

PROBLEMS OF DEVELOPMENT OF THE RUSSIAN GEOGRAPHICAL EDUCATION IN SECONDARY AND HIGHER SCHOOL

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Abstract: The article's authors have defined their goal of not just explaining the general architecture of the geographical education, but indicating the principles of its reorganization at the intra-stage and inter-stage levels, when using the world-view formulas.~The dialectics serves as a research method. Its laws are working in the form of the world-view formulas and the world-view guidelines. Problems of training the geographical perception start at the inter-thematic level, when a factor of time between the geographical analysis of the sectorial part and the geographical synthesis of the district part is involved. A loss of the synthesis forms in the geography's school course leads to the fact that the students cease to perceive the "sectorial geography – district geography" opposition, which makes it impossible to realize the interaction between them under the principle

"sectorial analysis – regional synthesis"; a rupture of the geographical education's integrity, and, on the whole, to a loss of the meaning of the geographical dichotomy's formula. For the efficient convergence of the university educational programs "Principles of personal and social safety" and "Geographical Education", the geosecuretology conception was developed into the "Principles of personal and social safety and Geography" program.

Keywords: geosecuretology, dichotomy, convergence, world-view formula, world-view guideline.

1. Introduction

Geography, as a fundamental science, along with astronomy, mathematics, physics, chemistry, biology and geology, forms the man's

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scientific world view. The decades-formed structure of the geography course in the Russian secondary school consists of four stages: the first stage is initial one that gives an insight into the Earth's mantles, fundamentals of topography and cartography (the 6th year); the second stage is acquaintance with the geography of continents and oceans (the 7th year); a peculiarity of the third stage is that, unlike the other stages, it includes two years (the 8-9th years) and works at the country (Russia) level, while forming the knowledge of its physical and socio-economic geography; the fourth stage is final one – this is the study of the world's economic and social geography (the 10th year).

In the university, a system of training the future geography teachers consists of the same stages, but, this is not just an in-depth review of the school program, this is an entirely new, higher level of the geographical education. Such succession embodies the dialectic law of the negation of negation, while demonstrating the helicity of the geographical education development, its succession at various levels.

At the school and university levels, the changes take place on a scale of themes and sections of separate

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stages, but the stages remain unchanged.

This brings up a reasonable question of suitability of such traditionality in the age of the innovative aspirations. What is the secret of such permanence of the inter-stage level? How should these sections be showed in the university education in conditions of the educational programs convergence?

The inter-stage level is a limiting level, its realization does not get to a sphere of reflection of teachers and methodologists. There are no academic papers on its analysis too.

In the teachers' training science on the theory and methods of teaching of the geography, the researchers are going to address specific teaching problems in the format of separate themes, sections or years of education. Within the framework of this article, the authors have defined their goal of showing a trunk line of complementation of the world-view models and guidelines, which logically change each other at the intra-stage and inter-stage levels. A problem, which is expressed by a proverb "not to see the wood for the trees", is typical of the modern theory and methods of teaching of the geography.

The four-stage geographical education, which is implemented at the school and university phases, is the general strategy. Developments at the level of annual cycles, sections and themes, serve as tactical actions. However, in recent years these tactical actions do not conform to the general concept of the geographical education system – a successive (intra-stage and inter-stage) synthesis of the students' geographical knowledge. A situation in the theory and methods of the geography teaching and in the methodologists' behavior is similar to the behavior of an apartment block's dwellers, who are making the replanning of their apartments on their floors for their own convenience, while weakening the load-bearing structures and blocking the general ventilation system. The article's authors have defined their goal of not just explaining the general architecture of the geographical education, but indicating the principles of its reorganization at the intra-stage and inter-stage levels, when using the world-view formulas. The article materials will allow the Russian practicing teachers to make the general adjustment of their teaching activities subordinated to the general concept. The article will allow

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the foreign teachers to borrow the most successful technological schemes of cooperation between the levels and to adapt them in their practice.

The authors set the following tasks:

- to detect the problems of training the perception as fragmentariness of the geographical education and mastering of the world-view formulas by the students at its various stages;

- to demonstrate the more complicated application of the world-view formulas and the change of their heuristic potential at the various levels;

- to develop a conception of the convergence (synthesis) of the university programs “Principles of personal and social safety” and “Geographical education” into a single dual baccalaureate on the basis of a dialectical approach.

