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CLUSTER AS AN INNOVATION APPROACH TO EDUCATION

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Annotation. The globalization process observed all over the world assumes the clustering of the educational sphere, as well as other areas. The globalization process has also caused a sharp increase in competition in the educational services market. In conditions of such competition, the cluster is a means of using the power of the globalization process against itself. The combination of Educational, Scientific and production subjects around a common goal increases their potential. And the pedagogical educational cluster provides this cooperation. The article is based on the scientific point of view of ensuring the competitiveness of subjects in the educational services market through a cluster tool. The concept of a cluster of pedagogical education is described and its necessity, mechanisms of implementation, principles and directions are outlined. In terms of the purpose, tasks, principles and directions of the pedagogical educational cluster, the author outlined his reasoning. The organizational aspects, practical significance and theoretical foundations of the practical implementation of the pedagogical educational cluster are highlighted. The author tried to base his views on the opinions of Western scholars. The scientific research of Western scientists on the educational cluster was analyzed and the author's attitude was expressed to them. Scientific conclusions on the social, economic, legal, marketing and pedagogical consequences of the clustering of education are described.

Keywords: the process of globalization, the cluster of pedagogical education, the mimetic method, cluster strategies, the purpose, tasks, principles and directions of the cluster of pedagogical education.

I. INTRODUCTION

The fact that the development of society by today's stage of its development takes place in a complex character, along with the positive aspects of development, the occurrence of its negative consequences is transversely putting new problems in front of humanity. It has now become impossible to find any region or state that is fully protected from interactions. A deep understanding of the essence of this phenomenon, the study of its features, in order to reduce the negative impact of the globalization process, which is currently going on in a violent way, and increase its positive impact on world countries, is one of the pressing issues. An in-depth study of the essence and features of globalization makes it possible to adapt to it, change its directions in the desired way, use its power "against itself". It can be seen from this that the development of methods and means of positive and creative use of the globalization process, its mechanisms on a scientific basis, is one of the pressing problems of today. A cluster model can be cited as one of the means of using the power of the globalization process "against itself". Clusters in the production sectors of the economy have also entered the education sector of Western countries over the next decade. Educational clusters are not an analogue of production clusters, but have many similarities. Some scientific work has been done in Kazakhstan in Central Asian countries on educational clusters. But in the rest of the countries, neither scientific research nor practical work has been done in this regard. For the next year in Uzbekistan, the Chirchik State

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Pedagogical Institute creates scientific and theoretical foundations for the clustering of pedagogical education.

II. RESEARCH TECHNIQUES

This study used the method of analysis and synthesis in the scientific study of the pedagogical educational cluster, the method of a comprehensive approach in terms of introducing innovations into the field of pedagogy, the method of comparative analysis in the study of educational clusters in foreign countries.

III. LITERATURE SURVEY

During the next ten to fifteen years, M. Porter's cluster theory entered the field of education, among many other fields. In this regard, it is appropriate to highlight the contribution of Russian scientists. In their researches, the essence of the educational cluster, its fields of application, and its characteristic features are expressed.

Studying and analyzing research on the cluster approach to education allows us to summarize several views on this topic. So the cluster approach is:

- a mechanism for strengthening the organizational forms of unification of industries that are a separate field (education, economy, etc.) and are interested in achieving competitive efficiency (T.I. Shamova);
- a structure consisting of several equal parts that preserves its full functional workability among optional components (L. Bespalova);
- a set of interdependent economic subjects of various fields, united in the structure of one organization based on modernity and systematic approach (G.S. Khraban and L.T. Snitkolar);
- combining the needs of production and educational programs (S.V. Krivykh);
- a means of forming support for innovations in the education-science-production system (Osechkina L.I.);
- an innovative and effective method of organizing the formation of personnel potential for the future economy of the organization (Sidorin A.V.);
- reorganization of the educational system based on the principle of consistency as a result of the integration of various educational institutions (kindergarten-school-college-high school) (Frolovskaya M.N.).

