# THE PROSPECTS OF DEVELOPMENT OF UKRAINE'S ECONOMY THROUGH THE CREATION OF INTEGRATED EDUCATIONAL CLUSTERS

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# Reshetniak O. I., Zaika Yu. A. The Prospects of Development of Ukraine's Economy through the Creation of Integrated Educational Clusters

The aim of this article is to analyze the prospects for economic development of the Ukrainian economy by creating the integrated educational cluster structures. Authors of the article propose to implement the formation of integrated educational clusters in Ukraine as a method for the orderly development of Ukraine's economy. For the control of sustainable development in terms of the formed integrated educational cluster, the main components should represent a combination of economic, organisational, motivational, coordinating, controlling methods and ways to manage the balanced development of economic system of individual regions and the State as a whole. In the course of the theoretical study of the development prospects of Ukrainian economy, basic functions, tasks and methods of managing the integrated educational cluster have been determined. A model for formation of a single integral educational cluster has been proposed, which includes five levels: individual educational institutions, regional education systems, business-structures-oriented, regional education systems, regional educational clusters, which take into account the sectoral specificity; unified integrated educational cluster of Ukraine. A model for improving the educational system of Ukraine according to the innovation development model, which involves the implementation of the cluster approach, has been presented.

Key words: cluster, educational cluster, integrated cluster, regional cluster, cluster structure, elements of cluster.

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## Решетняк О. І., Заїка Ю. А. Перспективи розвитку української економіки за допомогою формування інтегрованих освітніх кластерів

Метою статті є аналіз перспектив економічного розвитку української економіки за допомогою формування інтегрованих освітніх кластерних структур. Запропоновано здійснити формування інтегрованих освітніх кластерів в Україні як метод планомірного розвитку української економіки. Для управління сталим розвитком формованого інтегрованого освітнього кластера основними складовими повинна бути сукупність економічних, організаційних, мотиваційних, координуючих, контролюючих методів і способів управління збалансованим розвитком економічної системи окремих регіонів і держави в цілому. У ході теоретичного дослідження перспектив розвитку економіки України були визначені основні функції, завдання і методи управління інтегрованим освітнім кластером. Запропоновано модель формування єдиного інтегрального освітнього кластера, яка включає п'ять рівнів: окремі освітні установи, регіональні освітні системи, орієнтовані на бізнес-структури, регіональні освітні системи, регіональні освітні кластери з урахуванням галузевої специфіки, єдиний інтегрований освітній кластер України. Представлено модель вдосконалення освітньої системи України згідно з інноваційною моделлю розвитку, яка передбачає реалізацію кластерного підходу.

**Ключові слова:** кластер, освітній кластер, інтегрований кластер, регіональний кластер, структура кластера, елементи кластера.

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#### Решетняк Е. И., Заика Ю. А. Перспективы развития украинской экономики посредством формирования интегрированных образовательных кластеров

Целью статьи является анализ перспектив экономического развития украинской экономики посредством формирования интегрированных образовательных кластерных структур. В статье предложено осуществить формирование интегрированных образовательных кластеров в Украине как метод планомерного развития украинской экономики. Для управления устойчивым развитием формируемого интегрированного образовательного кластера основными составляющими должна быть совокупность экономических, организационных, мотивационных, координирующих, контролирующих методов и способов управления сбалансированным развитием экономической системы отдельных регионов и государства в целом. В ходе теоретического исследования перспектив развития экономики Украины были определены основные функции, задачи и методы управления интегрированным образовательным кластером. Предложена модель формирования единого интегрального образовательного кластера, которая включает пять уровней: отдельные образовательные учреждения, региональные образовательные системы, ориентированные на бизнес-структуры, региональные образовательные системы, региональные образовательные кластеры с учетом отраслевой специфики, единый интегрированный образовательный кластер Украины. Представлена модель совершенствования образовательной системы Украины согласно инновационной модели развития, которая предполагает реализацию кластерного подхода.

**Ключевые слова:** кластер, образовательный кластер, интегрированный кластер,региональный кластер, структура кластера, элементы кластера.

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he processes of globalization of Ukrainian economic entities determine the need for growth of efficiency of national education. In this situation, issues of achieving competitive advantages in the world markets, including in the educational market come to the fore. Educational institutions are the main elements of the infrastructure of any educational and administrative education. Regions that have developed higher education institutions are not only more competitive, but also attract investment, production and intellectual capital [1].