2. Materials and Methods

Study of the issues of an optimal combination of the natural-science, special and philosophical knowledge in the education system is traditional in developing the domestic philosophic-teaching thought, which is proved by A.O. Gennadievich, A.E. Asfarovna,

V.O. Aleksandrovna, S.D. Vitalievich, T.E. Nikolaevna; in their opinion, this approach develops the education in the context of the humanistic values, favors the formation of the specialist's personality, the world view development, the appearance of new morality and the people's spiritual reality [2018].

The dialectics, whose laws work in the form of the world-view formulas, acts as the research method.

Either the formulas are clearly shown in the secondary school's geographical education, or they have a concealed nature. The authors consider the following formulas: the dichotomy (duality) and the trichotomy (trinality).

The authors implemented a dialectic analysis, presenting a hierarchical system of interrelations between the stages and themes in the geographical education system in the form of binary oppositions "analysis – synthesis". In the university education, the synthesis was shown in the form of the authors-developed convergence conception into the dual baccalaureate of two profiles "geographical education" and "principles of personal and social safety".

Work of the world-view formulas is of interest, which is expressed in dividing the single content into parts (analysis) with its subsequent unification (synthesis) at the inter-thematic, intra-stage, inter-stage levels.

The dichotomy in geography is embodiment of the dialectic law of unity and the conflict of opposites, and the trichotomy is embodiment of a transition of the quantitative changes into the qualitative changes (appearance of the third principle as a result of interaction of two principles with subsequent qualitative transformation of the duality into the triplicity).

The article's authors have an experience of implementing the trichotomy as a world-view formula in the geographical research [Baklanov, Novikov, Ptitsyn, 2016; Kozyreva K. S., Novikov A. N., Novikova M. S. 2016; Baklanov, Novikov, Novikova, 2018].

Let's note that the modern stage has a great variety in perception of the geography by students and teachers, which is connected with the freedom of religion. In the Soviet period, the materialistic dialectics prevailed, which spread the dual perception of the world.

The dual perception of the geographical reality serves as a major

method in the post-Soviet period too. Let's note a conception of the continental-oceanic dichotomy by L.A. Bezrukov [2008] and a conception of the polarized biosphere by B.B. Rodoman [2002].

The said world-view formulas are well developed by the modern philosophy and logic. The authors are interested only in their constructive nature free from a religious and mystic implication.

3. Research results

Stages of training the geographical images perception

A problem of the perception training is worked out in the best way in the musical and artistic education sections, where it is shown the most clearly, and so it is realized perfectly well. The authors faced this problem. The Chita students visited the museums for several years, during organization of trips to the Long-distance comprehensive practice with the students to Irkutsk and the Irkutsk region, along with visiting the industrial enterprises. In the Art museum, during acquaintance with the oil-paintings, the article's authors noted that the students had no skills to perceive such works.

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They took a good look at them, approaching them very closely and they saw only colored strokes and failed to perceive what is painted on the picture. The authors had to explain that they need not peer at the details at a short distance, but they should take a step back and try to include the entire picture in their field of vision. Thus, they had to work on perception by the students of an artistic work.

While communicating with the musical school teachers, the authors often heard their expression: "Music is not in notes, it is between them". Thus, the teachers explain the beginning musicians that to learn the notes is not tantamount to learning the work. It is necessary to combine the rhythmicity and smoothness of the performance, which express the musical composition integrity.

The problem-reflexive potential is of importance to the music perception, this potential research is covered in the paper by the Kazan University scientists (Russia) S.V. Esekeeva, E.V. Kovrikova, I.F. Kamalova and S.N. Farah [2017].

In the geographic education, this problem is not shown so clearly, and so, it is not realized. This problem needs the

setting and the designation of a degree of severity at the various levels: an intra-thematic level (at the level of a week of teaching), an inter-thematic level (at the level of a term of the educational year), an intra-year level (at the level of a year's school phase) and the largest-scale level – the inter-year level (including the whole school course).

The problem is getting more and more severe with the transition from one level to another – a higher level.

At the intra-thematic level, this problem is not shown practically, since the teachers pay much attention to the methods of teaching of some themes in the geography at the level of academic papers, and the technologies of teaching of some themes are worked out in the best way. The problem can appear because of individual peculiarities of a student, his unwillingness to study of peculiarities of his mental development.