Study of the theoretical foundations of the formation and development of educational clusters by Russian scientists in relation to professional education

cluster approach (B. Pugacheva, A.V. Leontiev), activity and pedagogical design theory (V.V. Davydov, V.P. Bespalko, G.I. Ibragimov, B.Ts. Lednev, M.I. Makhmutov, A.A. Slastenin), the concept of continuous education (B.S. Gershunsky, G.V. Mukhametzhanova, A.M. Novikov), studies revealing the problems of social partnership and management of education in vocational schools (P.F. Anisimov, G. V. Mukhametzhanova, G. I. Ibragimov, E. A. Korchagin, V. P. Panasyuk, A. S. Subetto).

The same researchers noted seven main cluster strategies:

- geographic strategy, types of clusters spread across territories from small local to global scale;
- horizontal strategy, a megastructure form of a cluster consisting of the union of several clusters;
- vertical strategy, unifying, that is, clusters uniting subjects of the same level;

- lateral strategy, clusters that combine entities of different structures, can provide economies of scale, lead to new combinations;
- technological strategy, conspicuous clusters in a set of structures using the same technology;
- focused strategy, cluster subjects located around one center;
- quality strategy, cluster form where the main issue is how to implement cooperation of organizations.

In our opinion, it is appropriate to classify the above cluster strategies noted by Russian researchers as cluster forms. Because in them, rather than the priority goals of the cluster's implementation - the strategy, in what forms and types it is manifested.

Also, the effective development of the educational cluster directly depends on the following conditions and factors:

- availability of technological and scientific infrastructure that meets the demand (D.A. Yalov);
- mental readiness of participants for mutual cooperation (D.A. Yalov, V.P. Tretyak);
- existence of a solid regional strategy for cluster development;
- the ability to successfully apply the project management method;
- powerful information technologies that provide information exchange between cluster entities (A. A. Migranyan).

Therefore, successful implementation of scientific and practical work related to the clustering of pedagogical education, adaptation of the existing technological and scientific infrastructure to the process in order to achieve efficiency in them, achieving their full understanding of this innovative process through the implementation of propaganda work in the subjects, and cooperation will bring multifaceted benefits. It will be necessary to create an opportunity for their understanding, to develop a well-thought-out strategy of cluster development, methods and ways of successful project management, to create an opportunity for rapid information exchange between participants. This is a very large-scale organizational process that requires time and clearly targeted activities. But the content of these organizational processes is not separate from our activities. In fact, according to Russian scientists engaged in clustering of pedagogical education: N.N.Davydova, B.M.Igoshev, A.A.Simonova, S.L.Fomenko, the clear results of cluster development will be visible in 5-7 years.

IV. THEORY AND RECOMMENDATION

A) definition and description of the pedagogical educational cluster

From the opinions expressed in the scientific literature about the concept of a cluster, the concept of a cluster of pedagogical education can be described as follows: a cluster of pedagogical education is a mechanism that enhances the integralization of individual subjects, technologies and human resources with equal access to each other in order to meet the needs of a particular geographical area for

The pedagogical educational cluster is a mimetic (mimiomai in Greek – to emulate) method, which implies the introduction of a model on a creative basis into the pedagogical educational system, which led to efficiency in the field of development of Economics. The pedagogical educational cluster forms the innovation chain" education – science-educational tools – technology – management – business", and its research from a scientific point of view is one of the important tasks of our pedagogy today. It is becoming increasingly necessary to ensure the existing natural connection between the

branches that make up the Educational Complex, from the point of view of interest and samrador, arising from the socio-economic situation and needs of a particular area.

The main product of the Educational Complex is competitive personnel and educational services. The ultimate goal of the educational cluster will be to improve educational and scientific processes. This requires some organizational and structural changes in the specialist training system, along with significant changes in the system related to management, structure and quality. At the moment, at all stages of work on this subject, the question lies in the search for new forms and methods, strengthening the connection of all types of education with respect to the totality of the goal and the specificity of interests, ensuring integration between them.

