Specific Characteristics of Pedagogical Education Innovation Cluster

Kadirova Omadkhan Sobirjonovna, Nasiba Abdullaeva
Andijan State Pedagogical Institute masters, Scientific supervisor is the head of the "General Pedagogy" department of Andijan State University

Abstract: In this article, the reforms carried out in pedagogical education in our country today are aimed at strengthening the position of the teaching profession in society, attracting advanced foreign experiences and innovations to the field, ensuring the integration of education, science, production, and the main aspects of education. and improvement of auxiliary tools in accordance with the times, more involvement of the private sector in the field and improvement of the system of working with gifted students.

Keywords: Innovation, cluster, science, education, result, integration, cooperation, specialist, training, experience, knowledge, help, qualification.

Introduction. The regional implementation of the unified education policy implemented in our country shows the need to effectively develop innovative components of the higher education system and ensure competitiveness in the market of educational services. In particular, the creation of such a new mechanism in the pedagogic education system has become a vital necessity today, showing the need to achieve satisfaction of interests as a result of mutual control, competition, integration, coherence and continuity between the types of education. Based on this important social importance of pedagogical education in the sustainable development of society, modern requirements, problems in the system, and the disparity between science and education links in solving them today make continuous pedagogical education a cluster development model. requires the need to transfer.

Pedagogical education innovation cluster is also significant for its full response to these reforms. This scientific-pedagogical problem is fully compatible with the educational system of our country due to its innovative character, successful foreign experience and the ability to ensure mutually beneficial cooperation between types of education.

Today, the demand for innovations and original technological solutions in the world is increasing more and more. From this point of view, researching the scientific and pedagogical aspects of the cluster approach, which is considered as one of the new, modern methods of the integration process, scientifically justifying its effective method, and developing proposals on the mechanisms of its implementation, is one of the main issues of our national pedagogy. In this regard, systematic studies conducted by foreign specialists show that this concept means the integration of certain entities into a single organizational structure that is interconnected and dependent and works together to achieve certain goals. Modern educational clusters usually include subjects of science, education and production and form a relatively wider network. Therefore, it is envisaged to implement innovative approaches in the creation of single organizational structures of clusters.

The main part. Mutual integration of several subjects within the cluster is a complex, multidisciplinary scientific and practical process. Combining several interrelated activities around a common goal requires accurate calculations and scientific solutions, projects with a guaranteed result, thereby gaining the trust of
cluster subjects. A cluster cannot be implemented in bureaucratic and administrative ways. It can carry out effective activities only when it is organized on the basis of voluntary goodwill of subjects.

The educational cluster is an innovative approach in our national pedagogy, which includes the processes of integration not only between types of education, but also between science, education and production, as well as educational management, educational tools and includes areas related to forms.

The cluster approach carries out activities in the general directions related to teaching, creating educational literature, increasing the scientific potential of pedagogues, and the integration of education and training. This shows that the problem has a general methodological nature. At the moment, these general directions acquire a special methodological character in directions such as management and organization of education, types and directions of education, ensuring coherence and integration, teaching methods and tools. This shows that it is appropriate to approach the solution of the problem in a deductive (coming from the general to the specific) method.

A cluster can be called a system based on certain cooperation, but it has different aspects than a simple system. It's a special, unique system that improves performance by adding elements, but removing them doesn't have fatal consequences. As a result of our research, we came to the following conclusions regarding the difference between a cluster and a system:

1. Although each of the elements of the system performs a separate task, they differ from each other according to the level of importance. The elements of the cluster consist of equal components.
2. Malfunction of one of the elements of the system causes malfunction or failure of the entire system. The failure of one of the elements in the cluster can reduce the performance, but does not stop the operation of the remaining elements.
3. The system can be organized on the basis of mechanical connection, but the elements in the cluster are based on conscious, natural and purposeful connection.
4. In the elements that make up the system, private interest is not always required, but entities without private interest do not work in the cluster.
5. The system has a single purpose and every element is subordinated to that purpose. In a cluster, in addition to a single goal (common goal), each element has a specific goal. The private goals of subjects are no less important than the general goal.
6. A system can be said to be a whole consisting of separate parts, and a cluster can be said to be a whole consisting of separate wholes.

In the scientific research carried out on educational clusters, its special methodological character and its differences and similarities from ordinary systems should be justified.

