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## Main directions in scientific research of continuous geographical education

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**Introduction.** The article notes that the Concept of continuous education in its modern form was first presented at the UNESCO forum in 1965 by P. Langrand, and later has been developed by many foreign and domestic scientists, including those related to geographical education. The Law of Ukraine «On education» (1991) proclaims continuity as one of the principles of modern education in the country. The Concept of continuous geographical education and its individual links are being developed and implemented now in Ukraine.

**The purpose of this article** is to reveal the main directions in scientific research of continuous geographical education.

**The main material.** Continuous geographical education (CGE) develops mainly as a phenomenon of practice and does not have sufficient theoretical justification. The main directions in scientific research of CGE as a whole system are the following:

1st direction is the study of the systemic, holistic nature of CGE (preschool, school, high school, postgraduate). Between the stages of education there should be clear continuity objectives, contents, means, forms and methods of training. This follows from the principle of integration (in this case vertical integration).

2nd direction stems from the need for effective implementation of the principle of training individualization in the system of CGE. Educational institutions are now at the stage of intuitive search solutions.

3rd direction relates to the principle of creativity, the implementation of which should ensure the formation of a creative personality – the protagonist of continuing education.

4th direction is the scientific development of the communication problem in general and special (professional) education. This is also the rationale for the timely student choice of their future field of professional activities. This is the principle of pragmatism and differentiation of teaching in the system of CGE.

5th direction is concerned with the principle of the CGE dynamism. It is important to develop a dynamic approach to learning – the ability to assimilate the new achievements of science and technology (this approach is highly unusual in the lower levels of education).

**Conclusions.** Based on the experience of Kharkiv regional and University center for continuous geographical education, it is considered that the directions of research outlined in the article are significant, although this list can be expanded.

**Keywords:** continuous geographical education, principles of continuous education, main directions of continuous geographical education.

Олександр Жемеров

### ОСНОВНІ НАПРЯМИ НАУКОВИХ ДОСЛІДЖЕНЬ БЕЗПЕРЕРВНОЇ ГЕОГРАФІЧНОЇ ОСВІТИ

**Вступ.** У статті наголошується, що концепцію безперервної освіти в її сучасному вигляді вперше представив на форумі ЮНЕСКО в 1965 р. Р. Langrand. Пізніше концепція розроблялася багатьма зарубіжними і вітчизняними вченими, в тому числі - у галузі географічної освіти. Закон України «Про освіту» (1991) проголошує спадкоємність як один із принципів сучасної освіти в країні. У даний час в Україні розробляється і впроваджується концепція безперервної географічної освіти та її окремих ланок.

**Мета статті** - висвітлити основні напрями в наукових дослідженнях безперервної географічної освіти.

**Основний матеріал.** Безперервна географічна освіта (БГО) розвивається переважно як феномен практики і не має достатнього теоретичного обґрунтування. Основними напрямками наукових досліджень БГО є:

1-й напрям - вивчення системного, цілісного характеру БГО (дошкільної, шкільної, вищої, післядипломної освіти). Між етапами навчання повинна бути чітка спадкоємність цілей, змісту, засобів, форм і методів навчання. Це впливає з принципу інтеграції (у даному випадку - вертикальної інтеграції).

2-й напрям пов'язаний із необхідністю ефективної реалізації принципу індивідуалізації навчання у системі БГО. Навчальні заклади зараз знаходяться на стадії інтуїтивного пошуку рішень.

3-й напрям пов'язаний з принципом креативності (творчості), реалізація якого має забезпечити формування творчої особистості – головного суб'єкта безперервної освіти.

4-й напрям - наукова розробка проблеми комунікації у загальній та спеціальній (професійній) освіті. Це також є підставою для своєчасного вибору студентом майбутньої сфери своєї професійної діяльності. Це принцип прагматизму і диференціації викладання у системі БГО.

5-й напрям пов'язаний із принципом динамізму БГО. Важливо виробити динамічний підхід до навчання - уміння засвоювати нові досягнення науки і техніки (такий підхід украй рідкісний на нижчих рівнях освіти).

**Висновки.** Грунтуючись на досвіді Харківського обласного та університетського центру безперервної географічної освіти, вважаємо, що напрями досліджень, викладені у статті, є важливими, хоча цей перелік можна розширити.