The growing number of non-competitive Ukrainian universities, and at the same time an acute shortage of qualified specialists in certain regions and sectors of the economy, cause the need for significant changes in the concept of modernization of higher education. Change of the concept of higher education should include substantial changes such as consolidation of universities, sectoral association of primary, secondary and higher education, the introduction of a paradigm of continuous education. The role and requirements for the implementation of innovative approaches in all stages of the educational process - pre-university, university and post-graduate training are increasing.

Thus, the implementation of the fundamental objective of continuing education is only possible in an innovative environment that involves the cluster approach in the organization of the processes of interaction.

The theoretical basis for the research of educational clusters consists of the works of such scholars as Korchagina E. A., Leontieva A. V., Mitsyuk S. V., Mukhametzyanova G. V., Pugacheva N. B. and others.

The *purpose* of this article is to analyze the economic prospects of Ukraine's economy through the development of integrated educational cluster structures.

During the theoretical study of the prospects of development of Ukraine's economy the basic functions, tasks and methods of integrated management of educational clusters were identified (*Fig. 1*).

It should be noted that for the management of sustainable development of formed integrated educational cluster, the main components must be a set of economic, organizational, motivational, coordinating, controlling methods and ways of managing a balanced development of the economic system of individual regions and the state as a whole [2-8].

The educational cluster is characterized by community of rendered services and formed educational products in compliance with the relative independence of its individual elements [9].

The integrated educational cluster of Ukraine should include a number of smaller clusters, which must also meet the above characteristics, features and principles of formation.

So, the separate clusters formed on a regional basis can be allocated: the educational cluster of Kharkiv, Kyiv and other regions.

Formation of the unified integral educational cluster should include the following levels (*Fig. 2*):

 the first level – cooperation on the level of separate educational institutions (preschool, school, special, undergraduate and postgraduate);

- the second level the interaction with enterprise and business structures;
- ★ the third level a vertically integrated regional educational systems;
- the fourth level the integrated vertical and horizontal educational clusters, taking into account sectoral specification;
- the fifth level regional educational systems and clusters, which are combined into a unified integrated state educational system.

The first level of the unified integral educational cluster's formation is currently characterized by a low degree of interactions between disparate and fragmented educational institutions that provide training without reference to the needs of the market and integration into the world economy. This level should be improved by offering modernization projects, offering new educational products in accordance with international requirements, as most of the elements of this level do not meet the goals of providing internationally competitive products of the educational system.

At the second level the integrated interconnections between business structures and educational institutions with clear and generally accepted rules and principles of work that ensure the coordination of all structures of the first level, should be established.

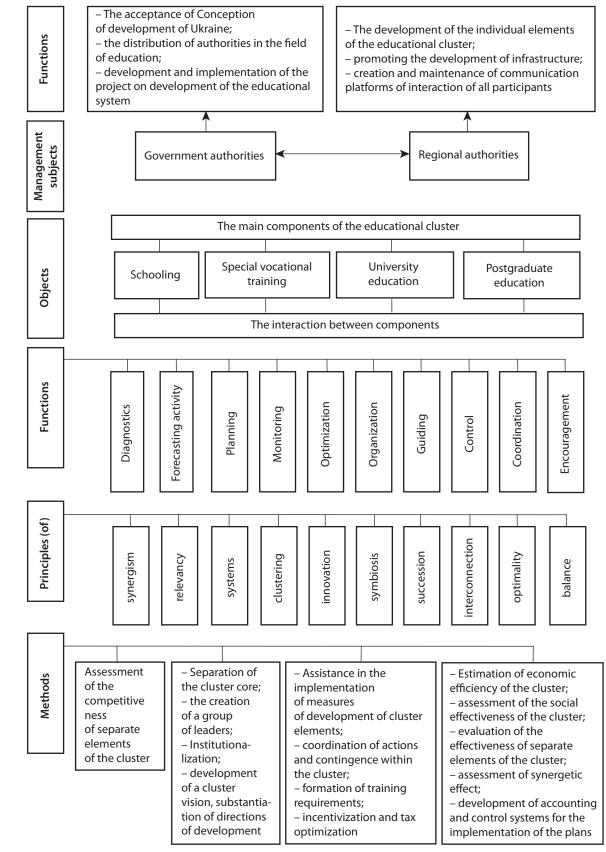
The third level involves the creation of regional educational systems that ensure integration into the international educational environment that is capable of providing high-quality educational products, improving the competitiveness of enterprises in the region. Regional educational system can be viewed as a subsystem of makroeducational system of Ukraine, as well as a subsystem of the educational cluster that has a sectoral focus.