When appropriate innovative approaches to existing problems are introduced in the management structure of educational institutions, opportunities arise to be able to pre-assess the current situation, correctly predict the development of events, take timely measures and make adjustments to the organizational management structure. The educational system cluster decides the right approach to the solution of such problems. After all, it is recognized that cluster integration processes are also the strongest in that they attract all the resources in the material, financial, technological, informational, methodological and personnel fields. The cluster adaptively allows the construction of a management system for its structures, predicting (forecasting) real development to ensure mutual trust. The presence of qualitative changes in the components of the educational system, meaningful activities, general and special management functions, programs, technologies and methods, processes associated with the development of the personnel potential of participants provide the opportunity to create a cluster environment.

The cluster model of the development of pedagogical education operates in general directions related to education, the creation of educational literature, the development of scientific potential of pedagogical personnel, continuity of education and training. This suggests that the problem has a general methodological nature. Currently, these general areas are privatized in areas such as education management and organization, types and directions of education, ensuring continuity and integration, teaching methods and tools.

B) goals and objectives of the pedagogical educational cluster

The main purpose of the activities of the pedagogical educational cluster is as follows::

- ensure effective succession in the field of pedagogy and promote the best students to the pedagogical profession;
- creation of an environment for training future education specialists in the base of practices with innovative experience;
- reduce the period of professional skill acquisition of young professionals;
- creation of a new generation of educational, educational-methodological, scientific literature, tools and didactic materials in pedagogical education;
- increase the scientific, scientific and pedagogical potential of pedagogical education;
- concentration and integration of intellectual resources around current issues of the development of pedagogical education;

- search and apply to education different forms and types of Education, Science and pedagogical practice;
- improvement of mechanisms that ensure continuity of education and training;
- to create the opportunity to quickly reconnect with preschool, secondary education and OSM as well as other applicants in the training of pedagogical personnel;
- scientific justification of the need for Communication, Connection and cooperation between the branches of pedagogical education.

Based on these goals, the pedagogical education innovation cluster performs the following tasks:

- effective use of innovative pedagogical technologies in improving the quality of Education;
- consistent implementation of scientific activities in the field of pedagogy;
- ensuring continuity and continuity in the cross section of the educational stages of the content and essence of the main and auxiliary means of Education;
- Organization of term training courses in order to fill gaps in the level of knowledge of teachers of educational institutions in the region;
- Organization of scientific and practical seminars in order to eliminate the problems associated with the teaching of subjects in secondary schools;
- strengthening scientific cooperation with scientific research institutes, scientific centers and base higher education institutions in order to increase the scientific potential of professors and teachers at the Institute;
- involvement of teachers with the ability to conduct scientific research in secondary schools in research work;
- implementation of internships in leading foreign universities in order to master advanced foreign experience in the field of pedagogy.

The cluster of pedagogical education provides an opportunity to identify existing problems in the system, in turn, its strengths and weaknesses. It is important that the information about the state of affairs in the cluster is very objective. With the cluster, the government will be able to effectively apply the results of the experience and research carried out by the government, the government agencies that control education, to promote education in the region where the cluster operates. The cluster approach to education allows management bodies to provide certain tools for effective interaction within the system, better understand the problems, plan the scientific foundations of development in the region.

All this:

first of all, it confirms the opinion that the educational cluster is a phenomenon of great scientific and practical importance, which makes it possible to achieve a new synergistic quality through system integralization;

secondly, it creates an environment and conditions that ensure the competitiveness of the system;

thirdly, it is also the presence of political, economic, social significance.

The entire set of activities in this process is aimed at improving the competitiveness of Education, which is the main foundation for the training of scientific and professional personnel. But it should also be remembered that not all subjects United within the framework of the cluster can immediately give a real result.

The introduction of an educational cluster into practice requires the establishment of pedagogical conditions and experimental verification of the effectiveness of the formation of qualified specialists. The role of higher education in the cluster is manifested in the production of innovational products. Research institutes and production institutions with cluster subjects will become a base of operations and will be able to participate in the formation of specialists in their scientific and educational activities in accordance with their needs and development prospects.

All subjects of the cluster organize and regulate a multi-stage system of training professionals with qualifications. Both the employer and secondary schools, secondary specialized, vocational education institutions and higher education become participants in the process from this integralization to their own benefit.

