiment is through this model to clarify the nature of key competences and to outline their importance for the development of adolescents.

For this reason, in the same survey, students were asked: "Why are competences important to you?" and the possible answers are:

A) Facilitate the realization on the labor market.

B) They are an important factor for the improvement of the personal development of each individual.

C) They contribute to the successful mobility within the European Community.

D) They ensure successful performance and social well-being of people by improving the quality of life.

E) I cannot determine.

F) Not important to me.

The results show that 66.8% of the students consider the competences important because they facilitate the realization on the labor market and for 21.9% of the surveyed students - because they contribute to the successful mobility within the European community. It is noteworthy that a small number of students indicated answers E (I cannot determine) and F (Not important to me), respectively 0.4% and 0.2% of the respondents. This indicates an awareness of the interest and appreciation of the important meaning of competences for the students. The presence of positive motivation to participate in the pedagogical experiment is crucial for expecting positive end results.

Another question asked to the students in the survey is related to the assessment of the significance of the individual key competences for the students themselves by their grading in the groups of competences with the greatest importance, with the least importance and without significance.

The analysis of the answers shows that of the eight key competences described in the European Framework of Reference and the ninth competency „skills to support sustainable development and a healthy lifestyle and sport” with the most importance for the surveyed students are digital competence and social and civic key competences. Students define as less important competences - Mathematical competence and basic competences in science and technology and skills to support sustainable development and a healthy lifestyle and sports. To the majority of the students the learning to learn skill and the competence for cultural awareness and expression are not important.

In order to establish the students' point of view on the methods for formation and development of key competences, the last question from the survey was asked:

How we can develop key competences in your opinion?

A) By working on projects;

B) By learning through experience;

C) By using interactive methods;

D) Through communication and exchange of experience;

E) Through teamwork.

The chart in Figure № 3 shows the students' summarize responses in %.

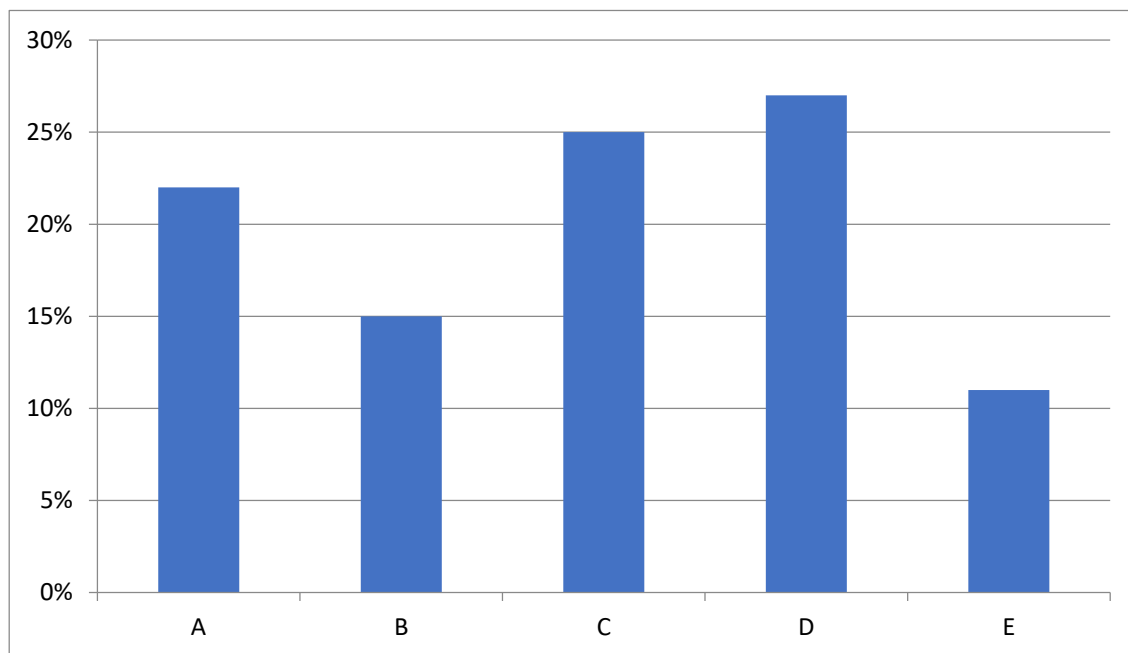


Figure 3. Relative share of the answers of the students participating to the survey to the following question: „How can we develop key competences”?