The educational system of the region conditionally has managed and management subsystems. Managed subsystem combines in its structure organizations that provide educational services. Management subsystem involves the formation of governance structures for each education level, as well as performs the functions of interaction and communication with the external environment and its controlled structures.

anagement subsystem is a three-level hierarchical structure that includes levels of educational institutions, business structures and the level which provides integration of management (or regional governments, or specially created units that carry out communication). In the current situation in the educational service market integration of actors is performed quite inefficiently. But in the long term development of the regional educational system it is necessary to ensure the integration of the control subsystems — business structures and functional performers at the highest (third) level.

By means of the presented model, realization of the main purpose of functioning of the educational system will be provided, that is the formation and implementation of an effective system of training highly qualified personnel in accordance with the existing demand from business structures in the region.

As the analysis showed, at the present stage almost all the elements of the educational system are fragmented



 $Fig.\ 1. The\ model\ of\ functions,\ tasks\ and\ management\ of\ integrated\ educational\ cluster$ 

**Source:** developed by the authors.

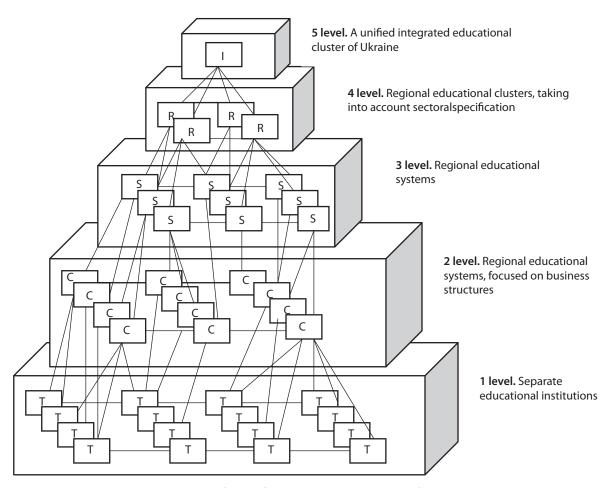


Fig. 2. Levels of the unified integral educational cluster formation

Source: developed by the authors.

and aimed at achieving the individual objectives of each organization, which insignificantly contribute to achieving the objectives of the system as a whole and do not provide an effective economic development. Therefore, the further transformation of the educational system is connected with the establishment of interrelations between the individual elements of the functional subsystems that perform homogeneous functions and ensuring the follow-up cross-functional integration of the educational system.

The fourth level involves the formation of the educational clusters, that can be carried out by the following algorithm: determination of restrictions in the formation of each cluster; identification of the goals and objectives of the cluster; identification of the structure and consist of the cluster; development of a program and a plan of its formation; clarification of the functions of all cluster members; development of a communication policy of the current participants in the educational cluster; implementation of programs and plans of the cluster's formation; assessment of the efficiency of the cluster structures; adjustment of programs and plans of the educational cluster.

According to the information provided above, the model of the integrated educational cluster is formed (*Fig. 3*).

The main unit of the integrated educational cluster includes the core of the cluster. It is the educational institutions of various levels, that supply educational services, as well as research institutions that provide innovative products that

ensure work of the information systems and technologies; the companies that provide information services etc.

The auxiliary units include the whole range of organizations and businesses that support the educational system, enterprises and institutions that are relevant to the sectors of the economy.

The education cluster combines the separate regional, functional and economically interconnected educational structures.

Multifunctionality and multidimensionality of activity of the educational system and the need for effective interaction of areas with educational and business structures require the creation of reliable mechanisms of coordination of all business processes.

Ensuring organizational prerequisites of the formation of the Ukrainian integrated educational cluster should be considered in three aspects: territorial, sectoral and international.

### **CONCLUSIONS**

Thus, the model of improving the educational system of Ukraine according to the innovative development model, which involves the implementation of the cluster approach, is presented. Due to the establishment of managed interconnections between the main actors of the integrate educational cluster, it will be possible to work on improving the economic efficiency of the whole Ukraine. Sustainable

**Source:** developed by the authors.

development of Ukraine's economy should be provided also by training qualified personnel in all sectors. The process of formation of the cluster structures is quite complex, as it requires not only the identification of the main elements and the establishment of stable interconnections, but also the appropriate mechanism for the formalization of cooperation and determination of approaches and criteria to the evaluation of its effectiveness.

