

EDUCATIONAL TRAININGS FOR FUTURE GEOGRAPHY TEACHERS: UKRAINIAN PERSPECTIVE

*PRÁTICAS DE TREINAMENTO PARA FUTUROS PROFESSORES DE GEOGRAFIA: PERSPECTIVA
UCRANIANA*

*LES STAGES DE FORMATION DES FUTURS PROFESSEURS EN GÉOGRAPHIE: LA PERSPECTIVE
UKRAINIENNE*

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ABSTRACT

The distinctive feature of higher geography education in Ukraine is that specialists in geography are trained at two types of educational institutions: classical and purely pedagogical universities. Classical universities focus more on shaping geography competences during educational trainings while pedagogical ones aim to ensure mastery of the geography teaching methods. A classical university offers more thorough practical training due to the fact that they have their own training bases and stations. One of the challenges in cultivating geography-related competences during educational practical trainings is the need to upgrade the algorithm for conducting such trainings, increase their frequency and agreement with the theoretical component of the students' training.

Keywords: Field Training. Geography Teacher. Classical University. Pedagogical University. Education Training.

RESUMO

A característica distintiva do ensino superior em Geografia na Ucrânia é que especialistas em nessa área são treinados em dois tipos de instituições de ensino: universidades clássicas e universidades pedagógicas. As universidades clássicas se concentram mais na formação de competências geográficas durante as práticas de treinamento; as universidades pedagógicas visam garantir o domínio dos métodos de Ensino de Geografia. Uma universidade clássica oferece treinamento prático mais completo devido ao fato de terem suas próprias bases e estações de treinamento. Um dos desafios na formação de competências relacionadas à Geografia durante as práticas de treinamento é a necessidade de atualizar o algoritmo para a realização de tais práticas, aumentar sua frequência e concordar com a componente teórica do treinamento dos alunos.

Palavras-chave: Treinamento de Campo. Professor de Geografia. Universidade Clássica. Universidade Pedagógica. Treinamento Educacional.

RÉSUMÉ

La particularité de l'enseignement supérieur en géographie en Ukraine est que les spécialistes en géographie sont formés dans deux types d'établissements d'enseignement: les universités classiques et les universités pédagogiques. Les universités classiques se concentrent plutôt sur la formation des compétences géographiques au cours des pratiques pédagogiques, tandis que les universités pédagogiques visent à assurer la maîtrise des méthodes d'enseignement en géographie. Une université classique offre une formation pratique plus approfondie, car elle possède ses propres bases et stations de formation. L'un des défis de la formation des compétences liées à la géographie au cours des pratiques pédagogiques est la nécessité de mettre à niveau l'algorithme pour la conduite de telles formations, d'augmenter leur fréquence et leur accord avec la composante théorique de la formation des étudiants.

Mots-clés: Formation sur le terrain. Professeur de Géographie. Université Classique. Université Pédagogique. Formation Pédagogique.

INTRODUCTION

Today's system of higher education in Ukraine is going through a period of reforms aimed at ensuring transition to a new educational paradigm that has the interests of an individual's personal development as a priority. Such transformations condition new goals for higher education: achieving such a level of education and professional preparedness of an individual and society as a whole that will ensure fulfilment of the essential tasks. Accordingly, this means content makeover at all levels of education, curricula diversification in secondary and higher education, changes in approaches to assessment of the learning outcomes, etc.

The discussion of the draft Concept of pedagogical education development in Ukraine also adds up to this issue. In particular, it identifies the problem to be solved as that of imbalance between the demands set by the Ukrainian society for highly qualified pedagogical staff and the real state of the pedagogical education, as well as between the educational institutions performance and the pedagogical staff's willingness to implement the educational reforms in Ukraine (Ministry of Education and Science of Ukraine, 2018).

The distinctive feature of higher geography education in Ukraine is training of such specialists in two main types of educational institutions. These are classical universities and purely pedagogical ones. The latter evolved from the pedagogical institutes created in each region of Ukraine in the USSR times. Today, many future geography teachers get their training in classical universities. At the same time, the results of our research to be detailed below show that there exist fundamental distinctions between the training of such professionals in a classical university and that in a pedagogical one. This indicates a methodological inconsistency in the process. Moreover, experts in geography currently get their training under several specialities: 106 "Geography", 103 "Earth Sciences" and 014.07 "Secondary Education (Geography)". This confirms lack of unified requirements and unified system of competences cultivated in the process of training in different types of institutions of higher education and has a very real impact on the quality and nature of geography education. An important aspect in professional training of a future geography teacher is their practical training happening largely during their work experience trainings (see the findings below for further detail).

LITERATURE REVIEW

Cultivation of a professional competence of a geography teacher has been the subject of methodological and scientific studies conducted by foreign and national scientists: Adolf (1998), Akcamete (2005), Borysenko (2017), Dushina and Ponurova (1996), Elkin (2005), Gaité (2011), Golov (1987), Hordashevska (2013), Hutmacher (1997, 27-31), Kerski (2012), Kyryliuk (2011), Maksakovsky (2001), McClelland (1973), Nosachenko V. M. and Nosachenko T. B. (2016), Otto et al. (2010), Palamarchuk (2009), Rozhko et al. (2011), Rozsokha (2008b), Wagemans and Dochy (1992), Woodruff (1993), Zavalevskyi (2014),

Zelenska and Trotsenko (2009), Zhupanskyi (2006), to name a few.

The current state of the system of geography education in Ukraine may be characterized as a state of continual reformation. And though the body of fundamental changes is generally aligned with the process of integration into the European educational system, there exists a number of problems that are specific to the transition period.

Today, the point is that emphases at different levels of geography education in the type of academic process need to be shifted from purely informational to personal-activity. In particular, Palamarchuk (2009) maintains that the pedagogical competences acquired by geography teachers during their self-education, professional training and refresher courses, intercourse work, participation in seminars, research-to-practice conferences, writing papers on experience, supervision of students' research at the Minor Academy of Sciences of Ukraine, preparation of children for geography competitions, tournaments, contests find implementation in their alumni's performance, their preparedness to resolve life problems, gain life experience, apply their knowledge and skills in various real-life situations.

