OPEN ACCESS
INTERNATIONAL JOURNAL
EIJMRMS
Next Scientists
European International Journal of Multidisciplinary Research and Management Studies
SJIF 5.954 2022

EUROPEAN INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH AND MANAGEMENT STUDIES
ISSN: 2750-8587
DOI: https://doi.org/10.55640/eijmrms-02-07-14
https://eipublication.com/index.php/eijmrms
Volume: 02 Issue: 07 July 2022
Published Date: - 30-07-2022

Page No.-76-81

# THE IMPORTANCE OF USING THE CLUSTER APPROACH IN THE EDUCATIONAL PROCESS

**Ravshan Madatov**

**Doctoral Student Of The Tashkent State Pedagogical University**

**Tashkent, Uzbekistan**

**ABSTRACT: -** The article deals with the main approaches to the creation of educational clusters, an analytical review of the functioning of clusters in the space of the CIS and abroad. From this perspective, the essence and characteristics of the national educational research and innovation cluster continuous pedagogical education.

**KEYWORDS:** Cluster, cluster development of continuous pedagogical education, training, research and innovation cluster, partnership, innovative development.

## INTRODUCTION

One of the most important trends in the development of excellent pedagogical education is the expansion of forms of interdisciplinary integration.

The characteristic aspect of ensuring the continuity of modern pedagogical education is that it is open to all, it is distinguished by its level, multi-level and multi-functionality. At the same time, the analysis of practice in the educational system encountered the existence of problems in the continuous pedagogical education system, that is, the fragmentation of educational institutions, this fragmentation creates certain difficulties in the implementation of the cluster approach in education, increasing the strategy and tendency of retraining pedagogues based on the cluster approach: educational institutions and scientific-methodical and the lack of cooperation between production enterprises in terms of continuous pedagogical education; cooperation between preschool education,

general education, vocational education, higher education and activities in their branches, as well as insufficient attention to the activities of experimental and innovative sections in educational institutions, as well as vocational training for young people in additional educational institutions.

The obtained results and their analysis. Cooperation based on the cluster approach plays the role of a bridge in organizing the cooperation of all subjects in ensuring the continuity of pedagogical education and the effectiveness of education. The concept of development of pedagogical education "in the systematic training and retraining of pedagogical personnel and the implementation of systematic education is the main process of implementing the cluster approach".1

A cluster in pedagogical education is an approach focused on the retraining of specialists for the purpose of putting scientific, educational and innovative ideas into practice by educational institutions operating in a certain area, based on mutual cooperation.

Development of the cluster approach in pedagogical education is a conceptual approach, and the use of the cluster is considered an element of the system aimed at increasing the quality of systematic improvement of the professional training of specialists and training and retraining of specialists.

The analysis of the experience of foreign scientists on this problem shows that in Europe in the 1990s it was created by M. Porter on the basis of the cluster theory and the cluster approach and the application of cluster development work to education. In the next 20-30 years, it is observed that it will increase as a result of the merger with the directions related to each other organizationally in the universities of Europe and also in the USA. As a result of such mergers, new entities are emerging, which makes it possible to increase the indicators of national education in the international ranking and to save expenses spent by the administration. In the same direction, integrations were carried out in Finnish higher education institutions and the number of universities was reduced from 20 to 15. In Denmark, 8 universities and 3 scientific research centres were formed out of 25 higher education institutions and scientific research centres. The University of Strasbourg, one of the largest universities in the world, was established as a result of the merger of 3 universities in France. It is planned to reduce the number of universities based on the educational cluster. In developed countries, clusters of education, including public educational institutions, scientific research laboratories, business companies, and organizations focused on the development of ecosystems, are developing very quickly.

In Germany, in 2006, the association of technical universities TU9 was established in order to increase cooperation with the real sector of the economy, to establish production and business cooperation. In 2012, 15 universities with a unique position in the educational services market joined the U15 association. In Norway, such integration processes began in 1994. The peculiarity of such integration in this country is that after a few years it can return to its previous position. In England, the education cluster operates in the health sector. The development of the regional economy of the USA and the development of the cluster depend mainly on the universities. The educational cluster in Massachusetts was analyzed by M. Porter, the leadership role in this field is considered to be the University of Massachusetts and Harvard, the role of the cluster in the field of education

is fully described in comparison with other states and countries.

An example of an innovative educational cluster can be served by the Swedish educational cluster, which is based on the cluster base of Uppsala University and the state of North Carolina. This cluster also includes innovative companies in these regions. At the same time, the management of educational activities is left to local universities.

