THE ROLE OF INNOVATIVE TECHNOLOGIES AND CLUSTERS IN EFFECTIVE TEACHING

Azimov Jumanazar Turgunovich

Dotsent, The Academy of The Armed Forces of the Republic of Uzbekistan E-mail: azimov_jt@mail.ru

Mamasaidov Ulugbek Egamberdiyevich

Head of the part-time education department, The Academy of The Armed Forces of the Republic of Uzbekistan

Annotation: Today, the cluster is an extremely important factor in the education system. This article analyzes the cluster of pedagogical education in higher education institutions. In addition, the characteristics and conditions of pedagogical education cluster in Uzbekistan were discussed.

Keywords: globalization, pedagogical education cluster, system, cluster subjects, integration, cluster directions, cluster principles.

INTRODUCTION

As a result of the rapid development of science and technology, the goal of innovations introduced in all areas is ultimately aimed at increasing the economic and social potential of the country.

Innovating industries requires new approaches to existing ways of working. There are general aspects and natural laws in the laws of development of society, and in this regard, rather than searching for unique new ways, sometimes taking ready-made models from developed countries and using them creatively gives better results. Based on this, today serious attention is being paid to the application of innovative experiences tested in international experience and gaining great importance in the development of production sectors of the country's economy. One such innovation is the "cluster model", which today is widely used in the agricultural, textile and light industrial sectors of Uzbekistan. In a short period of time, the cluster model was recognized as a promising innovative direction in the economy, and experiments using this model in other areas are being carried out.

Today, in the conditions of Uzbekistan, the creation of such a new mechanism in the higher education system has become a vital necessity, in which mutual control, competition, and satisfaction of interests should be ensured between the types of education. Due to the high social importance of higher education in the sustainable development of the society, modern requirements, problems in the system and the disparity between education, science and production sectors in solving them today make it necessary to transfer continuous pedagogic education to the cluster development model.

MATERIALS AND METHODS

The study and analysis of studies on the cluster approach to education allowed us to summarize several views on this matter. 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; [1; 25]
- an innovative and effective method of organizing the formation of personnel potential for the future economy of the organization; [4; 3]

The study of the theoretical foundations of the formation and development of educational clusters by Russian scientists was carried out in the following directions:

5	ISSN 2277-3630 (online), Published by International journal of Social Sciences & Interdisciplinary Research., under Volume: 12 Issue: 04 in April-2023 https://www.gejournal.net/index.php/IJSSIR
5	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

- a) cluster approach to professional education (B. Pugacheva, A. V. Leontiev);
- b) activity and pedagogical design theory (V.V. Davydov, V.P. Bespalko, G.I. Ibragimov, B.Ts. Lednev, M.I. Makhmutov, A.A. Slastenin);
- v) the concept of continuous education (B.S. Gershunsky, G.V. Mukhametzyanova, A.M. Novikov);
- g) studies revealing social partnership and management problems of education in vocational schools (P.F. Anisimov, G.V. Mukhametzyanova, G.I. Ibragimov, E.A. Korchagin, V.P. Panasyuk, A.S. Subetto). [6; 75]

Researchers such as N.N.Davydova, B.M.Igoshev noted the presence of geographical, horizontal, vertical, lateral, technological, - focal and quality strategies of the cluster. [6; 75]

RESULTS AND DISCUSSION

All state and non-governmental organizations that serve to increase the quality of educational, scientific and methodological activities of institutions as subjects of the pedagogical education cluster in the conditions of Uzbekistan can be understood as subjects of the pedagogical education cluster. The cluster model unites entities that are each operating separately around a common goal, and at the same time, each entity works in private interest based on a common goal. Subjects of the cluster model support and control each other, each creates the spiritual and intellectual space of a separate cluster, expands the social influence and importance of each other.

In the literature, the subjects included in the cluster are classified according to the characteristics of the products, information and knowledge they produce as follows:

- according to the form of communications;
- on the structure of mutual cooperation;
- according to the nature of the participants' activities;
- according to the nature of occurrence;
- according to the type of main resource;
- according to the level of guarantee;
- on the presence of a geographical component. [4; 12]

Such a classification is general for the cluster, and some of them may not be observed when looking at network clusters. Approaching from this point of view, it is correct to classify the cluster of pedagogical education as follows:

In order to determine the specific goals and tasks of the pedagogical education cluster, to foresee the horizons of its activities, it is necessary to come to a clear conclusion about the principles on which it is based. Based on the principles of education policy and existing conditions in Uzbekistan, it is appropriate to propose the following principles of pedagogical education cluster:

- ▶ natural connection: cooperation between cluster subjects, the naturalness of the issue of connection, that is, the objectivity of the issue of connection in terms of territory, sector or task.
- ▶ coherence and continuity, cluster entities form a chain in mutual dependence, each link forming the chain has its own specific tasks, gaps are not allowed in the chain of continuity.
- consistency is the location of cluster subjects in a single vertical line, following the trend of step-by-step movement from the bottom up, from simple to complex.
- ▶ succession, the role of the cluster in the exchange of generations, tutoring activities, as a result of the clustering of pedagogical education is to achieve regular satisfaction of the subjects' need for qualified pedagogical staff.
- ▶ modernity, introduction of modern science achievements related to the field into the system, assimilation of advanced foreign experiences, rational use of information and communication technologies.
- focus is the fact that each type of activity carried out within the cluster is oriented towards a specific goal, the possibility of predicting and evaluating the expected results in advance.