During a conversation with the students, they clarified that in their opinion, key competences can be developed through all these methods and they have indicated the most interesting for them. This explains the variety of the answers.

Good opportunities for the formation of social and civic competences can be found in the Geography and Economics training courses in 9th and 10th grade. The main reason for this is that in 9th

grade Geography of the Society of the World is studied, and in 10th grade Geography of Bulgaria [11, 14, 15].

Types of methods included in the model for the formation of social and civic key competences in geography and economics training in the first high school stage

Based on the results of the survey, we found a different entry level of the degree of mastery of the concept of „competence“, different ranking of the main types of key competences, but also a general positive assessment of their importance for the students.

We focused the pedagogical experiment on the curriculum in geography and economics in 9th and 10th grade, because it offers a good content basis for the formation and development of previously formed social and civic competences. We thought that the most suitable for this purpose were the topics:

- „World economy” – 9th grade;
- „Geographical location, borders and size of Bulgaria“ – 10th grade;
- „Settlements in Bulgaria“ – 10th grade;
- „State and administrative system of Bulgaria” – 10th grade.

An way of the formation of social and civic competences could be found in the first lesson of the geography and economics training and education in 10th grade, namely „Geographical location, borders and size of Bulgaria” [11,15].

During school year 2019 - 2020, 26 students from 10th grade in foreign language school „Nikola Vaptsarov“ Shumen participated in an experiment conducted in connection with a dissertation research. The students were given the task to analyze the borders of Bulgaria through the SWOT - analysis method. Figure 4 presents some of the students' answers about the northern border of Bulgaria.

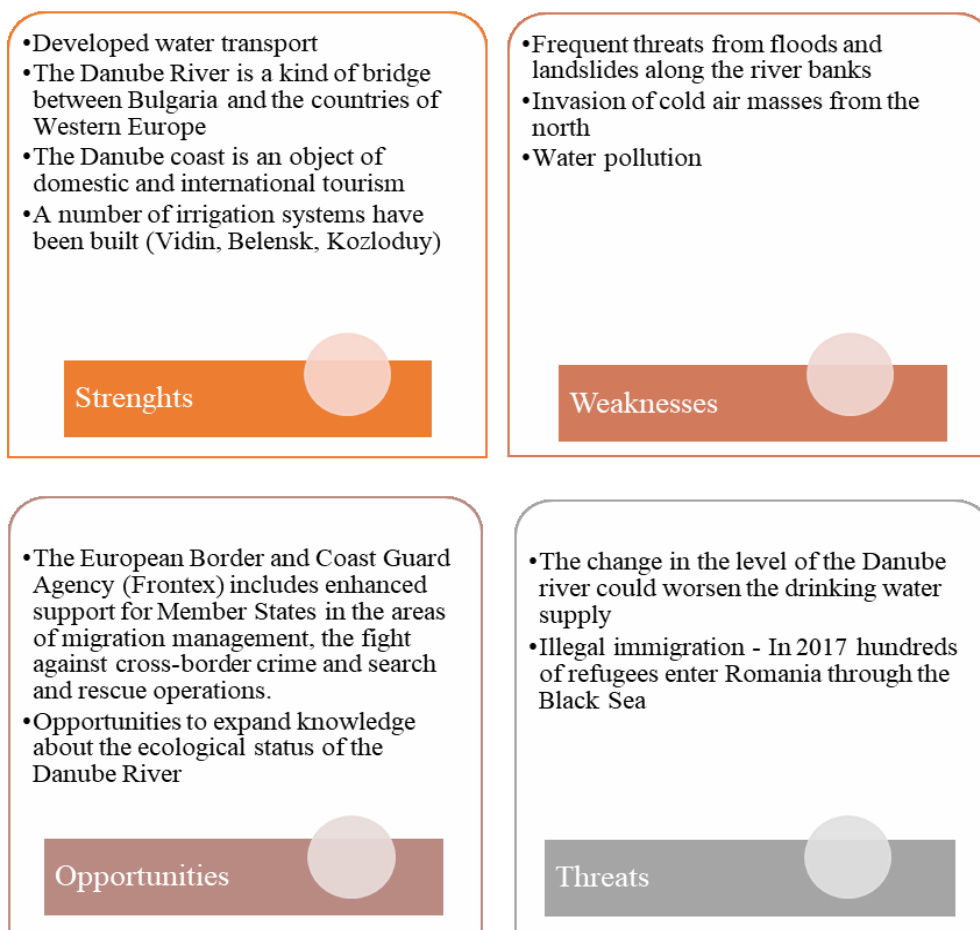


Figure 4. Results from SWOT - analysis of the northern border of Bulgaria

Another possibility for the formation of social and civic competence in students can be established in the topic „Settlements in Bulgaria“, studied in 10th grade [15]. The students were given the task to do a local history study of their homeland.