Hordashevskaya (2013) points out that the basic component of the educational field training is such activity that relies on the activity approach to comprise purpose, content, character, conditions and result. It is the training purpose that defines the tasks for the student to complete in order to achieve the required results. The purpose correlates with the specific nature of the subject in which the Geography students are having their work experience field training and conforms to the curriculum requirements. The content of the training includes its main stages and the sequence of the practical activities provided by those stages and comprises three blocks: obligatory, variable, individual. Those blocks enable the student not only to exercise his or her freedom of choice, but also to plan development of his or her independence and professional improvement at each stage. The organization and the specific content of the training depend on its type: winter or summer, the nature of its staging: stationary observations, studies at route points, laboratory work, etc. The result of the work experience field training largely depends on the conditions under which it is happening.

The importance of field trainings for competence-building in geography students was emphasized by Kasimov et al. (2013), Edwards (2015), France (2018) who believe and prove it to be a powerful asset in the geography major curriculum. Glass (2015) and Rudskaya (2006) illustrate the benefits of field trainings in an international landscape with regard to the participating students' reflections. Their findings reveal that trainings abroad are of the highest interest for students as those aim to cultivate a wider geographical thinking and outlook, consolidate their skills in integrated geography and special studies. She points out that it provides an opportunity to: first, personally explore the landscapes of the territory covered by the training route; second, characterize its environmental conditions; third, evaluate its economic conditions and shape a corresponding opinion.

According to the provisions of the Regulations on practical training of students of higher educational institutions in Ukraine" (Ministry of Education of Ukraine, 1993), the goal of the practical training is to enable students to master modern methods, forms of organization and tools of their future profession; to shape, based on the knowledge acquired at the institution of higher education, their professional skills required to make independent decisions under real market and production conditions; to cultivate their need to consistently update their knowledge and creatively apply it in practice.

Still relevant today are the well-grounded research papers of the past years on work experience trainings in Physical Geography by Alpatyev et al. (1964), Arkhangelsky (1998), Avramenko et al. (1991) and others who laid out the basic methods for conducting work experience trainings of Geography students. Although the approaches described therein need revising with regard to the fast development of the tools and IT-technologies.

The above conditions the need to analyze the current state of professional training of future geography teachers in Ukraine in terms of their practical work experience trainings, which is of particular interest and importance to the corresponding experts in Ukraine and beyond.

OBJECTIVE

This research paper aims to reveal the scientific and practical aspects of the professional training of future geography teachers during the practical work experience trainings they have at Ukrainian universities.

RESEARCH FINDINGS AND REFLECTIONS

Today, more than twenty institutions of higher education in Ukraine offer higher education in geography. An extensive list of specialities there results from the universities constantly competing for entrants and making every effort to offer as many options as possible in the market of pedagogically oriented geography education. The School of Geography at Taras Shevchenko Kyiv National University is an example to illustrate an offer of all the aforementioned specializations. Thus, the Speciality 103 “Earth Sciences” consists of very specific curricula of the geographical cycle: “Hydrology”, “Cartography”, “Meteorology”, etc. (<http://www.geo.univ.kiev.ua>). The speciality 103 “Earth Sciences” obtained licensing at the institutions of higher education only quite recently, which, we believe, has to do with the ever-increasing competition in the market of educational services. The analysis of the curricula and syllabi at Taras Shevchenko Kyiv National University in the context of our paper shows that practical field trainings provided by their School of Geography play a significant role in the training of future geography teachers in terms of both content and scope. The University has its own bases for such practical trainings in *Kaniv State Nature Reserve* (in Physical Geography); in the Carpathian Mountains, Yasinia Educational and Scientific Base in Chorna Tysa village (summer integrated practical geography training). Bohuslav Hydrological Base serves as the basis for practical trainings, too.

The School of Geology, Geography, Recreation and Tourism of V.N. Karazin Kharkiv National University prepares specialists in the specialities: 6.040104 “Geography”: 106 “Geography” and 014.07 “Secondary Education (Geography)”. There is currently no admission under 103 “Earth Sciences” (<http://geo.karazin.ua>). The tourism major is actively developing with the new speciality (106 “Geography”) opened under “Geography of Recreation and Tourism”. It is worth pointing out that opening of tourism specialities today is partly opportunistic and partly expansion of the scope of educational services, yet often with no qualitative change in the faculty or facilities and resources. Field and pedagogical practical trainings at the university are an important constituent of the academic process. Karazin University has its educational and scientific geographical base for practical trainings in Haydariy village, (Zmiivskyi district, Kharkiv oblast) (Avramenko et al., 1991).

The School of Geology of Ivan Franko Lviv National University offers similar specialities for future teachers to choose from: 106 “Geography”, 103 “Earth Sciences” and 014.07 “Secondary Education (Geography)” (<https://geology.lnu.edu.ua>). Practical field trainings are important in the academic process and impact the School’s standing among its potential students. Therefore, high-level field researchers facilitate such practical trainings and supervise research carried out in different regions of Ukraine. Moreover, practical trainings organized abroad ensure a full-round impression on a variety of natural and socio-cultural geosystems, which down the line contributes to the quality of work of a geography teacher as a graduate. In addition to the expeditionary method, the faculty uses four stations:

Chornohirskiy Geographical Station (educational practical trainings for full-time and part-time students majoring in Geography, Ecology, Tourism, practical work experience trainings for students of other higher education institutions of Ukraine and exchange practical training); Dnestrovsky Geographical Station (educational practical trainings for full-time and part-time students majoring in Geography); Shatsk Biological-Geographical Station (educational practical trainings for part-time students majoring in Geography, full-time students majoring in Ecology and Balanced Nature Management). An important area in the work of the School is educational, pedagogical and on-the-job practical trainings. Taking into account the experience of exchange educational practical trainings with M. Curie-Skłodowska Lublin University, similar exchanges are planned with other educational and scientific institutions in Europe.