The problems start at the inter-thematic level, when the time factor is involved, in other words, the synthesis takes place much later than the analysis does. The students forget a part of the material, while the complexation mechanisms became much weaker in the domestic school geography in the last two decades. These mechanisms were

based on serious scientific conceptions: the natural territorial complex with geochemical cycles, the territorial production complex with energy-production cycles. The problem appears because of the scientific reduction (simplification) of the school geography content. In the last two decades a problem of overloading of the students with scientific terms and notions have been solved: the natural territorial complexes and the territorial production complexes disappeared from the teaching course, but it was they that performed a function of complexation, or the assurance of the geographical synthesis form. No new conceptions, which would synthesize the geographical knowledge into the district geography, were introduced. Geographical characteristics lost a clear form and consistency. The knowledge must be synthesized in the format of scientific conceptions. Synthesis without a form is impossible. Apart from that, the district geography without the synthesis conception is not realized by the child and does not leave integral geographical images of countries and regions. The first part of geography is called “sectorial” – this is analysis, the second part is synthesis. The analysis is based on

the map studying, the synthesis of based on studying of the mechanisms of interaction between the geographic areas. When the synthesis is lost, the analysis is getting senseless. Here a chain of the integral geographical education is broken. And the child loses the geographical dichotomy perception.

Let's call the inter-thematic level within a stage an "intra-stage level". At the intra-stage levels, an active work of the world-view formulas should be carried out, but if a connection between the themes is lost, this does not take place. This is the main barrier on the way of forming the world view, which makes the intra-year level of the geographic education fragmentary and makes the level lose its integrity.

In the Soviet period, at the intra-stage level, the geographical dichotomy formula was established, which took on the role of a model of the scientific explanation.

At the first, initial stage that gives an insight into the Earth's mantles, these contradictions are reasons for development of these mantles. Take, for example, one of the key notions of the "Lithosphere" – "relief" theme, which appears in the geography course as a result of a fight of the endogenous and

exogenous forces. And in the study of the "Atmosphere" theme, the air mass movements are considered as a result of a fight of the pressure maximums and the pressure minimums. The study of topography and cartography itself is a division of all geo-images into two types on a scale.

The second stage's name also comprises the dichotomy "Geography of continents and oceans" that emphasizes the Earth division into territories and areas of water.

The third stage opens for the schoolchildren a dual essence of the geographical science in its division into natural and social (humanitarian) parts.

The fourth stage gives an insight into the binary oppositions: "developed countries – developing countries"; "specialization – cooperation"; "global – regional".

According to the plan of founders of the materialistic geographic education, a schoolchild, when finishing the secondary education, must be ready to understand the materialistic dialectics in the university, as he is trained on the world-view formula of perceiving the duality of all the things in existence. In the university the school knowledge quantity must pass into the quality – the

understanding. The university program should be perceived dialectically consciously.

Some students really get through this scheme. More than that, some of them use this formula in their candidate and doctoral research in the future.

The dichotomy is the major world-view formula in the geography or the major formula of the scientific explanation. However, simultaneously with the dichotomous formula, the trichotomous formula starts to be involved, and in some cases, the quaternary formula is present.

For example, in the physical geography all the territories (regions and countries) are studied by a sectorial (analytical) way, whether this is the soil geography or the machine building geography, and then they are studied by a district (synthetic) way. Introduction of a district way of the geography study by N.N. Baransky [1980] in the school and university courses can be called revolutionary in the methods of the subject teaching. However, in the dual (dichotomous) formula, which is introduced by N.N. Baransky, it is possible to see the transition to the trichotomous (trichotomous) formula. The theme “Geographic position”, which is

contained in the sectorial part, does not fit into it because of a nature of its content. Like other themes, it does not give the sectorial component-wise analysis, but it detects the territory position. As the globalization increases, this theme is getting independent and requires special attention in studying the economic-geographical, geopolitical and ecological-geographic types of the position. As a matter of fact, a new formula of the trichotomy appears, which acquires a nature of the completed geographical trilogy.

The inter-stage level is a limiting level in the geographical education. A problem of the continuity and discretization correlation is the most severe here. Here a social role of the theoretical geography should be showed, which is intended to assure the geographical science development as well as to supply the geographical education with models of forming the geographical images of some countries and regions and the integral geographical picture of the world and to offer something new in return for the territorial complexes.

In the modern information society, the geographical competences pass into a rank of common cultural

competences due to the geo-information technologies. More and more people come to use the “geographic data” function on their smartphones, to identify their position and to lay the advance routes.