The process of continuing education is a multi-level system, changes at the social level and the professional potential of the subjects create favorable conditions for its development. Therefore, the main goal of the idea of continuing education is to adapt the status, desires and abilities of a person as a person to Labor and social relations in a rapidly changing world.

The importance of the pedagogical educational cluster can be classified by industry as follows: in the economic sphere: in the formation of the market for effective educational services; in the social sphere: in the employment of graduates of pedagogical educational institutions; in marketing: innovation in the popularization of educational technologies, new opportunities in educational and educational work of educational institutions; in the legal sphere: in; in the field of pedagogy: continuing education is prominent in the areas of collaborative design of training of pedagogical personnel in the system.

C) principles of the cluster of pedagogical education

In order to determine the specific goals and objectives of the innovation cluster of pedagogical education, to anticipate the horizons of activity, it will be necessary to come to specific stops on what principles it will be based on. In this regard, we recommend the following principles related to the content of Education:

► natural communication, cooperation between cluster entities, the naturalness of the issue of communication, that is, the objectivity of the issue of connection in territorial, sectoral or task. Researchers argue that clusters cannot be artificially formed. So, the cluster is a product of natural communication arising from interest, and ensuring competitiveness, raising quality and result is its main goal. The most convenient and effective way to strengthen existing natural involvement, direct scattered potential towards a specific goal, create and strengthen legal foundations, and accelerate the exchange of information and innovations are clusters. As conditions for ensuring naturalness in communication, the following can be indicated:

- Geographical proximity;
- Dynamics of educational quality (progress);
- Strengthening teachers ' capacity;
- Rational use of the scientific potential of the OSCE and scientific research institutions;
- Improving the quality of educational tools;
- To be able to set a common goal, etc.;

► continuity and continuity, the fact that cluster subjects form a chain in interconnection, that each branch forming a chain has its own specific functions, that gaps in the chain of continuity are not allowed. At the same time, it should be noted that continuity is a phenomenon of content, continuity is a phenomenon of form. That is, ensuring the natural sequence of educational content, taking into account the age and physiological characteristics of those who receive knowledge, provides continuity. Continuity can be observed both within a specific type of education and between educational types. Continuity, on the other hand, occurs when there is no gap in the reciprocal sequence of educational types (or the illumination of the content of a particular discipline). Hence, continuity and continuity are interrelated, joint and at the same time separate phenomena, the provision of which is directly related to the quality of education and should be considered as a fundamental issue in the relationship between the types of Education. The fact that the cluster of pedagogical education disputes around the same phenomenon justifies the fact that continuity and non-continuity are considered as an important principle.

As conditions for ensuring continuity and continuity, it can be shown that:

- Development of educational subjects on the basis of the dependence principle of educational plans;
- To be developed in the bottom-up principle of the content of programs of recurring subjects in all types of education and to achieve the absence of gaps in it;

► consistency is the arrangement of cluster subjects in a vertical single line, in which the trend of step-by-step elaboration from bottom to top, from simple to complex is followed. Consistency is both a phenomenon of form and content, and refers to the distribution of the form and content of education between the types of Education. This distribution should take into account the specifics and purpose of the types of education, state educational standards, requirements for graduates. Consistency is one of the main conditions for mastering the content of Education. Consistency can be both within a certain type of education and between educational types. The same types of Education-consistency is a phenomenon associated with the pedagogical educational cluster, and the processes associated with its provision correspond to the problems that must be solved within the framework of the cluster. This theoretically justifies the imposition of consistency as an important principle of the pedagogical educational cluster.

As a condition for ensuring consistency, it can be shown that:

- The development of regulatory documents, tools, forms and technologies related to education and upbringing on the principle of moving from bottom to top, from simple to complex;
- Upbringing in the development of regulatory documents, tools, forms and technologies related to education and upbringing, taking into account the age and physiological characteristics of students and students;

► succession, the role of the cluster in the alternation of generations, tutoring activities, as a result of the clustering of pedagogical education, is the achievement of regular satisfaction of the needs of subjects for qualified pedagogical personnel. Succession is a dividing process associated with an increase in the status of the teaching profession in society. One of the tasks of the pedagogical educational cluster on the basis of the principle of succession is associated with researching problems

in the social protection of teachers, putting on the agenda problems associated with increasing the respect of the teacher in society.