The School of Geography of Y. Fedkovych Chernivtsi National University has largely a set of solely tourism specialities. The geography specialities are as follows: 106 “Geography”, 103 “Earth Sciences (Hydrometeorology)” and 014.07 “Secondary Education (Geography)” (<http://geo.chnu.edu.ua>). It should be pointed out that the School of Geography of that university, like some other classical universities, has the speciality 193 “Geodesy and Land Management” whose graduates cannot work as secondary school teachers. Therefore, this speciality falls beyond the scope of our study here. This also applies to the full extent to the travel business specialities. The academic process in geography specialities involves educational and on-the-job practical trainings conducted in the picturesque areas of the Ukrainian Carpathians, Trans-Dniester region, on Polissia, and in Poland, Bulgaria, Romania and Serbia with the education institutions of which Y. Fedkovych Chernivtsi National University has relevant cooperation agreements (School of Geography of Y. Fedkovych Chernivtsi National University, 2016).

The School of Geography of Lesia Ukrainka East-European National University, besides the said industry-oriented specialities (geodesy, travel business), offers the following specialities: 103 “Earth Sciences (Geography)”, 103 “Earth Sciences (Hydrology)” and 014.07 “Secondary Education (Geography. Economics)” (<https://eenu.edu.ua>). The School provides not only pedagogical practical trainings under the curriculum, but also field practical trainings: educational integrated natural-scientific and educational profession-oriented, constituting 2 credits and 4 credits respectively. The field practical trainings take place in various regions of Ukraine, including on the university’s own training base at *Hart* campus in the Shatsky Lakes area.

The School of Geology and Geography of I.I. Mechnykov Odesa National University has the following geography-related specialities: 106 “Geography” and 014.07 “Secondary Education (Geography)” (<http://onu.edu.ua>). The percentage of educational field and on-the-job practical trainings at the School makes 25% of the total volume of the academic process. The practical trainings take place in Ukraine and abroad, at stations and on field routes. The general practical training in physical geography happen at the School’s Krynychky Field Station (Balta district, Odesa region), with radial drives to Zavallia village (Haivoronsk district, Kropyvnytskyi region), Uman town (Cherkasy region), and Yuzhnoukrainsk town (Mykolaiv region); the topographical, meteorological, geobotanical and economic and geographical practical trainings are conducted at Krynychky Station and in the suburban area of Odesa; the hydrological practical training – in the Dniester river basin.

The Department of Geology and Geography of Oles Honchar Dnipro National University prepares specialists in the following specialities: 106 “Geography” (“Geography” and “Geography of Recreation and Tourism” curricula), 103 “Earth Sciences (Hydrology)” and 014.07 “Secondary Education (Geography)” (<http://www.ggf-dnu.org.ua>). The general geography, interzonal and other practical trainings are conducted at the university’s own bases of the International Research Biosphere Station in Andriivka village, on the base of Odesa

National University, Odesa State Environmental University, in the biosphere and natural reserves of Ukraine, at education institutions of the region, etc.

The training of future geography teachers in Ukraine is also conducted on the basis of pedagogical universities. By their special nature, they are designed to prepare teachers only, which leads to a shift in the emphasis to the educational research and methodological competence. The practical training by geographical profession has a lower extent and a more general orientation than at classical universities. For example, the School of Natural and Geographical Education and Ecology of M.P. Drahomanov National Pedagogical University offers only one geography speciality: 014.07 “Secondary Education (Geography)”, although the said speciality is integrated. The students obtain an additional speciality: “Secondary Education” (Language and Literature: English, German, French), specialization: International Tourism. Its graduates obtain the qualification of Bachelor of Education (Geography), geography teacher, foreign language teacher/tourism service specialist (<https://www.ipgoe.npu.edu.ua>). This is conditioned by the peculiarities of the labor market, especially when it comes to secondary education institutions located in remote rural and mountainous areas. The graduating department is the that of geography. It devotes much attention to arranging and conducting educational practical field trainings for full-time and part-time students, which includes teaching cartography with the fundamentals of topography, meteorology and climatology, geomorphology, hydrology, landscape science. Practical field trainings take place in Kyiv city and its suburban area, as well as at *Sula* educational and recreational base (Lubny town, Poltava region) and Synevyr educational and recreational base (Kolochava village, Transcarpathian region, Synevyr National Natural Park).

The School of Natural Sciences and Geography of Mykhailo Kotsiubynskyi Vinnytsia State Pedagogical University also prepares geography teachers under the speciality 014.07 “Secondary Education (Geography)” (<http://vspu.edu.ua>). Students majoring in Geography, in the first year, do educational and field practical trainings, within the territory of Vinnytsia region, in geology, fundamentals of general ecology, biology, hydrology, topography, meteorology. In the second year, they do the said trainings in geography of Podillia, in geoecology, ground science, geomorphology, human ecology.

The School of Natural Sciences and Geography of Volodymyr Vynnychenko Central Ukrainian State Pedagogical University trains future specialists in the speciality 014.07 “Secondary Education (Geography)” (<https://www.cuspu.edu.ua>). Geography teachers are prepared there at the Department of Geography and Geoecology. After the first year, its Geography students, traditionally have practical trainings in geology, topography and hydrology in the territory of Pobuzhzhia (Mykolaiv region); after the second year – an integrated practical training in physical geography (geomorphological, soil and landscape studies) in Podillia, the Precarpathian region, the Carpathians and the Transcarpathian region and a geobotanical practical training in Central Ukraine.

The School of Geography of V. Hnatyuk Ternopil National Pedagogical University offers training in the speciality 014.07 “Secondary Education (Geography)” (<http://tnpu.edu.ua>). Its graduates receive the qualification of “geographer, teacher of Geography, Fundamentals of Economics, Ecology/Nature Study, local lore and tourism work coordinator”. To conduct practical field trainings and research, the School has its geography station in Dzvenyhorod village (Borshchivskyi district, Ternopil oblast).