1300 industrial and innovation clusters have been formed in China. More than 560,000 researchers and engineers (including more than 52,000 masters, more than 9,000 doctors of philosophy) participated in this system, as well as 1.33 million of the 4 million graduates of all colleges.

According to the analysis of the literature, the cluster approach in Russia in the development of education is based on mutual and self-development of cluster subjects, social cooperation, and this situation allows to increase the opportunities for individual participants in the cluster as well as all participants in the cluster in all conditions. Researchers N.A. Sharay, L.N. According to Nikolaeva, T.V. Vdovina, the educational cluster is considered as an integrative system for the organization of educational resources. V.L. Chudov, L.M. According to the Perminovs, the accumulated experiences of schools, lyceums, higher educational institutions and production clusters are considered as an integrative system and generalize and connect the training aimed at providing quality education. M. Yu. Barashnikov, I.I. Chinnovoy, A.V. A single typological model of the educational cluster was proposed and described by Simonov.

L.V. Ovsienko, I.V. In the researches of Ziminova, N.N. Klintsova, the scientific-educational cluster is considered the most promising network cooperation system that implements integration with higher education, production, secondary special education, general education schools in social cooperation.

A clear meaning of the cluster reminds the following organizational forms such concepts as concern, consortium, corporation. On the basis of the concept of a cluster, complex multi-functional cooperation between preschool educational institution, school and higher education is envisaged in educational conditions.

The analysis of experiences shows that the organization of the cluster approach occupies the most important place in the social and economic development of the CIS countries. Therefore, cluster mechanisms connecting education, research, business and production with organizational economic and socio-pedagogical directions are being developed in the CIS countries.

According to V.A. Bolotov, it is economically important to organize all levels of the educational system, i.e. preschool, school, college and higher education institution in one place. gives the opportunity to teach. As a result, integration between pre-school, school, college and higher education will be done consistently. The educational cluster system allows the child to choose his professional direction from his early development and later become a high-level specialist.

There are 33 university-oriented educational complexes in microdistricts of the Moscow region, which include 220 schools and kindergartens, pedagogues are working in a new direction of teaching activities.

In Tatarstan, the cluster approach is considered as the most promising tool for raising the republic's economy, and the

concept of an educational cluster has been developed and approved.

On the basis of the Omsk State Pedagogical Higher Education Institution, a regional professional pedagogical cluster is being formed. The activity of this cluster is to organize an educational system taking into account the needs of the labor market in the Omsk region and the demands of customers in the training of teachers. The innovative educational cluster established in Kazakhstan is an example of a cluster approach that allows students to continuously work on their professional activities, study, learn, generalize and collect the most effective experiences, quickly assimilate and process scientific achievements, and constantly update the content of professional training. .

The cluster-based policy in Ukraine is aimed at the establishment of modern educational centers and the training of highly qualified personnel and the implementation of modern educational technologies. The scientific-educational cluster in Ukraine aims to implement the world's best-practiced innovations in the Ukrainian educational system and to attract world expert partners to improve the scientific-educational environment, prepare and implement projects useful to the educational system, and improve education.

The analysis of the cluster approach in the CIS countries shows the existence of different types of clusters: according to the direction of activity (competency-oriented, innovative-educational, socio-cultural), depending on the level of organization (regional, republican, municipal, institutional, international) educational fields, etc.

Based on the types of clusters, educational clusters are conditionally divided into the following types: educational "school-lyceum - college - university" and mixed, for example, "scientific-educational" and "production-educational" types. The goal of the manufacturing-educational cluster is to eliminate the obstacles to mutually beneficial cooperation between business and higher education institutions and to accelerate the transfer of innovations.

From the point of view of innovative development, the role of the mixed cluster in its improvement is extremely high, because the implementation of cooperation between consumers, producers, and employers provides educational services to attract expert practitioners to the cluster, as well as to enable the organization and employers to use its tools. These processes make it possible to implement innovations in educational practice.

In 2015, an educational-scientific-innovative cluster based on a complex of educational institutions in continuous pedagogical education was launched in Belarus. This cluster-based complex includes educational institutions of various levels, educational, scientific, scientific methodical, public organizations and voluntary cooperative organizations on the basis of a contract. The creation of such a cluster, based on a conceptual and theoretical-methodological approach, was created by the famous Belarusian scientists A.I. Zhuk and A.V. It is based on the results of Torokhova's scientific research.