**Ключові слова:** безперервна географічна освіта, принципи безперервної освіти, основні напрями безперервної географічної освіти.

Александр Жемеров

## ОСНОВНЫЕ НАПРАВЛЕНИЯ НАУЧНЫХ ИССЛЕДОВАНИЙ НЕПРЕРЫВНОГО ГЕОГРАФИЧЕСКОГО ОБРАЗОВАНИЯ

**Введение.** В статье отмечается, что концепцию непрерывного образования в её современном виде впервые представил на форуме ЮНЕСКО в 1965 г. Р. Langrand. Позже концепция разрабатывалась многими зарубежными и отечественными учёными, в том числе - в области географического образования. Закон Украины «Об образовании» (1991) провозглашает преемственность как один из принципов современного образования в стране. В настоящее время в Украине разрабатывается и внедряется концепция непрерывного географического образования и его отдельных звеньев.

**Цель статьи** - осветить основные направления в научных исследованиях непрерывного географического образования.

**Основной материал.** Непрерывное географическое образование (НГО) развивается преимущественно как феномен практики и не имеет достаточного теоретического обоснования. Основными направлениями научных исследований НГО являются::

1-е направление - изучение системного, целостного характера НГО (дошкольного, школьного, вузовского, последилового образования). Между этапами обучения должна быть чёткая преемственность целей, содержания, средств, форм и методов обучения. Это следует из принципа интеграции (в данном случае - вертикальной интеграции).

2-е направление связано с необходимостью эффективной реализации принципа индивидуализации обучения в системе НГО. Учебные заведения сейчас находятся на стадии интуитивного поиска решений.

3-е направление связано с принципом креативности (творчества), реализация которого должна обеспечить формирование творческой личности – главного субъекта непрерывного образования.

4-е направление - научная разработка проблемы коммуникации в общем и специальном (профессиональном) образовании. Это также является основанием для своевременного выбора студентом будущей сферы своей профессиональной деятельности. Это принцип прагматизма и дифференциации преподавания в системе НГО.

5-е направление связано с принципом динамизма НГО. Важно выработать динамичный подход к обучению - умение усваивать новые достижения науки и техники (такой подход крайне редок на низших уровнях образования).

**Выводы.** Основываясь на опыте Харьковского областного и университетского центра непрерывного географического образования, считаем, что направления исследований, изложенные в статье, являются важными, хотя этот перечень можно расширить.

**Ключевые слова:** непрерывное географическое образование, принципы непрерывного образования, основные направления непрерывного географического образования.

**Introduction.** The forerunner of modern ideas on continuing education is considered to be J.A. Comenius, who in his works, starting with the Czech «Didactica magna» (1633-1636), developed the idea that each age is suitable for learning and a person has no other purpose in life than learning. The concept of continuous education in its modern form was first presented at the UNESCO forum in 1965 by P. Langrand [1], and later developed by many foreign [2, 3, etc.] and domestic scientists, including those with regard to geographical education [5-10, 15, etc.].

The Law of Ukraine «On education» (1991) proclaims continuity as one of the principles of modern education in the state. Now in Ukraine, the concept of continuous geographical education and its individual links [6-8, 10] are being developed and implemented. In 1992, Kharkiv National University established a Regional center for continuous geographical education, which explores various theoretical and applied aspects related to the functioning of the new educational system [4]. Department of physical geography and cartography at V.N. Karazin Kharkiv National University has been

organizing and conducting International scientific and methodological seminars annually since 1992, (now – scientific conferences, devoted to topical issues of continuous geographic and cartographic education [13].

It can be stated that important steps have been taken to reform traditional education and create a new educational system, which will be, first of all, continuous.

However, continuous education, including geographical, develops mainly as a phenomenon of practice and does not have sufficient theoretical justification. It is not always supported by the results of special scientific research. For example, basic principles of continuous geographical education [3] in a simplified form are perceived (or completely ignored). Based on these principles, it is possible to develop research areas and create a truly effective model of new educational activities.

**The purpose of this article** is to define and briefly describe main directions in scientific research of continuous geographical education as an integral system.