The School of Geography, Tourism and History of Kryvyi Rih State Pedagogical University trains bachelors and masters in the specialty: 014.07 “Secondary Education (Geography)” (<https://kdpu.edu.ua>). Their curricula include practical pedagogical trainings of future specialists practical trainings at children’s health camps and have no clear geography orientation.

The School of Natural Sciences and Geography of Bogdan Khmelnytsky Melitopol State Pedagogical University offers training in the speciality: 014.07 “Secondary Education (Geography)” with several specializations: Physical Culture, Biology, Foreign Language (English), which are additional to Geography and impact the final qualification (<https://mdpu.org.ua>). The integrated practical field training totaling 72 hours in Physical Geography is conducted only in semester VI.

H.S. Skovoroda Kharkiv National Pedagogical University offer training in the speciality: 014.07 “Secondary Education (Geography)” at the School of History (<http://hnpu.edu.ua>). A significant number of elective disciplines are of historical orientation. Geography field trainings take place at the Department of Geography and Geography Teaching Methods (year I – general geography practical training, year II – ecological and cartographic practical training, year III – tourism practical training) and are not purely field oriented.

It is interesting to observe that practical field trainings for future geography teachers trained at pedagogical universities get much less coverage in scientific literature than their counterparts at classical universities. These are mainly the works by Nosachenko V. and Nosachenko T. (2016), Nosachenko, V. and Rozsokha A. (2018), and Rozsokha (2008a; 2008b).

Based on the above, one can argue that classical universities position themselves as institutions training universal geography specialists with the right to teach at institutions of secondary education. In the process of training, more focus is on specific, “narrow” specializations of geography orientation. At the same time, the situation at the labor market encourages competition for entrants as most “narrow” specializations are not popular with them because they reduce their employment opportunities. Therefore, there is a general tendency observed at classical institutions of higher education to form branched offers consisting of all the available geography specialities.

Pedagogical universities, on the contrary, offer only the speciality: 014.07 “Secondary Education (Geography)” because the entrant’s choice of a pedagogical university already relates to his or her choice of a future pedagogical profession. Classical universities offer a choice in this respect. Some Bachelor-degree holders choose the speciality: 014.07 “Secondary Education (Geography)” only for their Master’s degree. During their studies under the Bachelor’s degree program, students receive education of dual orientation.

To illustrate the methodological inconsistency in the process of professional training of future geography teachers at classical and pedagogical universities (*inter alia*, in the course of educational practical trainings), we conducted a comparative analysis on the example of Bachelor’s degree programs in the speciality: 014 “Secondary Education (Geography)” at H.S. Skovoroda Kharkiv National Pedagogical University (hereinafter referred to as Skovoroda University) and V.N. Karazin Kharkiv National University (hereinafter referred to as Karazin University) (tables 1-5).

Table 1 – Constituents of professional training under Bachelor’s degree programs in speciality: 014.07 “Secondary Education (Geography)” compared

Skovoroda University	ECTS Credits		Karazin University
Soil Geography and Science	4	6	Research pedagogical training
General Hydrology	4	5	General Hydrology with Fundamentals of Ocean Science
Meteorology	3	4	Meteorology with Fundamentals of Climate Science
Total	11	15	

Table 2 – Pre-requisite subjects in speciality: 014.07 “Secondary Education (Geography)” (excluding practical trainings) at Karazin University (fragment)

Subject Name	ECTS Credits	Total	Lectures	Practical Classes	Practical Classes
Pre-requisite subjects					
Advanced Mathematics with Fundamentals of Mathematical Statistics	4	120	32		32
Informatics with Fundamentals of Geoinformatics	5	150	16	48	
Physics with Fundamentals of Physics of the Earth	5	150	48	24	
Chemistry with Fundamentals of Geochemistry	4	120	24	24	
Geomorphology with Fundamentals of Geology	4	120	32		32
History of Geographical Discoveries and Research	4	120	16		
Topography with Fundamentals of Geodesy	5	150	32	32	
Cartography	4	120	32	16	
Geographic Information Systems	4	120	20		40
Occupational life safety in the field	4	120	16		16
Total	43	1290	268	144	120

Table 3 – Elective subjects in speciality 014.07 “Secondary Education (Geography)” at V.N. Karazin Kharkiv National University (fragment)

Subject Name	ECTS credits	Total	Lectures	Practical Classes	Self-Study
Pre-requisite subjects					
Fundamentals of Research	4	120	24	24	72
Fundamentals of Computer Graphics	4	120	16	48	56
Fundamentals of Geocology	3	90	24	24	42
Modern Concepts of Natural Science	4	120	20	20	80
Cartographic Research Method	4	120	20	30	70
Total	19	570	104	146	320

Table 4 – Elective subjects in speciality: 014.07 “Secondary Education (Geography)” at Skovoroda University (fragment)

Subject Name	ECTS credits	Total	Lectures	Practical Classes	Self-Study
Pre-requisite subjects					
Medical Geography	3	90	20	16	54
Meteorology	3	90	18	18	54
Introduction to Speciality	3	90	20	16	54
Geography Teaching Methods	4	120	24	24	72
Geology	4	120	24	24	72

Subject Name	ECTS credits	Total	Lectures	Practical Classes	Self-Study
Pre-requisite subjects					
Soil Geography and Science	4	120	24	24	72
Biogeography	3	90	20	16	54
Cartography with Fundamentals of Topography	3	90	20	16	90
General Earth Science	5	150	20	26	90
Physical Geography of Ukraine	5	150	34	26	90
Total	37	990	224	206	702

Table 5 – Practical constituent in training under Bachelor’s degree programs in speciality: 014.07 “Secondary Education (Geography)” compared

Skovoroda University	ECTS credits		Karazin University
Educational field (geography) training	90	120	Educational natural science and research training
Educational field (elology-cartography) training	90	120	Educational profession-oriented training
Educational field (tourism) training	90	90	Educational local lore and tourism training
Total	270	330	

Their content and scope considerably differ, and introduction of certain general subjects raises questions if we take into account the Bachelor’s training curriculum.