Quality, modernity, openness, continuity, effectiveness are the unique features of educational-scientific-innovative cluster. It provides a number of useful practical and economic efficiency, integrates intellectual resources around the main problems, enables network cooperation between all participants, increases the interest of applicants in the field of pedagogy, attracts the best students: focused training and retraining and will have

the opportunity to improve the skills of pedagogues, create an environment for upward development, adapt specialists to the educational environment, and reduce the time spent on professional training.

Participation in the educational-scientific-innovative cluster allows ordering of personnel among partners, openness of access to specialists based on mutual trust and communication in educational institutions, participation in discussions in the preparation of educational programs, allocation of young specialists to workplaces, and practical training.

Educational-scientific-innovative cluster educational-methodological cooperation, design of educational programs and other documents in educational organizations, creation of educational manuals in cooperation, its expertise; generalization of scientific-methodical works and innovative experiences in the scientific and educational sphere; through the organization of master classes in educational subjects, it is possible to increase the quality of training of future pedagogues, to ensure the sustainable development of education, and to increase the competitiveness between students and teachers.

Scientific cooperation in the effective areas of pedagogical-psychological research in the educational-scientific-innovative cluster educational environment, management of collaborative work in scientific and innovative projects, organization of scientific research work of graduate students, students, students, in general, organizing cluster subjects to gather all their intellectual resources around solving pedagogical problems gives

Cooperation organized in such ways to create a practical-oriented educational environment; strengthening competition between cluster entities; provides an opportunity to train highly qualified specialists in the most optimal period.

In short, the cluster and cluster approach are primarily focused on innovative education, and the educational cluster is considered a form of organizing innovative education. Within the framework of the educational-scientific-innovative cluster, a single information field of professional skills will be created, an opportunity to implement educational technologies and innovations will be created. It enables commonality of educational resources, productivity and quick exchange of information between the participants of the cluster, implementation of joint projects of participants, strengthening of activities of cluster subjects in the market of educational services, comprehensive response to public tasks.

**REFERENCES**


1. Madatov R. Use of interdisciplinary integrated approaches in the educational process //Current research journal of pedagogics. – 2022. – T. 3. – №. 02. – C. 56-61.
2. Мадатов Р. Features of teaching developmental biology, based on the cluster approach. –Тошкент:. Universiteti xabarlari, 2022, [1/6] ISSN 2181-7324.
3. Galichin, V. A. International market of educational services: main characteristics and development trends / V. A. Galichin // Century of globalization. - 2013. - No. 2. - P.101-112.
4. Sokolova, E. I. The term "Educational cluster" in the conceptual field of modern pedagogy / E. I. Sokolova // Continuous education: XXI century. - 2014. - No. 2 (6). - P.153-160.
5. Ways of clustering the economy in order to increase the competitiveness

of the Zaporozhye region / Sokolenko S. I. [et al.]. // International Market Assistance Foundation; Union of Economists of Ukraine; Chamber of Commerce and Industry of Ukraine; JSC "Ukrimpeks" Electronic resource]. - Kyiv. - 2010. - Access mode: http://litcey.ru/ekonomika/9155/index.html?page=8.

6. Senyuk, N. Yu. Opportunities and mechanisms of innovation and investment cooperation between Russia and China in the era of globalization / N. Yu. Senyuk // Quality. Innovation. Education. - 2007. - No. 4 (23). - S. 37-47.
7. Pavlova T. S. In the educational cluster of Moscow, teachers will be taught to teach children in a new way / T. S. Pavlova // Educational-methodical cabinet [Electronic resource].- Access mode: http://ped-kopilka.ru/blogs/pavlova -tatjana/v-obrazovatelnom-klastere-moskvy-pedagogov-nauchat-uchitdetei-po-novomu.html
8. Espaev S. S. Educational cluster - the key to the competitiveness of personnel in Kazakhstan /S. S. Espaev // Global challenges and modern trends in the development of higher education: International scientific and practical conference dedicated to the 50th anniversary of the Kazakh Economic University named after T. Ryskulov: Sat. abstracts October 4-5, 2013 - Almaty, 2013. - P. 159 -162.
9. Madatov R.M. Modern approaches in the educational process. - Chirchik: Academic Research in Educational Sciences, Volume 2, Conference 3, 2021. – 881 p.
10. Rakhmatov U. E. Cognitive tasks in educational-upbringing process on biology. International scientific review of the problems and prospects of modern science and education, 2019. – 60 p.