#### **LITERATURE**

- **1. Шимко П. Д.** Развитие региональных кластеров высшего профессионального образования в условиях глобализации / П. Д. Шимко // Экономика образования. 2009. № 4. C. 57 72.
- **2. Галимова Л. И.** Образовательный кластер как механизм инновационного развития производственной деятельности / Л. И. Галимова // Вестник Казанского технического университета. 2009. № 5. С. 125 127.
- **3. Захарова Н. П.** Образовательный кластер региона / Н. П. Захарова, Е. В. Тоготина // ВлГУ: электронный журнал. 2007. № 18, часть 2 [Электронный ресурс]. Режим доступа: http://journal.vlsu.ru/index.php?id=1869 (02.01.2010)
- **4. Смирнов А. В.** Образовательные кластеры и инновационное обучение в вузе: монография / А. В. Смирнов. Казань: РИЦ «Школа», 2010. 102 с.
- **5. Павлова Е. И.** Инновационное развитие образовательных кластеров в рамках региональной инновационной систем / Е. И. Павлова, И. П. Маркин [Электронный ресурс]. Режим доступа: http://www.journal-discussion.ru/index.php/publications
- 6. Гаврилова О. Е. К вопросу о подготовке специалистовконструкторов швейного производства в условиях образовательного кластера / О. Е. Гаврилова, Ф. Т. Шагеева, Л. Л. Никитина [Электронный ресурс]. – Режим доступа : http:// conference.kemsu.ru/GetDocsFile?id=13537&table=papers\_ file&type=0&conn=confDB
- 7. Семенова О. А. Образовательный кластер «образование технологии производство» как форма государственночастного партнерства учреждения среднего профессионального образования и работодателя / О. А. Семенова [Электронный ресурс]. Режим доступа: http://www.ktp62.ru/index.php/prepodavatelyam/stati/282-statya-semenova
- **8. Абанкина И.** Кластеры развития / И. Абанкина, К. Зиньковский [Электронный ресурс]. Режим доступа : http://www.strana-oz
- **9. Решетняк Е. И.** Формирование образовательных кластеров как лифт повышения конкурентоспособности регионов / Е. И. Решетняк // Трансформация социальных функций образования в современном мире: материалы международной научно-практической конференции. Харьков: Изд-во НУА, 2015. 460 с. С. 369 373.

#### **REFERENCES**

Abankina, I., and Zinkovskiy, K. "Klastery razvitiia" [Clusters development]. http://www.strana-oz

Galimova, L. I. "Obrazovatelnyy klaster kak mekhanizm innovatsionnogo razvitiia proizvodstvennoy deiatelnosti" [Education Cluster as a mechanism of innovative development of industrial activity]. Vestnik Kazanskogo tekhnicheskogo universiteta, no. 5 (2009): 125-12.

Gavrilova, O. E., Shageeva, F. T., and Nikitina, L. L. "K voprosu o podgotovke spetsialistov-konstruktorov shveynogo proizvodstva v usloviiakh obrazovatelnogo klastera" [On the question of training, the designers of clothing production in the conditions of

educational cluster]. http://conference.kemsu.ru/GetDocsFile?id= 13537&table=papers\_file&type=0&conn=confDB

Pavlova, E. I., and Markin, I. P. "Innovatsionnoe razvitie obrazovatelnykh klasterov v ramkakh regionalnoy innovatsionnoy sistem" [Innovative development of educational clusters within the regional innovation system]. http://www.journal-discussion.ru/index.php/publications

Reshetniak, E. I. "Formirovanie obrazovatelnykh klasterov kak lift povysheniia konkurentosposobnosti regionov" [Formation of educational clusters elevator improving the competitiveness of regions]. *Transformatsiia sotsialnykh funktsiy obrazovaniia v sovremennom mire*. Kharkiv: Izd-vo NUA. 69-373.

Semenova, O. A. "Obrazovatelnyy klaster «obrazovanie tekhnologii - proizvodstvo» kak forma gosudarstvenno-chastnogo partnerstva uchrezhdeniia srednego professionalnogo obrazovaniia i rabotodatelia". http://www.ktp62.ru/index.php/prepodavatelyam/stati/282-statya-semenova

Shimko, P. D. "Razvitie regionalnykh klasterov vysshego professionalnogo obrazovaniia v usloviiakh globalizatsii" [The development of regional clusters of higher education in the context of globalization]. *Ekonomika obrazovaniia*, no. 4 (2009): 57-72.

Smirnov, A. V. *Obrazovatelnye klastery i innovatsionnoe obuchenie v vuze* [Educational clusters and innovative teaching in high school]. Kazan: Shkola, 2010.

Zakharova, N. P. "Obrazovatelnyy klaster regiona" [Education Cluster region]. http://journal.vlsu.ru/index.php?id=1869