Even more inconsistent is the situation with elective subjects. While this cycle at Karazin University is mainly represented by geography subjects (table 3), these subjects at Skovoroda University are mainly of historical orientation (15 credits). This is motivated by the fact that a large number of Skovoroda University graduates work at rural schools and teach several related subjects, here: most often history.

The situation with organization of students’ practical training is fundamentally different (table 5).

If we compare the two universities from the standpoint of systemic and competence approaches, we will see that the Bachelor’s degree holder in the specialty: 014.07 “Secondary Education (Geography)” must have a certain integral competency, which accordingly consists of a number of general and professional competences. These competences are formed as a result of mastering certain subjects and in the process of practical training.

At the same time, it is evident from tables 1-5 that the list of competences that are formed under the Bachelor’s degree programs at pedagogical and classical universities are fundamentally different. While this partially happens in the compulsory professional training cycle, the situation is much more difficult in the cycle of elective subjects. Some professional geography competences that are to be shaped in the students of pedagogical universities are practically non-existent (due to the replacement of the geographic subjects with the historical ones). Thus, we have a fundamentally different end result and fundamentally different (as a result) integral competencies of a future geography teacher.

What is important to note is that formation of the integral competency of the future geography teacher does not create the corresponding competency model as a result of decomposition of the corresponding pedagogical system, which leads to a certain voluntarism in specialists’ training of in this major. From our point of view, it also leads to significant methodological problems in the future geography teacher’s training, breaks the logic of

formation of curricula and syllabi at institutions of higher education, their contextuality and opportunism.

While the previous years could partly explain it by the fact that classical universities predominantly trained specialists in the virtually double speciality: 106 “Geography”, creation of a single complex competency model in the speciality: 014.07 “Secondary Education (Geography)” is an urgent demand of today.

The analysis conducted within this research showed certain deterioration in the situation with practical training at higher education institutions caused by a number of organizational and financial factors, formalization of approaches to the learning process in higher education in Ukraine. The contradiction that exists today between the real positive steps taken by the Ministry of Education and Science of Ukraine to improve the quality of higher education services provision, *inter alia*, creation of the State Agency for Quality Assurance in Education and other progressive measures, and the real situation at higher education institutions has found no final solution.

In the context of our research, this is primarily due to the cutdown in the scope of educational practical trainings, which happens mechanically, without any scientific or methodological justification thereof. Moreover, numerous scientific publications on the application of the competency-based approach to future teachers’ training with various majors tend to address the problem fragmentarily within a particular subject or its part. At the same time, educational practical trainings, which are an essential part of the future teacher’s professional training, are not implemented in the specialist’s competency models, nor are they regarded in an integrated manner. They are not in the focus of system research, which is absolutely illogical from the standpoint of competency-based education where the practical component of professional training is increasing.

Limited funding, inadequate facilities and resources at the institutions of higher education, practical trainings confinement to only one territory, etc. have a negative impact on the effectiveness of educational trainings. This is particularly noticeable in the process of a future geography teacher’s training. Conducting full-fledged educational trainings with extensive territorial coverage requires not only significant travel expenses, which are partly borne by the student, but also the financing for the equipment: special (relevant devices and tools) and tourism (tents, sleeping bags, footwear, equipment for field kitchens, etc.). Capturing the student-led research and studies requires digital photo and video equipment, laptops for data collection and processing of the results in the field, communications, etc.

Higher education institutions in Ukraine find it difficult to maintain practical training bases in different regions, geography stations, etc., which, to a large extent, depends on the capacity of the respective institution and mentality of its management responsible for this direction.

Today, many higher education institutions have a negative tendency of replacing educational field trainings with students’ formal stay at the department, “alternative” trainings in the city of the institution. Such attitude results in deterioration in the level of practical competence of future geography teachers, which hampers the development of their further pedagogical skills and leads to long-term adaptation to the professional activity in the future. This tendency is actually a clear factor of antimotivation in the process of professional training both in terms of formal professional training and from the standpoint of positive idealization of their speciality by future geography teachers. Most of them, choosing the speciality while studying in high school, would partially picture themselves to be explorers of the natural complexes of the planet, thirst for travel, virtually conquer the highest mountain systems of the world or reach the poles, read the popular-science literature on the achievements of F. Nansen, R. Amudsen, P. Pirie, R. Scott, D. Livingston, modern researchers of the Arctic, Antarctic, Central Africa, Amazon forests, the depths of the oceans and the like. In practice, instead of at

least exploring the natural complexes in the territory of Ukraine, they receive purely formal training without long-distance travels or acquisition of complex skills.

The above found confirmation during the pilot survey of the first-year students of the School in Geography, Recreation and Tourism of Karazin University. In particular, 87% of the respondents said that their motive for enrolling in “Geography” was their thirst for travel. 73% of the respondents revealed their plans of using the knowledge acquired in their future pedagogical activity. The survey of the third-year students who had already had experience in the regional and Carpathian stage of educational trainings showed that 90% of them would like to have the duration of their educational trainings extended. Although, that applied only to the field trainings stage (physical geography and mountains) and did not relate to exploration of the cities. All the respondents expressed a desire to have the geography of practical trainings extended, especially beyond Ukraine, which is implementable, especially after the introduction of biometric passports in Ukraine that enable Ukrainian citizens enter more than 100 countries of the world without the need to preliminarily obtain a visa.

Particularly important is the regional aspect of the students’ educational practical trainings that ensures cultivation of love for their Small Motherland and patriotism, influences the shaping of their mentality and spiritual development of the future geography teacher. Our analysis shows that the work of a geography teacher, especially in a rural school environment, is closely connected with tourism and local lore. During the practical classes conducted with students in the natural environment, local lore activities, tourism competitions and quizzes, etc., questions would often arise about the geology, soil science, hydrology, climate, biogeography of their native land. A geography teacher who has no relevant professional competences, which are largely acquired during the educational trainings, is unable to solve the relevant pedagogical and educational tasks and, therefore, loses his or her authority in the eyes of the students.