**The main material.** Reforming education is a complex and time-consuming process. In the past, it has

repeatedly ended in vain. Formal, institutional educational system in nature is believed to be difficult to reform, and therefore should actively develop various forms of parallel, «outside the institutional» education [2]. We may agree or not with the last thesis, but it is hard not to agree with obvious conservatism of the educational system. The educational sphere is too complex and quite a stable system, which has numerous negative feedbacks aimed at countering any external influence.

The processes of such reform in the context of continuous education - a more complex system than its individual parts - the lower-ranking system (pre-school, school, University, postgraduate, etc.), closely connected with each other, are particularly difficult.

The development of continuous education, particularly geographical education, is an objective irreversible process, as is the development of society. Phrases like: «society demanded reforms in education» or «geography as a separate subject appeared in schools of the XVII century, because the mass of geographical education has become necessary for society» can often be found in the literature on the history of education development. It turns out that education is designed to fulfill a certain social order, that is, its role is secondary: society affects education, and not vice versa; not a new educational model forms citizens and thereby reforms the society, and the society determines the education. But there were always opposing opinions. For example, the founder of Kharkiv University V.N. Karazin believed that general mass education was the key driving force of social progress.

The truth usually lies between diametrically opposed points of view. Education has a leading role in the progressive development of a society, but it is futile to hope that the society will be reformed, guided by innovative ideas of teachers. Objectively, it may not be ready for this, but subjectively will resist these ideas until there is a extremely urgent need to update its own education system.

Modern society already has signs that stimulate the development of continuous education. Among these features are: the main technical revolution, increasing free time, the need to participate in cultural processes, democracy deepening. Professional activity, free time and culture have a social character and provide for constant creativity of the individual. Purposefully introducing continuous education in these areas, it is possible to influence the development of modern society, which has already understood the drawbacks of traditional education system. But it still has an abstract idea what a new educational model should be like.

We consider introduction of continuous geographical education by reforming its links to be an urgent task of our time [2]. The steps that teachers have already taken in this direction should be evaluated positively, despite the numerous flaws, shortcomings and mistakes. Representatives of education should take an active position with regard to modernization of the sphere of their own activities and the renewal of society itself. But the

reform of education should be carried out on the basis of deep theoretical developments, understanding of the rich pedagogical heritage, a systematic approach, especially to the system of continuous education, including geographical.

Attention should be paid to the need for scientific justification of the principles of continuous education system, which will allow to have a clearer idea of the nature of the new educational activities. In 1976, R.H. Dave was the first to formulate the principles of this formation [2]. But that was the period when the new educational model was only declared, existed as an idea, and therefore among the 25 mentioned principles there were repetitions or a list of properties of the educational model itself. Now, when continuous education is introduced, its principles can not be perceived in a simplified form or even ignored (unfortunately, this is the case).

We believe that the main principles to be used to create a truly effective system of continuous education are:

- the principle of integrity; according to it, reforms should simultaneously cover the entire system - all levels and forms (stages) of education;
- the principle of integration; vertical integration is necessary to ensure continuity between the stages of education, between different levels within individual stages, etc.; horizontal integration should be between different subjects, aspects of human development, etc.;
- the principle of individualization of education; it should be taken into account at all stages of continuous education, especially at the stages of secondary and higher education;
- the principle of stimulating motivation for education (the implementation of this principle largely depends not only on education, but also on the whole society); to get a better education should be the motive of both the pupil and the student;
- the principle of creativity; its implementation should ensure the formation of a creative personality - the main actor of continuous education. Of course, this principle involves the creative activity of the teacher, but this quality of the teacher is not yet considered the main thing - creativity in the hierarchy of the characteristic features of the modern teacher is not the first position;
- the principle of dynamism; especially important is a dynamic approach to knowledge - the ability to assimilate new achievements of science;
- the principle of pragmatism; thanks to this principle communication of general and professional (special) education, early selection of the future scope of the student professional activities should be ensured;
- the principle of flexibility and diversity; it applies to all components of education - its content, means and methods of education, educational technologies and the like.

Sometimes the principles of modern education include humanization. However, in the continuous education the idea based on humanization is embodied: it is in the center of all transformations of the person who needs to create optimum conditions for full development of his abilities throughout life [3].