The modern man’s geographic perception of the reality is changing significantly because of development of the communication and the transport mobility. Quantity of the geographical information about territories and areas of water increases. A problem of the geographical perception appears, which consists in the fact that, in condition of the information overload, the man ceases to process the information: to analyze, to choose the main things, to compare and to generalize. The man is not surprised at the geographical changes any longer, when he crosses the natural zones boundaries. It comes natural that it is impossible to learn the whole inventory (encyclopedic) geography in the intra-thematic formats. The schools had such aspiration as far back as 100 years ago. Geography was one of unpopular subjects among the children, since it boiled down to the study of the areas plotted on the geographical map. However, the modern schoolchildren know the encyclopedic geography worse

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and worse from year to year, relying upon the electronic media. The people’s brains transfer some their memorization functions to the “external storage media”. A problem of the materials choice for memorization is very severe in the geography. But it is necessary to memorize even a carefully chosen material in a certain system, imparting it clear forms at the inter-thematic, intra-stage, inter-stage levels. The forms of the geographical information synthesis are demanded to a greater extent. The authors do not propose returning the cancelled notions (the territorial production complex and the natural territorial complex) into the school geography course, it is possible to introduce more modern notions, for example, the geographical clusters.

Levels of a more complicated application of the world-view formulas

A modern system of the geographical education in the secondary school and in the universities’ geographical departments is a product of the longtime evolution. The main function of this system is to equip the man with the world-view formulas that will allow him to adequately reflect the geographical reality in the future. A problem of the students’ readiness to use

these formulas is the most severe: some students, having learnt a lot of examples of these formulas, do not fall outside their limits; other people use these formulas as a “world-view mold”, finding for each geographical situation their only situation. In the latter case, we can see stereotyped thinking. Essentially, the geographical education of a threshold level is formation of a number of the student’s examples, which he operates with. The next level is a standard level that is distinguished by provision with the “world-view mold”. The highest level is a reference level, whose representatives can use several world-view formulas to explain the same geographical situation. In the variability, the pliancy of mind is shown, as a necessary quality of thinking, showing of a true geographical culture allowing the student to identify himself as a “geographer”. According to the research conducted by V A. Gnevasheva [2018], a success of a young man’s professional identification is reflected in a personal context of his professional satisfaction.

In the modern pedagogics, the foreign authors Caroline Baillie, John A. Bowden and Jan H. F. Meyer [2013] actively implement the concept of The Threshold Capability Integrated

Theoretical Framework that forms the basis of development of the universities’ educational programs aimed at developing the graduating students’ ability to cope with new situations in their professional, social and personal life. Sanjeev Kumar Srivastava [2013], when studying the threshold notions in mastering by the students of the geographical information systems, considers them as a step to the conceptual understanding. He said that the threshold notions are the transforming notions in a discipline, which are often hard to understand during the first detection, but when they are mastered, they transform the students towards the discipline epistemically and ontologically. For example, some notions in various disciplines serves as thresholds in the sense that it is necessary to master them before it would be possible to obtain the future progress in this discipline. These notions resemble the conceptual gates, by means of which the students go through a liminal space (in translation from the Latin language “limen” means a “threshold”), before they can become experts in the discipline. In order to master the geographical information systems, the map scale, the data model and the

functional compatibility serve as threshold notions. The author is fair to say that due to the technological simplicity, the geographical information systems can be used with the surface knowledge too, or without achieving the conceptual understanding of the fundamental theories.

R. A. Ulengov and N. K. Gabdrakhmanov [2017] are fair to say that the wider possibilities of computers, the growth of information cognitive activity of the students and the people, who are just interested in the geography and the ecology, are a task of qualitative new educational creation of the geographical information systems, which unites the toponymy, cartography and geography data.

In transition from one level to another, the geographical thinking is getting more independent and it is removing from stereotypes. Essentially, the first, threshold level is not a geographical thinking as such, it demonstrates only a possibility of the human memory to recollect a good example. In this case, a possibility of explanation in the geography is limited by the doubt that this example would fit the necessary situation. The next, the standard level implies the demonstration

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of the thinking independence, namely, not just knowledge of some world-view formulas, but their choice for a specific situation. The man, who reaches this level, becomes free, he is able to make decisions. The reference level can be identified as the “top class” of the geographical thought. Reaching of this level runs into the barriers that the education system itself builds. In the Soviet period this was a barrier related to a peculiarity of the students’ philosophical training. The materialist dialectics are often mastered by the students formally and boiled down to the examples learning. This is explained by the fact that the majority of students could not see its connection with the geographical science. The lecturers delivered the philosophy lectures in the universities uniformly for various specialties, and the lectures were practically not adapted for specific students via examples of their science. The geography students need a special course “Philosophy of geography” that would serve as a “theoretical bridge” between the philosophy proper and the geography.