Considering the above, we are of the opinion that the process of regional trainings planning needs further substantial individualization: both local peculiarities and possibilities of further employment of individual students need to be taken into account. This will enable the curriculum-makers to set individual tasks for the trainings more clearly.

As for the practical training of future geography teachers outside a particular region, it important to bear in minds its significant impact on the shaping of the outlook of the geography teacher as a specialist whose activity largely aims to develop a comprehensive world view in his or her students. At the same time, he or she gets to know the natural processes happening outside the region, and the region is viewed as a certain subsystem of higher-order natural complexes. Students receive visual, tactile and other practical confirmation of the knowledge acquired during the academic year in geography of Ukraine and the world and in the studies of numerous special subjects.

We would like to emphasize that most authors consider the concept of winter educational practical training existing today as a process of preparation for a summer practical training. We believe that these views need revising as a future geography teacher should be aware of winter landscapes, be able to adapt to difficult natural conditions, etc. During this period, Geography students can master skills in winter hiking and walking tours, toughen up physically and morally. The curricula for future geography teacher’s training need supplementing with not only winter landscape training, but also other seasonal study tours, weekend excursions, etc. In a sense, this is implementation of system views on training of a specialist in the relevant profile.

Further individualization of future geography teachers’ training and development of their personal educational trajectory remain a problem. Today, this process is notably formal. We believe that it should be tied to future professional activity at the preparatory stage. Students majoring in geography specialities, who will be future geography teachers, should have an end-to-end plan for geographic and pedagogical field trainings. Participation in educational practical

trainings must be ideologically agreed *inter se*, with the topic of the Bachelor's and later Master's paper, taking into account the future working position of the university graduate.

Educational practical trainings develop the following professional competences: an ability to process geographic information collected in the field in geoinformation systems; an ability to solve standard geographical and tourism-related tasks based on the information and bibliographic culture using the information and communication technologies and taking into account the main information security requirements, to use different sources of information about the tourist product and its object; an ability to find, analyze and process scientific and technical information in the field of geography, etc.

These competencies are important not only in terms of quality geography teaching at institutions of secondary education, but also for many extracurricular focus areas. One of such areas is the work of the Minor Academy of Sciences of Ukraine. The researcher skills acquired in the course of educational trainings will come in handy for the future geography teacher during research with "Geography" students at the Minor Academy of Sciences. They are also important for preparation for the practical component of geography tournaments and the like. Today, these statements find confirmation through practice in the on-the-job activity of the graduates of the School in Geology, Geography, Recreation and Tourism of Karazin University. These are graduates: N. Kravchuk (2015 graduate) – teacher at secondary school No. 66 (Kharkiv); N. Yatsenko (2012 graduate) – teacher at secondary school No. 6 (Kupiansk); M. Shulha (2018 graduate) – teacher at secondary school No. 67 (Kharkiv); O. Susla (fourth-year student) – teacher at Bezliudivka law lyceum; M. Dienhin (2014 graduate) – teacher at Iziium secondary school No. 6; A. Kutsenko (2013 graduate) – teacher at Kharkiv gymnasium No.144; A. Lazurenko (2012 graduate) – teacher at secondary school No. 57; O. Bezditko (2015 graduate) – teacher at Chutove secondary school; O. Kaliberda (2017 graduate) – teacher at Lozova secondary school No. 2; N. Didenko (2017 graduate) – teacher at Kramatorsk secondary school No.16 and others.

Our survey of Karazin University graduates in the speciality: "Geography" confirmed our conclusions. Thus, 91% of the respondents confirmed that the special competences they had acquired during their educational practical trainings proved useful to them in their work with their students. 85% of the respondents wished they had treated acquisition of certain skills during their educational practical trainings with more diligence and responsibility.

The above brought to the agenda the need to improve the practical component of a future geography teacher's training in accordance with the requirements of today within the scientifically grounded competency model.

Our analysis also highlighted another relevant area that is important for improving the results of practical training of future geography teachers of – improvement of the procedure for evaluation of the professional competence level in future geography teachers by the results of the educational practical trainings. To date, the scientific literature offers no relevant effective IT-supported mechanisms for that, either.

DISCUSSION

The above findings make it evident that classical and pedagogical universities graduate differently skilled specialists. This may be regarded as a problem as such graduates, who will potentially become geography teachers, will have different skillsets and understanding of what geography as a subject should comprise and what skills should be taught to school children. This may sound as a good thing if interpreted in theory in terms of ensuring an individual approach to teaching. However, in the light of the uniformity of the secondary education that the entire generation should obtain to be on the same page, so to speak, the content and the skills to be acquired by the students should be integrated and compatible in order to ensure

smooth academic mobility and equal educational opportunities. Thus, it is only but natural for the education system to develop and implement integrated curricula for educational practical trainings for geography students at classical and pedagogical universities and their agreement with the new geography curricula for secondary schools of Ukraine developed in accordance with the conceptual principles of secondary school reform “The New Ukrainian School” (Elkin et al., 2016). Such curricula should ensure indivisibility, interdependence and interrelatedness between the theoretical knowledge the students receive and their practical trainings. In other words, practical trainings should enable the students to apply their theoretical knowledge in practice. This also raises the question of the logic and consistency in the sequence in which the practical trainings should follow the corresponding theoretical courses in the curricula, which, unfortunately, can be currently observed in the universities of Ukraine. And perhaps, the frequency and duration of practical trainings could be reviewed appropriately, too, to provide the students with enough time and opportunities to practice and reinforce their professional skills and competences.

CONCLUSION

Based on the above, we come up with the following conclusions:

(1) The problem of shaping professional competences in future geography teachers during their educational practical trainings has quite limited coverage today in the scientific and pedagogical literature. The vast majority of the scientific works addresses the processes of theoretical training of geography teachers. Moreover, this process is fragmentary and does not happen within a scientifically valid competency model, and therefore requires further scientific exploration. The above issues have become significantly relevant due to the implementation of the conceptual principles of secondary school reform “The New Ukrainian School” and the requirements of the Law of Ukraine “On Education”.