Taking these principles into account, will create a truly effective model of continuous geographical education designed to help people navigate in a changing environment.

It can be stated that important steps have been taken to reform traditional education and create a new educational system, which will be, first of all, of a continuous character [4, 7].

Systemic, holistic nature is the most important indicator, an essential feature of continuous geographical education (preschool, school, University, postgraduate). Between the links (stages) of education there should be a clear continuity of purpose, content, means, forms and methods of training.

In other words, the basic principles of continuing geographical education are the principle of integrity and the principle of integration (in this case – vertical integration). They determine the first direction of scientific research. According to the principle of integrity, any reforms of the educational sphere should simultaneously cover all its levels and forms, the entire education system, not each of its links separately, which is now actually happening. The school is reformed – the link of secondary education is a separately reformed link of higher education. Vertical integration is necessary to ensure continuity between the stages of education, different levels within its individual stages. In connection with the development of standards for geography (for secondary schools, for higher education institutions) research «docking» of these standards are relevant with each other – on the lines of content (knowledge and skills), as well as means, methods and forms (in general – technology) training. There is a need for manuals, the purpose of which is to prepare pupils for future education in universities by combining secondary and higher levels of geographical education [14].

The second direction of research follows from the need for effective implementation of the principle of training individualization in the system of continuous geographical education. In this direction, the domestic higher school works relatively fruitfully, although our ideas about the individual path of the student to higher education are significantly different from the views of European colleagues – participants, for example, in the Bologna process. Secondary school and most institutions of postgraduate geographical education are still at the stage of awareness of this problem or are just beginning an intuitive search for ways to solve it. As a rule, individualization of education at school in the conditions of standard programs is simply impossible. Students at the retraining courses are very rarely offered, for example, elective courses. The implementation of this direction is considered particularly difficult for us.

The third direction of research concerns the principle of creativity, the implementation of which should ensure the formation of a creative person – the main actor of continuous education – a person capable of acquiring new knowledge throughout his life, creatively applying them in the realities of a changing world. Despite the importance of this problem and available specific

results of relevant research, targeted development of students' creativity by means of geography is a single, not a mass phenomenon in high school. But the school is the determining link for the formation of the creative personality of continuous geographical education.

Taking this into account, the author has been developing tasks of creative level for geographical Olympiads of different levels - all-Ukrainian and regional for schoolchildren [11, 12], University for entrants for many years. The principle of creativity also presupposes the creative activity of the teacher. It is this quality that should be characteristic of a modern teacher. But according to the results of the survey, conducted by us during 2015-2018, in the opinion of high school students and teachers of geography themselves, the most important features of the teacher of the XXI century (in order of importance) are: knowledge of their subject; friendly attitude to the student; the ability to explain complex material, the ability to tell interesting things, etc. Creativity of the teacher (which was in the list of answers to the questionnaire), took places from the 7th to the 10th (out of 12).

The fourth direction of research is the scientific development of the problem of ensuring the connection between general and special (professional) education, justification for the timing of the earliest possible choice of the student's future sphere of his professional activity (the principles of pragmatism and differentiation of training in the system of continuous geographical education). School practice in this matter is much ahead of theory. As a result, specialized training in geography can (at the discretion of the teaching staff) start with any class, even with the 1st. We believe that it is very early. But the introduction of specialized training only in school forms 10-11 can be hardly justified. Special research should show when to start such profiling.

The fifth direction of research is related to the principle of dynamic continuous geographical education. Development of the so-called dynamic approach to knowledge - the ability to assimilate new achievements of science and technology is particularly relevant (this approach is extremely rare for the lower levels of education). For example, in modern programs on geography, until recently, there was no mention of new scientific and technical achievements. This problem had to be solved by the teachers themselves, if they felt the need for it.

#### **Conclusions and prospects for further research.**

The introduction of continuous geographical education is a complex and multifaceted process, the research of which requires joint efforts of many scientists – geographers, teachers, psychologists, sociologists and the like. Based on the experience of Kharkiv regional and University center for continuous geographical education, we consider the directions of research outlined in the article to be significant, although we realize that this list can be expanded.

In the future, research on these, actually mutually related, areas will continue through the coordination of creative efforts of teachers in the region on new educational activities.

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