The implementation of innovative approaches related to the training of specialists with multiple qualifications in the theory and practice of higher education is relevant today. Pedagogical education clusters appear as a reasonable solution in this regard. The practice of using the cluster approach in education exists in the experience of countries such as China, India, Indonesia, Malaysia, Morocco, Jordan, Egypt, Saudi Arabia, and the United Arab Emirates. In particular, in this regard, in the Chinese experience, innovation clusters were formed around Xinhua University in Beijing and Fudon University in Shanghai, as well as research institutes, scientific and technical parks organized in the form of business incubators, and scientific centers. Such innovative clusters attract government grants, local and foreign experts, and cooperate with professional training institutions.
If you look at the activity of more than 2000 existing clusters in India, you can see that they are also concentrated around large cities and large industrial companies with developed infrastructure and rich labor resources. The most important thing is that all the clusters that are working effectively have established strong connections with scientific centers and universities. In general, one of the conditions for the successful formation of modern clusters is its connection with science. Because the areas that ensure the efficient operation of the cluster related to timely understanding of new trends in the field, adaptation to them, implementation of innovations, forecasting of efficiency, assimilation of foreign experiences cannot be without scientific activity.

Agreements with Sangmyung University and Chung-Ang University in order to develop cooperation with higher education institutions that specialize in training personnel for the South Korean education system and have pre-school educational institutions under their management, as well as Cooperation memoranda were signed with Chonnam National University, and within the framework of these agreements and memoranda, exchange of experience between students, scientific-pedagogical and management specialists, personnel training, retraining and upgrading of their skills, the newest programs in the field and introduction of methods, organization of collaborative research, conferences, exhibitions and seminars, organization of special joint master's and doctoral programs for training preschool education specialists, as well as experimental preschool education institutions based on the Korean system in Uzbekistan organization. It is envisaged to cooperate in important directions. The implementation of these cooperation works requires understanding the nature of new trends and adapting to them, forecasting the intended effectiveness, and implementing innovations. This determines the topic of today's current scientific research aimed at the development of the field of preschool education.

**Conclusions and suggestions.** It is desirable to carry out the research of the pedagogical education cluster as a scientific-pedagogical problem in the following directions:

1. Research in the field of pedagogical education.
2. Studies in the cross-section of types (stages) of education.
3. Study of directions of pedagogical education clusters.
4. Study of principles of pedagogical education cluster.
5. Study of pedagogical education cluster subjects.
7. Study of problems in preschool education and general secondary education system.
8. Study of forms of cooperation.
9. Pedagogical education cluster strategy research.
10. Study of management of education by means of a cluster.

The concept of an educational cluster in American and European science in the works of researchers such as V. T. Volov, N. V. Zhukova, S. Ya. Bobrova, V. V. Yarovova, G. B. Kleiner, R. M. Kachalov, N. B. Nagrudnaya, A. A. Migranyan, T. V. Sikhan, Jonathan Sallet, O. Solvell it is used as a scientific-pedagogical problem, meaning the content related to the interaction of several elements (educational subjects). According to them, clusters are usually formed in systems oriented towards multifactorial use.

Experts commented on the cluster, saying that "...the whole is not equal to the sum of its parts, it is neither more nor less than the sum of its parts, it is qualitatively different. There is also a new principle of
harmonizing parts, which is to determine the overall development rate of the parts included in it. It is of great importance to develop the right approaches to create social and geopolitical integration in the evolution of the organization,” he says.

Along with the systemic sign of integrity, there is also a synergistic sign of cluster relations. The synergetic approach is an actively developing methodology, which is dominated by the ideas of self-development, self-awareness and self-organization. Self-organization, simply put, "...this is a natural-scientific expression of the process of self-management of subjects that occurs due to internal reasons. The main idea here is to choose such effects on the object (system) that correspond to its internal characteristics. In practice, the relatively small 'resonance' effect of this condition can have a very large effect on the controlled object." The use of self-organization features is of great importance in management and pedagogical systems, and leads to high-quality changes and an increase in the quality of education. Unlike systems that first appear and operate due to external influences, clusters operate mainly due to internal resources.

**List of used literature:**


6. Bobrova S.Ya., Zhukova N.V., Yaravova V.V. Aktualnye voprosy formation of clusters kak instrumenta povyshenia konkurentosposobnosti regiona. // Fundamental research, 2