(2) The academic process at classical universities of Ukraine places more focus on shaping geography competences during educational practical trainings and gives a significant advantage to geography teachers who have graduated from such higher education institutions in terms of developing practical skills in their students in the future.

(3) Pedagogical universities give priority to practical trainings at schools and children’s camps. We can state that a priority for pedagogical universities is to ensure mastery of the geography teaching methods while classical universities devote more attention to the scientific component and students’ independent research, with the methodological training of future geography teachers of secondary importance.

(4) The practical training of a future geography teacher at a classical university is more thorough, which is owed to the fact that they have their own training bases and stations.

(5) We believe one of the challenges in cultivating special competences in future geography teachers during educational practical trainings is the need to upgrade the algorithm for conducting such trainings. Today, theoretical training should intersperse with field trainings more than once in an academic year and cover different periods in the academic year. Moreover, field geography trainings are quite loosely connected with the students’ activity during their pedagogical trainings and are seen as separate elements of the academic process at higher education institutions, especially at classical universities.

(6) Consideration of the subject matter of our research through the prism of the system, activity, personality-oriented, competence and qualimetric approaches revealed the need to create a scientifically grounded integrated model of a future geography teacher, define within it the professional competences to be shaped during the educational practical trainings and develop an adequate technology for improvement of the process.

REFERENCES

- ADOLF, V. (1998). Формирование профессиональной компетентности будущего учителя [Shaping professional competency of a future teacher]. *Pedagogika*, n. 1, p. 72-75.
- AKCAMETE, G. (2005). **The Professional development and training of the teachers, the results of the reconstruction in faculty of education and the symposium of teacher training**. Ankara: Gazi Faculty Educ, p. 251–259.
- ALPATYEV, A. M., ARKHANGELSKY, A.M., GORDEEVA, T. N. (1964). **Полевая практика по физической географии [Field training in physical geography]**. Moscow: Prosveshchenie.
- ARKHANGELSKY, S. I. (1998). **Учебный процесс в высшей школе и его закономерные основы и методы [Academic process in higher school and its regular foundations and methods]**. Moscow, Minsk: Vysshaya Shkola.
- AVRAMENKO, A.M., BABICH, A. D., GVOZD, N. A., (1991). **Географическая база «Гайдары» и др. [Geography station “Haidary” and others]**. Kharkov: KhGU im. V. N. Karazina.
- BORYSENKO, K. B. (2017). Формування спеціальних компетентностей майбутнього вчителя географії у процесі навчальних практик: регіональний аспект [Shaping special competences in a future geography teacher during educational trainings: regional aspect]. *Problemy inzhenerno-pedahohichnoi osvity*, n. 56-57, p. 114–122.
- DUSHINA I., PONUROVA, G. (1996). **Методика преподавания географии: пособ. для учит. и студ. педагогич. ун-тов и инс-тов [Geography teaching methods: handbook for teaches and students of pedagogical universities and institutes]**. Moscow: Prosveshchenie.
- EDWARDS, S. (2003). Examples of Integrating Field-based Research and Teaching in Geography, Earth and Environmental Sciences. *Planet*, n. 11(1), p. 19-21.
- ELKIN, M.V. (2005). **Формування професійної компетентності майбутнього вчителя географії засобами проектної діяльності [Shaping professional competence of future teachers of geography by means project activity]** (Doctoral dissertation). Central Institute of Postgraduate pedagogical Education of the Academy of Pedagogical Sciences of Ukraine, Kyiv.
- ELKIN, O., HRYNEVYCH, L., KALASHNIKOVA, S., KHOBZEY, P., KOBERNYK, I., KOVTUNETS, V., ... USATENKO, H. (2016). **The conceptual principles of secondary school reform “The New Ukrainian School”**. In: M. Gryshchenko (Ed.). Kyiv: Ministry of Education and Science of Ukraine. Retrieved from: <<https://mon.gov.ua/storage/app/media/zagalna%20serednya/Book-ENG.pdf>>. Accessed on: 21 dec. 2019.
- FRANCE, D., HAIGH, M. (2018). **Fieldwork@40: fieldwork in geography higher education**. *Journal of Geography in Higher Education*, n. 42(4), p. 498-514.

GAITE, M. (2011). Geographical education and teacher training. Challenges and prospects in the new European Higher Education Area (EHEA). **Boletín de la Asociación de Geógrafos Españoles**, n. 57, p. 459–464.

GLASS, M. R. (2015). International geography field courses: practices and challenges. **Journal of Geography in Higher Education**, n. 39(4), p. 485-490.

GOLOV, V. (1987). **Средства обучения географии и условия их эффективного использования: Учеб. пособие для студентов пед. ин-тов по спец. № 2107 «География» [Geography teaching means and conditions for their effective use: training aids for students of pedagogical institutes in speciality No. 2107 “Geography”]**. Moscow: Prosveshchenie.

HORDASHEVSKA, H. (2013). Навчально-польова практика як засіб формування професійної компетентності майбутнього вчителя географії [Field training as a means of shaping professional competency of a future geography teacher]. **Pedahohichna osvita: teoriia i praktyka**, n. 13, p. 220-225.

HUTMACHER, W. (1997). **Key competencies for Europe** (Report of the Symposium (Berne, Switzerland, March 27-30, 1996) ED407717). Strasbourg: Council for Cultural Cooperation for Europe. Retrieved from ERIC website: <<https://eric.ed.gov/?id=ED407717>>. Accessed on: 20 dec. 2019.

KASIMOV, N. S., CHALOV, S. R., PANIN, A. V. (2013). Multidisciplinary field training in undergraduate Physical Geography: Russian experience. **Journal of Geography in Higher Education**, n. 37(3), p. 416-431.

KERSKI, J. (2012). **Spatial Environmental Education: Teaching and Learning about the Environment with a Spatial Framework**. Earthzine. Retrieved from: <<https://earthzine.org/spatial-environmental-education-teaching-and-learning-about-the-environment-with-a-spatial-framework-2>>. Accessed on: 20 dec. 2019.