In the study of the geographical reality, a transition from the threshold level to the standard level and then to the

reference level of cognition has two scenarios in alternation of the world-view formulas in training of perception of the integral images of the Earth, countries and regions: the basic scenario and the nonbasic scenario.

The basic scenario is related to the use of one world-view model – the dichotomy of all the things in existence, as an analysis of binary oppositions. In order to reach the threshold level, the student learns a number of such oppositions in each theme. And at the school level, these oppositions serve as examples, while bringing the dichotomy to the rank of the main world-view formula.

In the recent years the higher education has experienced the transition to the international standards: introduction of the baccalaureate and the magistracy; a competence-based approach with its complicated system of assessing the student's activities. However, this is only a change of external forms that do not concern the subject's content-related side (in this case, the geography). The Western foreign countries are discussing a problem of the geography integration into the educational program oriented to the internationalization. In Journal of

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Geography in Higher Education, Paul F. Hudson and Sarah E. Hinman [2017] express their concern about the internationalization of the university geographical education in the Netherlands. The transition to the single external forms of the educational process is followed by the transition to the content unity. For example, it is necessary to use the common soil typification in all the USA and European universities. The decades-formed geographical education system in the secondary and higher school may experience the revolutionary changes. There is a question: "What world-view formulas will be the main formulas during the internalization?"

Problems of the geographic education convergence in the higher school

At present, Russia witnesses a process of uniting the teaching teams of the universities, faculties and departments, which is accompanied with the educational programs convergence. The united teams are demanded not only to establish a good psychological microclimate to continue an efficient work of the creative personalities as well as to develop the single conceptual basis of interaction. It is of particular

importance to the teams united to work in the single educational program format.

In 2012 In Chita (the Transbaikal Territory, Russia), N.G. Chernyshevsky Transbaikal State Humanitarian-Teachers' Training University was joined to Transbaikal State University.

Creation of the double direction of the baccalaureate work through uniting of two profiles "Principles of personal and social safety" and "Geographical Education" creates the convergence problems. The author believes that this is related to the absence of the common conceptual basis of uniting of specialties; substantiation of prospects of forming a unique set of the graduating students' competences, a mechanism of the meta-competency-based cooperation of the graduating departments.

The modern science has the following tendencies: divergence, parallelism and convergence.

A convergent approach in the science and education in this country is actively implemented in the physics and physical education under the leadership of the Doctor of Engineering Sciences, professor, corresponding member of the Russian Academy of Sciences, the

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President of National Research Center "Kurchatov Institute" (Moscow) Mikhail Valentinovich Kovalchuk [2013]. This process is implemented at three levels: in Kurchatov Institute, in the artificial intelligence research on the basis of the convergent NBICS-technologies (nano-, bio-, info-, cognitive, socio-humanistic); in Moscow Institute of Physics and Technology (MIPT), where the NBIC-faculty was established to train the specialists in conditions of the convergence of sciences and technologies; in Moscow Kurchatov School.

The socio-humanistic sciences and technologies joined the convergence later than the others did, and the NBIC abbreviation was supplemented to NBICS.

The MIPT professor K.A. Skvorchevsky, while speaking about a role of teachers, managers and scientists in the education system in conditions of designing the Future world in conditions of the opposite trends, indicates the change inhomogeneity and the feeling of "break", "tearing apart" of the reality, says: "A lack of goals, a shortage of the common work prospects is getting more and more obvious. We have quite enough means of organizing the

activities and the work tools. The teaching tools are very rich in methods, technologies, a standard of the teaching experience. The shortage is in the space of goal sets (*underlined by K. Skvorchevsky*). We believe that a “convergent approach in the education” consists in goals rather than means of the education itself [2017, p. 8].