In the theoretical and methodological literature and in the practical activity local lore is a term that includes the activity of state institutions, public organizations and individuals for searching, collecting, processing and systematizing, studying and promoting publications, documents and material sources for a given administrative-territorial unit or area defined by natural, historical or economic boundaries [2].

The methodical requirements for realization of the set task are shown in Figure 5.

The first stage of completing the task is organization of the work and a preliminary preparation which includes determining the settlements and setting a deadline for the implementation of the task. When determining the settlements, the students are given the opportunity to choose their home settlement, the home settlement of their parents or grandparents. In this way a variety of settlements was researched and the interest of the students increased. The students were given fifteen days to prepare the local history study, and they had to allocate themselves for the each activity.

The second stage of the students' work is related to the research itself. Students should explore the location and nature of the settlement, when it originated, by whom and how it was founded and to follow its development. An important part of the study is the research of the population, its ethnic and racial affiliation, numbers and how they have changed over the years. In the second stage, students must also study the economic activity that is developing or that has developed in the village and the environmental consequences of human activity. Last but not least is the description of the problems of the settlement and the opportunities that exist to develop in the future. The third stage is the systematization of collected information. Students have the task to summarize the information from the study. During this stage, the data they have collected must be processed and the surveys, if any, analyzed. The last, fourth stage is the presentation of the local lore study. Students have to choose themselves how they will present their research – through a presentation, brochure, flyer or other.

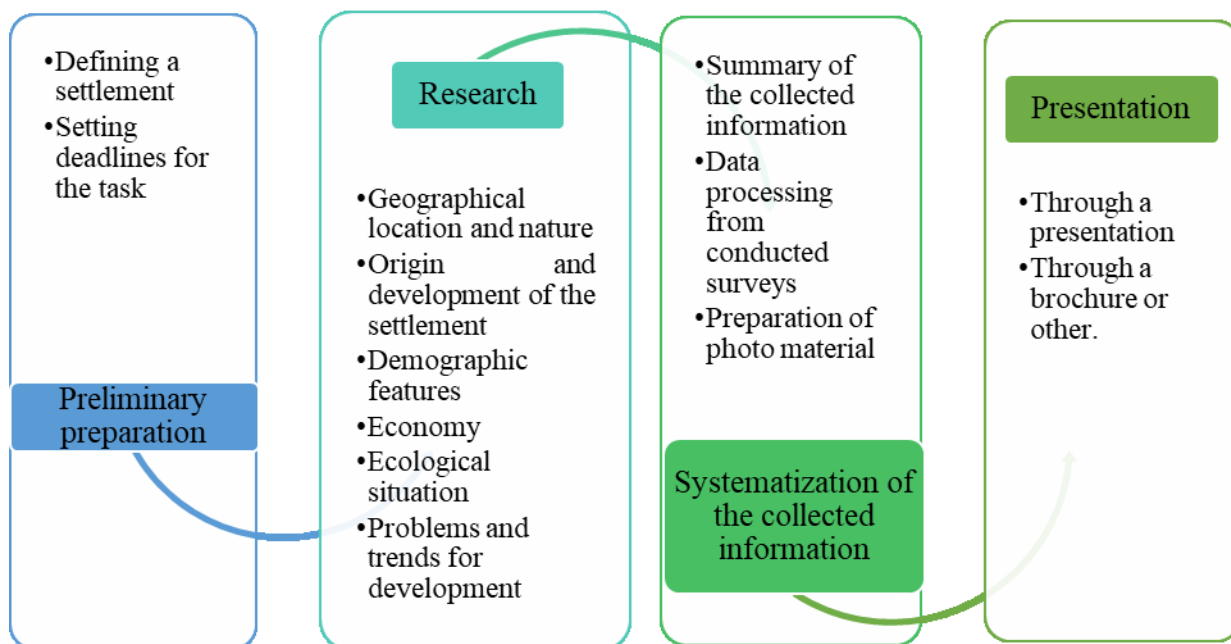


Figure 5. Requirements for preparing a local history study

During the preliminary preparation, namely the determination of the settlements, it became clear that there will be a great variety of studied settlements from northern, central and northeastern Bulgaria./Dobrich, Zlatar, Isparih, Kazanlak, Madara, Novi Pazar, Osmar, Pavlikeni, Pliska, Plovdiv , Smyadovo, Timarevo, Tutrakan, Hitrino, Shumen, Yasenkovo.