As a condition for ensuring succession, the following can be shown:

- Strengthening propaganda and propaganda work in order to increase the status and status of the pedagogical profession in society;
- To establish targeted training of gifted students in the profession of a teacher-educator;
- Establishing rational selection work;

► modernity, the introduction of the achievements of modern science in the field into the system, the assimilation of advanced foreign experiences, the rational use of information and communication technologies. The principle of modernity can be understood in two directions: the first, the modernization of production processes (problems associated with the introduction of achievements of modern science into education, science and production), the second, in the sense that the product being produced (graduates) meets modern requirements. It is known that it is impossible to prepare a competitive, high-quality product without modernizing production processes. This requires an innovative approach to educational content, educational processes and tools, technologies. And the non-existence of a cluster without innovation theoretically justifies the promotion of modernity as a principle of a cluster of pedagogical education.

As a condition for ensuring modernity, it can be shown that:

- Regular updating of the application of modern information and communication technologies to the pedagogical educational process;
- Creation of a regular working mechanism for integrating the achievements of modern science into the process of pedagogical education;
- Adaptation of educational content and form to time;
- Coordination of state requirements for graduates with requirements for graduates of the educational system of developed countries.

► orientation is the fact that each type of activity being carried out within the framework of the cluster is aimed at a specific goal, the presence of the possibility of pre-sampling and evaluation of the expected results. The pedagogical educational cluster assumes project directions and the practical implementation of several projects in each direction, which are aimed at a specific goal and are scientifically based. It is desirable that all aspects of the educational sphere, such as scientific research, information-analytical, scientific-methodological and experimental-innovation, be taken as project directions, and that a particular project serves quality and efficiency in a separate aspect of these directions. Working on this taxlite further clarifies, compacts and directs the concept of a pedagogical educational cluster and activities in this direction to a specific goal. Orientation in these aspects indicates that the scientific proposal as a separate principle of the pedagogical educational cluster is justified.

As a condition for ensuring the principle of orientation, it can be shown that:

- Clear definition of the goal;
- Orientation of each activity towards the goal;
- Determination of competitive personnel training as the main criterion;

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- Approach the concept of competition not from a local or National point of view, but from a global point of view;
 - Development of a methodology for the work of pre-testing and evaluation of the effectiveness of the activity;
 - The provision of project directions and, in accordance with it, projects aimed at a specific goal and the result of which is guaranteed in advance.

► the totality of the goal is the unification of cluster entities around a single goal in the global aspect, in addition to their private goals. Being able to find a common goal related to the activities of all subjects in a cluster is one of the important factors in the process. The overall goal is related to the strategy and implies a far-sighted plan. It may not be directly related to the subject, but indirectly related, and the success of the cluster ensures the effectiveness of the activity of that subject. For the general purpose, the interests of all the entities that make up the cluster should be reflected. Otherwise the cluster will not be full-fledged. This is a discontinuity in the cluster chain that causes the system to perform defective or not work at all. In these aspects, the totality of the goal justifies the fact that the Advanced Idea as an important principle of the pedagogical educational cluster is correct.

As a condition for ensuring the principle of generality of the goal, it can be shown that:

- The realization that private interest is directly related to the common goal;
- Being able to get out of its shell when setting strategic directions and plans;
- Foresight (the presence of long-term perspective plans);
- Taking into account The "Voice" of each of the entities that make up the cluster when setting a common goal;

► the peculiarity of interests is that in the model of the pedagogical educational cluster, each of its subjects has a legal, social, economic interest. The private interests of their subjects ultimately serve for the common good. Without Interest, a cluster of pedagogical education cannot exist. Economic clusters also actually arose in order to increase profits and increase competitiveness. In them, when profit is manifested in material manifestations, in the pedagogical educational cluster it is visible in terms of strengthening social, that is, personnel capacity and improving the quality of Education. Social Interest also ultimately serves the material interest of the industry, of course. In general, the issues of raising the capacity of personnel and increasing material interest are concepts that are directly related to each other, within the framework of any cluster they are considered as processes carried out in parallel. The principle of natural engagement occurs only when the most reasonable private interest at the moment is ensured. Therefore, private interests ensure the naturalness of communication, and at this point these two principles create a close connection. The intensification of one of these two principles in itself serves to intensify the other (or vice versa).