In 2018, for the first time, the department of Geography, Theory and Methods of Geography Teaching of Transbaikalian State University (Chita) trains the students on the specialty “Principles of personal and social safety and Geography” of the educational program “Teachers’ Training Education”. The issue of reasonability of uniting two profiles was solved for reasons of their coincidence of parts of the educational plans on the content, in other words, apart from the general scientific disciplines, some natural-scientific disciplines coincided with each other too. However, there is no single educational conception even now, which poses a problem of the goal coordination of the teaching team that is presented by two graduating departments of engineering, technology and principles of personal and social safety and Geography, Theory and Methods of

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Geography Teaching. The single conception is a kind of an idea guideline. Of course, all the requirements for the level and quality of the students’ education are stipulated at the level of competences. However, the single conception is a world-view guideline of the meta-competences level. Each operating program of the discipline must be oriented to it, expressing the general concept of the programs convergence.

All the educational disciplines of the specialty of the educational program “Principles of personal and social safety and Geography” can be divided for convenience, according to the meaning in the program, into analytical and synthetic disciplines. Of course, the courses on the methods of teaching the geography and principles of personal and social safety are synthesizing courses, while uniting the psychological and teachers’ training disciplines with the disciplines of geography and principles of personal and social safety. The problem is that there is no a synthesis of the geography and the principles of personal and social safety. Although, the main task is to find a conception that would carry out a meta-subject mission, when uniting the two profiles into the single system with the general concept.

The “principles of personal and social safety” specialty had a lot of technical and technological disciplines in the educational plan: “Hydraulics”, “Fundamentals of metalwork”, “Fundamentals of materials machining”, “Fundamentals of nanotechnologies”, “New technologies and materials”, “Fundamentals of applied mechanics”, “Materiology”. All these disciplines were inherited by the double baccalaureate “Principles of personal and social safety and Geography”. These disciplines are of extreme importance to understanding of the technical and technological principles of personal and social safety. However, there is a question: “What do they matter for the geographical education?”

It appears that they are of the utmost importance. The educational programs (educational plans) of training the future geography teachers always had two technical disciplines: “Cartography with fundamentals of topography” and “Fundamentals of industrial and agricultural production”. Later on, the latter discipline changed its name twice: for “Fundamentals of economy and technologies of branches of the material production” and for “Geography of the material production

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branches”. In the course of this discipline, the students familiarized themselves with the production forces and the energy-production cycles. The discipline gave them the knowledge to understand the technological and technical factors of production location. Requirements for the discipline teaching and for the textbooks were very high, since it was necessary to explain the complicated technological processes in extremely simplified form to the students who did not have an elementary technical culture. And it was necessary to do the simplification without prejudice to the content. This discipline, along with the cartography, was one of the most difficult disciplines for the students. After the double baccalaureate was introduced, the students came to master this discipline better. The reason is that a level of the students’ technical culture became much higher, while the discipline, which had the meaning of forming the fundamentals of technical knowledge, changed its meaning radically, started synthesizing the geographical and technical subjects. The economical-geographical and geo-ecological disciplines received a powerful foundation in the new educational program.

The educational plan of the students training provides for three yearly essays: on the geographical sciences, on the principles of personal and social safety and on the teaching methods. The last yearly essay is performed on the methods of teaching of the geography or the principles of personal and social safety (at option of the student). A great explanatory work was carried out with the students on this issue. The author, who was guided by an idea about the safety-oriented geographical thinking, induced the students to choose the research avenue, which was common for two yearly essays, and which would cover the aspects of the principles of the population's personal and social safety and the geography. For example, the geographical paper was performed on the demographic processes' territorial organization, and the paper in the principles of personal and social safety was performed on the demographic safety. Such the sciences convergence at the yearly essays level allowed the students to reach a certain depth of knowledge, while sparing their time and strength. Let's note that some students bought into an idea of such convergence at the yearly essays' level.

The geographical education has a possibility, which is not translated into action up to now. The geographical education in the school and university education is built on the single principle of succession of the analytical and synthetic parts. This principle is observed in the physical (natural) as well as in the social (humanitarian) geography. As a matter of fact, the first, analytical part is a geographical inventory that asks two questions: "What?" and "Where?". Of course, the professional geographers do not like the fact that their science is identified only with this first part. This is only the encyclopedic geography that develops the memory and nothing but. The first part is also called the sectorial geography.

Let's cite some examples of sorting out the specialties (branches): surface water geography, zoogeography, population geography, industry geography, etc. The sectorial geography is difficult for students because of its load on the memory. The students spend much time filling in the base maps and handing in their work to the lecturers. The sectorial geography is traditionally studied in the 2-3 years.