KYRYLIUK, S. M. (2011). **Проблеми викладання географії у школі [Problems of geography teaching at school]**. Chernivtsi: Chenivetskyi natsionalnyi universytet.

MAKSAKOVSKY, V. (2001). **Преподавание географии в зарубежной школе [Geography teaching in foreign school]**. Moscow: Gumanitarnyi Its VLADOS.

MCCLELLAND, D. C. (1973). Testing for competence rather than for intelligence. **American Psychologist**, n. 28, p. 1–14.

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE (2018, July 16). **Концепція розвитку педагогічної освіти [Pedagogical education development concept]**. Retrieved from: <<https://mon.gov.ua/storage/app/uploads/public/5b7/bb2/dcc/5b7bb2dcc424a809787929.pdf>>. Accessed on: 20 dec. 2019.

MINISTRY OF EDUCATION OF UKRAINE (1993, April 08). Наказ “Про затвердження Положення про проведення практики студентів вищих навчальних закладів України” [Order “On approval of practical trainings of students of higher educational institutions of

Ukraine”], n. 93. Retrieved from: <<http://zakon1.rada.gov.ua/laws/show/z0035-93>>. Accessed on: 20 dec. 2019.

NOSACHENKO, V. M., NOSACHENKO, T. B. (2016, February 29). Формування ключових фахових компетентностей майбутніх учителів у процесі професійної підготовки [Shaping key professional competences of future teachers during of their professional training]. O. I. Shapran (Ed.). **Proceedings of the III International Research-to-Practice Internet Conference “Ключові компетентності в моделі сучасного фахівця”** [in 2 parts], part 1, p. 85–90.

NOSACHENKO, V. M., ROZSOKHA, A. P. (2018). **Професійна підготовка майбутніх учителів географії: картографічна складова. Переяслав-Хмельницький (Київська обл.) [Professional training of future geography teachers: cartography component. Pereiaslav-Khmelnytskyi (Kyiska oblast)]**. Kyiv: Kravchenko Ya.O.

OTTO, K.-H., MÖNTER, L. O., CZAPEK, F.-M., ENGELHARD, K., JACKOWSKI, C., KERSTING, R., ... SIEGMUND, A. (2010). **Rahmenvorgaben für die Lehrerausbildung im Fach Geographie an deutschen Universitäten und Hochschulen [Framework for teacher training in geography at German universities and colleges]** (2nd ed.). Bonn: Deutsche Gesellschaft für Geographie. Retrieved from: <https://geographie.de/wp-content/uploads/2016/06/pub_lehrerausbldg_geo_rahmenvorgaben.pdf>. Accessed on: 20 dec. 2019.

PALAMARCHUK, L. (2009). Формування педагогічної компетентності вчителя географії в умовах змін освітнього і культурного середовища: теорія і методика [Shaping pedagogical competency of geography teachers under changes in educational and cultural environment: theory and methodology]. **Problemy bezpererвної heohrafichnoi osvity i kartohrafii**, n. 9, p. 184–190.

ROZHKO, I. M., MATVIIV, V. P., BRUSAK, V.P. (2011). **Географо-екологічні маршрути Чорногори [Geographic-ecological routes of Chornohora]**. Lviv: LNU imeni Ivana Franka.

ROZSOKHA, A. P. (2008a). Кафедра географії: особливості становлення та перспективи підготовки майбутнього вчителя географії [Department of Geography: peculiarities of establishment and prospects of future geography teachers' training]. **Humanitarnyi visnyk DVNZ «Pereiaslav-Khmelnytskyi derzhavnyi pedahohichnyi universytet imeni Hryhoriia Skovorody»: Pedahohika. Psykhologhiia. Filolohiia. Filosofiia**, n. 14, p. 211–215.

ROZSOKHA, A. P. (2008b). Становлення системи професійно-педагогічної підготовки майбутніх вчителів географії в Україні (1888–1917 pp.) [Establishment of the system of professional pedagogical training of future geography teachers in Ukraine (1888–1917)]. **Ridna shkola**, n. 10, p. 64–67.

RUDSKA, D. (2006). Географические практики: взгляд студента [Geographic trainings: student's view]. **Fundamentalnye issledovaniya**, n. 7, p. 93–98.

SCHOOL OF GEOGRAPHY OF Y. FEDKOVYCH CHERNIVTSI NATIONAL UNIVERSITY (2016, February 24). **Перспективний план розвитку географічного**

факультету Чернівецького національного університету ім. Ю. Федьковича на 2016–2020 рр. [Prospective plan of development of the School of Geography for 2016–2020]. Retrieved from: <<http://geo.chnu.edu.ua/index.php?page=ua/02about>>. Accessed on: 21 dec. 2019.

WAGEMANS, L., DOCHY, F. (1992). Principles in the use of experiential learning as a source of prior learning. **Distance Education**, n. 12 (1), p. 32–47.

WOODRUFF C. (1993). What is meant by a competency? **Leadership and Organizational Development Journal**, n. 14(1), p. 29–36.

ZAVALEVSKYI, Yu. I, (2014). **Теоретико-методичні засади формування вчителя як конкуренто-спроможного фахівця [Theoretical and methodological foundations for shaping a teacher as a competitive specialist]**. Chernivtsi: Bukrek.

ZELENSKA, L. I., TROTSSENKO, O.V. (2009). Методологічні проблеми розробки інформаційної системи «Розвиток географічних уявлень про територію регіону» (на прикладі Дніпропетровської області) [Methodological problems of development of information system “Development of geographical views on region territory” (on example of Dnipropetrovska oblast)]. **Problemy bezpererвної heohrafichnoi osvity i kartohrafii**, n. 9, p. 102–106.

ZHUPANSKYI, Ya. I. (2006). **Історія географії в Україні [Geography history in Ukraine]** (2nd ed.). Kyiv: Shliakh.