As a condition for ensuring the principle of interest privacy, the following can be indicated:

- Conditionality of interest in integralization;
- That private interest does not cause withdrawal from a common goal;
- Equality between increased personnel capacity and increased material interest;
- To see the self-interest of subjects in the framework of the cluster as equal to the interest of others.

► mutual control, the formation of a unified unified system of subjects of education within the framework of the cluster model, and the fact that each subject is interested in the flawless functioning of this system, the error or disadvantage allowed in a particular subject affects the effectiveness of the activities of other subjects, is the establishment of a system of mutual assessment of At this point, it becomes clear that the cluster of pedagogical education is a phenomenon as a certain system, and it assumes the principle of mutual control. How perfect the system is ensures that reciprocal control is so powerful. In this case, it is important to develop objective norms of assessing the activities of subjects, arising from the general purpose and private interest.

As a condition for ensuring the principle of mutual control, it can be shown that:

- Unification as a single system;
- Work on the principle of the system;
- To understand that private interest also depends on the quality of the activities of other entities;
- Development of interaction mechanisms;

From the above principles, it will be possible to outline several important directions when creating a cluster of pedagogical education. These include:

first, the existence of a common goal between cluster entities;

secondly, the fact that the joint activities of the subjects have a legal basis;

third, a system of mutually beneficial relations between entities United within the framework of a cluster;

fourth, the Coordination of the control mechanism;

fifth, that the work carried out by the subjects does not retreat from the common goal;

sixth, to follow the principle of mutual control between subjects.

G) directions of the pedagogical educational cluster

It is advisable to organize a pedagogical educational cluster in the following directions: 1) educational direction; 2) direction of educational tools; 3) direction of education and science; 4) direction of education and production; 5) direction of Educational Management.

In the above classification, the activities of the field of pedagogical education are fully covered, each direction is networked within itself. The content of these directions and networks combines all forms, methods and technologies of Educational, Scientific, methodological, educational tools and management-related cooperation between educational types.

The content of the directions of the pedagogical educational cluster consists of:

1. Direction of Education:

- Development of mechanisms for identifying, classifying and eliminating existing problems;
- Development of the mechanism of vertical and horizontal movement of educational and methodological potential;
- Quality management and control of classes;
- Development and implementation of simple and optimal mechanisms for determining educational and methodological effectiveness;
- Establishment of educational activities in the educational and methodological field.

2. Educational tools direction:

- Improving curriculum and science programs;
- Raising the level of enrichment and content of textbooks, teaching aids;
- Improving the auxiliary literature and didactic supply of the lesson;
- Achieve effective use of Information Technology and pedagogical technologies.

3. Direction of education and science:

- Strengthening the integration between education and science;
- Establishment of educational activities in the scientific field.
- Increase of binary scientific research in cooperation of teachers of OSCE and secondary schools (preschool educational institutions) (scientific developments are carried out by professors and teachers of OSCE, its implementation is carried out by teachers of the secondary school);
- Development of a mechanism that ensures the flow of scientific and pedagogical potential depending on the need;

4. Direction of education and production:

- Strengthening the integration between the educational and production direction;
- Increase of binary scientific research in cooperation of the OSCE and production staff (scientific developments are carried out by the OSCE professors and teachers, its implementation is carried out by the production staff);
- Achieving the harmony of theory and practice;
- Improving the mechanisms for the rapid implementation of scientific achievements into practice, taking into account the intensity of progress;

5. Educational management direction:

- Conducting scientific research work on innovation management of Education;
- Creation of a territorial management system that coordinates the interests of all types of Education;
- Implementation of innovative methods and tools, information and communication technologies in management.