The fourth-fifth year students learn the second, synthetic part of the geography. Professors or associate professors with great work experiences should teach this part at the geographical departments. This part opens great opportunities on the geographical knowledge complexation before the lecturer and students. This is a “top class” of the geographical thought.

A synthetic part of the geography can be implemented in three ways.

The first way is a synthesis of geographical knowledge in the form of complexes and systems. To this effect, the lecturer has only to “choose a mold” of the methods developed. In the Soviet science – this is a teaching about the natural territorial complex (the physical geography) and a teaching about the territorial production complex (the social geography).

The second way is a problem approach. This is isolation of the key geographic problems by means of the geographical examination and offer of ways to solve them.

The third way is related to the building of the logically-determinate chains. In the Soviet geography, a teaching about the geographical determinism was criticized and called

the “bourgeois geography”, it was related to the nazism and the socio-darwinism. The problem is that the Western classical geography has many papers grossly exaggerating a geographical factor in the society development. While the Soviet geography, on the contrary, tried to diminish this factor, when proposing “reversing the rivers”. The reason for that is simple: it was necessary to master the Northern areas by the people who had no physiological health adaptation to the resettlement locality.

At present, a problem of assessment of the geographical factor’s connection with the country’s economic development and the Russian society’s evolution appropriately attracts more and more attention of the Russian economic geographers. The attitude towards the geographical determinism is changing gradually, its extremes and exaggerations are overcome, the determination’s limits and chains are specified. Therefore, the explanatory possibilities of the economic geography itself as a fundamental science, which is intended to study the conditionality (determinacy) of the socio-economic and political phenomena, connections and processes by the differentiation

(inhomogeneity) of the natural, economic and cultural landscapes, expanded significantly [Bezrukov, 2008, p. 3].

Discussion

The world-view formulas and guidelines are of great importance to the geographical education.

The dichotomy and trichotomy, as world-view formulas, when complementing each other, expand the possibilities of the geographical explanation, while the geo-securitology becomes a form of the geography and principles of personal and social safety convergence.

Geography of the principles of personal and social safety should, via the geographic examination in the analytic geography, to detect the existing real and potential territorial threats, which are to become an initial link in building the geo-determinate chains in the synthetic geography. Such direction of the thought development can become the pivot of the safety-oriented geographical thinking.

The sectorial and synthetic geographies are implemented at the global, country-specific and regional levels, so the safe geographical thinking can be applied at all the levels.

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The uniting of two educational programs is intended to assure not just a mechanical amount, but the synergistic effect, a qualitatively new intellectual product in the form of a unique educational system and in the form of a unique combination of the students' competences. However, in order to achieve this effect, there is a need for not so much a reflection of the program implementation experience, as a new conceptual basis that would make the convergence reasonable. An idea of the safe geographical thinking must become such a conceptual basis. The idea of the geographical thinking is well worked out in the domestic science. The geographical science develops not only in depth, when creating new notions and formulating new laws, but also in breadth. In the latter case, the researchers' geographical thinking is aimed at new subjects that were not researched by the geographical science earlier.

“Geosecuritology” (geography of the principles of personal and social safety) can develop on the basis of forming a special variety of the geographical thinking – the safety-oriented geographical thinking.

Essence of the safety-oriented geographical thinking consists in detection of the logically-determinate chains of appearance and the space implementation of natural and industrial threats to the population's health and life, which are shown at the local, regional and global levels.

4. Conclusion

1. Problems of training of the geographic perception start at the inter-thematic level, when a factor of time between the geographical analysis of the sectorial part and the geographical synthesis of the district part is involved. A loss of the synthesis forms in the geography's school course leads to the fact that the students cease to perceive the "sectorial geography – district geography" opposition, which makes it impossible to realize the interaction between them under the principle "sectorial analysis – regional synthesis"; a break of the geographical education's integrity. The school program's course needs a modern form of the geographical knowledge synthesis. This is an implicit social services commissioning to the theoretical geography.

2. Knowledge of the world-view formulas is an issue of reflecting the

geographic reality. In transition from one level to another, the geographical thinking is getting more independent and removing from stereotypes, the heuristic potential increases through the formulas combination that gives variability of the geographic reality reflection.

3. The authors offered a conception of the geo-securitology for convergence of the educational programs "Principles of personal and social safety" and "Geographical Education" into the program "Principles of personal and social safety and Geography". The geo-securitology conception is embodiment of the geographical synthesis.

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