In a detailed analysis of the local lore research of the students, a thorough study of the nature, origin and development and demographic features of the settlement is observed. The students made an effort to present a rich photo material describing interesting, according to them, events and landmarks from the studied village. On figures from 6 to 12 could be seen a part of the photos gathered and used by the students in their local history study. Those photos illustrate different aspects of economical activity from historical point of view in the settlements subject to the study.



Figure 6. The fortress of Shumen



Figure 7. The center of the Pavlikeni in 1940



Figure 8. Market of Pavlikeni in the 30s of the XX century



Figure 9. The exhibition „Bee Mania“ in the city of Dobrich



Figure 10. The train station in the village of Hitрино before the explosion on 10.12.2016.



Figure 11. Development of grain production in the village of Zlatar in 1976



Figure 12. The school opening in the village of Timarevo in 1965

As already mentioned, part of the third stage is the systematization of the collected information and summarization of surveys conducted among the population.

Interesting results could be seen in the survey conducted among some residents of the Shumen in connection with the local history study of the city. After analyzing the survey, the following conclusions were made:

- Many people of the working age with professions such as medics, gastronomes and others from the tertiary sector would emigrate from Bulgaria and Shumen, but at a later stage 93% of them say that they would return to their hometown.
- Older people strongly believe that the economic situation in the city will change and will attract migrants in the future.
- People in Shumen believe that the food products in the big supermarkets are very expensive, which do not correspond to the income of the population.
- 68% of the people in Shumen participating in the survey indicated that one of the most serious problems of the population in the city is the high price of water and the frequent accidents that leave the population without water supply.
- 75% of the surveyed population of the city has indicated that the medical services in the city are of very low quality and are unsatisfactory for the population.

In the study for the town of Isparih are described interesting stories told by locals about the history, development and life of the town.

According to the residents of Isparih about the way of life in the town since 1955 to date:

- The city market was on a barter basis
- Eggs calibrators were used. The calibrators were used to determine the size of the eggs and therefore according to the size were determined their price in the form of other goods: a small egg = one soap, a large egg = half a kilogram of sugar.
- In the past, almost all residents of the city have raised animals / horses, goats, pigs, chickens, etc./, and today these people are units.
- Until 1970 there were no large industrial plants in Isparih
- Many of the villages around Isparih do not have schools, so the children from these villages are transported to the town of Isparih so they can study.
- According to the residents, it was possible to feed a large family with the received remuneration due to the fact that they produced food products in their households (cheese, yellow cheese, etc.).
- According to many of the town residents, life used to be calmer and "sweeter", but there were also disadvantages that there was a lack of a number of goods. "Now there are goods, but we don't have money, and in the time of socialism we had money but there was no variety of goods," Grandpa Peter said in a conversation with him

The results of the study of the native village give grounds to claim that through it a number of skills are developed in the students: to research, summarize, systematize, to make a forecast and to express an opinion on problems encountered.

Based on the results of the experiment, we come to the conclusion that in most of the students social and civic competences have been formed.

The described activities are types of methods included in the pedagogical experiment which represents only one part of it.

Conclusions

- The formation and development of the key competences is accomplished by applying a set of methods in geography and economics training process in the first high school stage.
- The formation of social and civic competences in students is increasingly important for them, as this key competence helps to ensure resilience and the ability to adapt adolescents to the changing world.
- The research of the home settlement contributes to better social inclusion in the social and economic life of the student in the country and creates an opportunity to develop critical thinking and skills for better argumentation, which are among the most important skills related to social and civic competence.
- The described methods by which it is possible to form social and civic competences and the results of the conducted experiment confirm the thesis that the school subject geography and economics creates many good opportunities for the formation of this group of competences.

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