Interaction and openness, which ensure the mutual support and control of all participants, serve the effectiveness of the cluster. Proximity to each other, internal contacts, constant personal contacts and general openness facilitate interaction as well as information transfer. Issues related to clustering include innovations in education, the availability of new components and tutorials, testing the educational process, exploring new trends in the development of the educational system.

V. CONCLUSION

All the work to be carried out the cluster is directly related to the level of initial, professional, high professional and professional training of the participants and should be aimed at the realization of the scientific and educational cluster. At the same time it is necessary that educational institutions within the cluster, other types of organizations that are part of the cluster, work for a common purpose. Additional and distance learning should also be provided for in teaching. It is also important to pay special attention to the creation of the necessary conditions for the active involvement of a number of research institutes, industrial enterprises and other institutions of the Republic in the cluster.

This resulted in an area of:

"first, the need for qualified pedagogical personnel is qualitatively satisfied (social consequence);

"secondly, the market for effective educational services is formed (economic consequence);
 "thirdly, the possibilities of rapid popularization of innovative educational technologies, new opportunities in educational and educational work of educational institutions appear (a consequence in the field of marketing);
 "fourth, regulatory framework will be created in connection with the establishment of cooperation of educational institutions, as well as the transition to a new organizational form of management of the educational system (legal consequence);
 "fifth, the design of the pedagogical personnel training system in cooperation with the subjects of the cluster is established (pedagogical consequence).

Thus, the implementation of a cluster approach to education strengthens continuity and connection in the educational system, integration processes between the types of Education. The consideration of this as innovation in relation to education and its effectiveness, as well as the development of implementation mechanisms, are considered important problems before the scientific community. The cluster approach makes it possible to radically change the content of State Educational Policy and look at the relations of subjects with the criteria of development and efficiency. As a result, the cluster creates a powerful mechanism that unites human resources, organizations and technologies in the area as an innovative approach to education.

REFERENCES

1. M.Porter, *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, Cambridge, 1980, -P.79
2. Шамова Т.И. Кластерный подход к развитию образовательных систем// Взаимодействия образовательных учреждений и институтов социума в обеспечении эффективности, доступности и качества образования региона: Материалы 10 Международного образовательного форума (Белгород. 24–26 окт. 2006 г.): в 2 ч. / БелГУ, МПГУ, МАНПО; отв. ред. Т.М. Давыденко, Т.И. Шамова. Белгород: Издательство БелГУ, 2006. Ч. 1. С. 24–29.
3. Беспалова Л. Что такое кластер? URL: <http://siok.rightside.ru/siok/> 2009-12-01-06-24-41. Загл. с экрана.
4. Актуальные проблемы бизнес-образования : материалы XIV Междунар. науч.-практич. конф., 16–17 апр. 2015 г., Минск / Бел. гос. ун-т, Ин-т бизнеса и менеджмента технологий. – Минск : Национальная библиотека Беларуси, 2015. - 298-301 С.
5. Кривых С.В. Кластерный подход в профессиональном образовании / С.В.Кривых// академия профессионального образования. -2014. -№3-4. –с.7-13.
6. Осечкина Л.И. Кластерный подход как условие повышения эффективности деятельности вуза / Л.И.Осечкина// Высшее образование в России. -2012. -№8-9. –с.73-76.
7. Сидорин А.В. Система формирования кадрового потенциала высокотехнологичных отраслей промышленности на основе кластерного подхода / А.В.Сидорин // Интернет- журнал «Науковедение». -2012. -№4. –С.1-7.
8. Фроловская М.Н. Становление профессионального образа мира педагога на основе кластерного подхода / М.Н. Фроловская // Инновационные технологии в науке и образовании:

сб. статей П ПНМК, Пенза, 23 янв. 2017 г. / МЦНС «Наука и Просвещение»; под общ.ред. Г.Ю.Гуляева (и др.). – Пенза, 2017. -С.210-212.

9. Давыдова Н.Н., Игошев Б.М. и др. Образовательный кластер как системообразующий компонент региональной модели непрерывного педагогического образования, Педагогическое образование в России, 2014. № 10, стр.75

10. Шарай Н., Кластерный подход в интеграции, «УГ Москва», №15 от 14 апреля 2015 года.