6	ISSN 2277-3630 (online), Published by International journal of Social Sciences & Interdisciplinary Research., under Volume: 12 Issue: 04 in April-2023 https://www.gejournal.net/index.php/IJSSIR
0	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

- ▶ the commonality of the goal is the unification of the cluster subjects around a single goal in a global aspect, apart from their private goals.
- ▶ specificity of interests is the legal, social, and economic interests of each subject in the pedagogical education cluster model.
- ▶ mutual control is the formation of a unified system of educational subjects united within the framework of the cluster model, and the fact that each subject is interested in the flawless operation of this system, the error or deficiency made in a certain subject affects the efficiency of other subjects, the establishment of a system of mutual evaluation of the subjects' activities.

A number of important conditions are required for the formation of a pedagogical education cluster. Based on the results of our research, we offer the following in this regard:

- establishing mutual cooperation between educational institutions using the competitive advantages of the region;
- identification of leaders determining long-term innovations and other strategies of the entire system:
- designation of scientific organizations that allow to increase the qualification level of the employees of the educational institution, which ensures internal and external competitiveness;
 - atmosphere of confidence and creativity;
- it is possible to include such things as the existence of private interest arising from the common goal of educational institutions in one region.
- the importance of the pedagogical education cluster in the following areas can be seen in the following areas: in the economic area: it helps to form an efficient educational services market; in the social sphere: help provide employment to graduates of pedagogical educational institutions;
- in the field of marketing: popularizes innovative educational technologies, new opportunities in the educational work of educational institutions; in the legal field: it provides an opportunity to establish mutual cooperation within the cluster, as well as to create regulatory and legal bases related to the transition to new forms of management of educational institutions; in the field of pedagogy: continuous education creates an opportunity for collaborative design of teacher training in the system.

CONCLUSION

In general, the pedagogic education cluster implies the achievement of efficiency as a result of the application of economic models to the field of pedagogy. Researching its implementation mechanisms, directions, principles, goals and tasks on a scientific basis is one of the urgent problems facing specialists in the field at the moment. In this regard, we offer the following:

- 1. To attract the attention of the scientific community to the topic "Pedagogical Education Innovation Cluster".
 - 2. Research of strategic directions and principles of pedagogical education clustering.
- 3. Amendments and additions to the existing regulatory documents related to the clustering of pedagogical education.
 - 4. Creative assimilation of advanced foreign experiences regarding educational clusters.
- 5. Development of rational mechanisms of implementation of innovative clusters of pedagogical education.

REFERENCES

1. Shamova T.I. Cluster approach to the development of educational systems // Interactions of educational institutions and institutions of society in ensuring the efficiency, accessibility and quality of education in the region: Materials of the 10th International Educational Forum (Belgorod. Oct. 24–26, 2016): at 2 pm / BelSU, MSGU, MANPO; resp. ed. T.M. Davydenko, T.I. Shamov. Belgorod: BelGU Publishing House, 2016. Part 1. C.25

ISSN 2277-3630 (online), Published by International journal of Social Sciences &
Interdisciplinary Research., under Volume: 12 Issue: 04 in April-2023
https://www.gejournal.net/index.php/IJSSIR
Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of
Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license,

- 2. Bespalova L. What is a cluster? [Electronic resource] $/\!/$ 2019-12-01-06-24-41. Title from the screen.
- 3. Osechkina L.I. Cluster Approach as a Condition for Increasing the Efficiency of University Activities // Higher Education in Russia. 2012. No. 8-9. P. 75. URL: https://cyberleninka.ru/article/n/klasternyy-podhod-kak-uslovie-povysheniya-effektivnosti-deyatelnosti-vuza
- 4. Sidorin A.V. The system of formation of personnel potential of high-tech industries based on the cluster approach // Internet journal "Naukovedenie". 2012. No. 4.
- 5. Porter M. Competition. Kyiv: "Williams", 2011. 208 p. URL: https://www.twirpx.com/file/505299/
- 6. Рашидов, Д. (2022). TRANSPORT KORXONALARI UCHUN NOGIRONLAR TOMONIDAN ISHLAB CHIQARILAYOGAN MAXSUS KIYIMLAR VA BOSHQA MAHSULOTLAR XARIDINI KO 'PAYTIRISH ORQALI NOGIRONLAR MEHNATINI RAG'BATLANTIRISH. Scienceweb academic papers collection.
- 7. Davydova N.N., Igoshev B.M. and others. Educational cluster as a backbone component of the regional model of continuous pedagogical education // Pedagogical education . 2014.
- 8. Shokhrukh, Y., & Bobur, T. (2022). China's Presence, Priority Interests and Actual Image in Central Asia. *International Journal of Multicultural and Multireligious Understanding*, 9(12), 8. https://doi.org/10.18415/ijmmu.v9i12.4295