

LEVELS OF EDUCATIONAL CLUSTER AND MECHANISMS OF INCREASING THEIR EFFECTIVENESS

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Abstract- In the Republic of Uzbekistan in recent years, when developing many modern plans and strategies for the development and implementation of innovations in the education system, one of the priority tasks has been the creation of so-called scientific and educational clusters. The majority of researchers determined the quality of education, its continuity, succession, accessibility and competitiveness as the priorities of the educational cluster. This article discusses some possible directions for the development of educational clusters on the example of teaching foreign languages, as well as their relationship with other areas of human activity. In addition, the article provides an analysis of the effectiveness of the cluster approach to the process of teaching a foreign language in the senior classes of general education schools.

Index Terms- education, cluster, approach, innovation, high school, school, method.

I. INTRODUCTION

The creation of scientific and educational clusters is provided for by targeted programs for the development of education in a number of leading countries of the world, including the USA, Canada, Spain, Brazil, Finland and others. To solve the main tasks of such target programs (bringing the content and structure of vocational education in line with the needs of the labor market, the creation and development of clusters based on institutions of school, secondary vocational and higher education, it is necessary not only to provide appropriate funding, but also to train teaching staff at each of the above levels.

II. LITERATURE REVIEW

The study of the literature showed that the problem of creating clusters, a cluster approach to school education, to the development of vocational education, to higher education, was covered in foreign works (M. Porter, T. Shamova, T. Tsikhan, N. Larina, A. Makeev, E. Tkachenko, M. Frolovskaya, I. Smirnov, G. Mukhametzyanova, E. Korchagin, R. Safin, A. Migranyan) and domestic (G. Mukhamedov, N. Kushiyeva, U. Hodzhankulov, A. Shofkorov, A. Pazilov, S. Dushaeva, Ch. Adilova, K. Makhmudov) scientists.

III. ANALYSIS OF THE PROBLEM

Differentiation and individualization of vocational education, carried out under the current state educational standards, are the basis of integration processes, one of which is the formation and development of scientific and educational clusters. A cluster has a number of advantages over other forms of integration:

- first, it is the efficient use of all available internal resources;
- secondly, a higher quality of personnel training and, accordingly, the demand for graduates of schools, colleges and universities not only in the cluster enterprises, but also in the labor market as a whole;
- thirdly, shortening the training period by integrating the content of training and the continuity of educational programs, end-to-end training plans (school-college-university), etc.

Analysis of studies on this issue made it possible to identify areas for the development of the educational space:

1. Increasing demand from the regional business, production and management for personnel of the highest qualification level.
2. Increase in the number of specialties demanded by the regions, including the level of primary and secondary vocational education.
3. Strengthening the regional demand for specialists who previously belonged to a number of elite (international relations and trade, banking, state and municipal administration, etc.).
4. Increasing demand for multi-level training of specialists at all levels of education.
5. A kind of "educational boom", which covered all levels of education and a significant part of the population of the regions.

The identified development trends have led to a change in attitudes towards education in the following areas:

- Awareness of the importance of education has grown both for the future of the individual and for the future of the region as a whole;

- there is a clear tendency for business leaders to understand the importance of highly qualified personnel for the development of their enterprises, their ability to withstand competition;
- education itself begins to be perceived as a certain value (which is in flagrant contradiction with the previous period);
- parents are willing to invest in their children's education, and there is practically no correlation between the level of income and this readiness;
- the attitude of students to learning is changing, an increasing number of schoolchildren and students are showing educational initiative and independence;
- the nature of the interaction between the educational space and the education system of the region is changing;
- many adults start spending personal funds on their own retraining and retraining.

IV. DISCUSSION

It is important to note that the scientific and educational cluster should be considered as a set of interrelated educational institutions united by industry and partnerships with industry enterprises. The distinctive features of the sectoral scientific and educational cluster are: the integration of education with science and production, the creation of conditions for the training of specialists with different levels of professional education, and the raising of the prestige of highly qualified working professions. The main difference between scientific and educational clusters and educational and industrial complexes is the market mechanism for managing them, which is created from below, at the initiative of the educational organizations of school, secondary and vocational education and enterprises themselves, while educational and industrial complexes were managed from above according to the command-industry principle.

The scientific and educational cluster is a holistic education, which includes 1) organizational, 2) managerial, 3) technological, 4) content levels. These levels make it possible to ensure a purposeful process of development of vocational education in accordance with the set goal and the final result.

1) The organizational level determines the degree of adequacy of the organizational forms and methods of the scientific and educational cluster to the requirements of the professional training of schoolchildren, students of technical schools and colleges, bachelors and masters of universities, and ensuring the optimal combination of all components in the implementation of this process. The corresponding indicators characterize the progressiveness of the applied forms and methods of organizing professional training of personnel, their changes and the impact of improving the organization of this process on the final results.

2) The managerial level is associated with the implementation of planning, decision-making regarding the interaction of participants in the scientific and educational cluster within the system and with its external environment; coordination of actions to achieve the set goals.

3) The technological level ensures the continuity of the technological chain in the training of personnel for the industry.

4) The content level involves the joint development of the content of education by the participants of the scientific and educational cluster: scientific organizations provide scientific and methodological support for the preparation process, production organizations are actively involved in the formation of the content both through separate recommendations (for example, in the form of presenting topics for school projects, theses, etc.) to the development of professional standards.

Colleges, university complexes, service centers, technology parks, and others can be named as specific models of clusters. The cluster approach is based on the following principles: observance of the interests of each labor market participant; selection of training professions with a strict focus on the needs of the labor market; introduction, in addition to the per capita norm, of the order financing norm. The creation of a scientific and educational cluster in the field of teaching foreign languages is aimed at solving the following tasks in the process of professional training of philological specialists: independence in the choice of vocational educational programs, the introduction of cross-cutting curricula covering the main areas and specialties of training at the level of schools, colleges and universities. Such diversification of education makes it possible to take into account the needs of the labor market, create conditions for the training of a creative multifunctional and highly professional staff. Identification of preferences in the professional field and proper career guidance can help in solving the problem of saturation of the labor market with professionals who are educated and working in the same professional field, but it seems right to do this not only for senior students, but also for schoolchildren.

The scientific and educational cluster is considered as an important factor in improving the quality of training of personnel of a certain profile (in our case, philological), since the close community of educational, scientific institutions and industry enterprises ensures the modernization of the material and technical base of the educational institution, stimulation and motivation in the education of schoolchildren and students and professional development of teachers, employment of graduates, career guidance work with both applicants and students, the formation of a sustainable interest in the future profession, etc.

To achieve the goals of an educational institution in the field of professional training of personnel, mutually beneficial cooperation between educational, scientific institutions and industry enterprises within a scientific and educational cluster can solve the following important tasks:

- joint planning of the educational process in an educational organization of higher education, specialized schools and professional educational organizations;
- ensuring participation in the training of bachelors of technical profile of scientific organizations and enterprises of the industry;
- improving the quality of the subjects of humanitarian, special and practical education;
- joint development of training content (topics for term papers, theses, cross-cutting educational programs, professional standard);
- development of the material and technical base of educational institutions;
- introduction of modern technologies and teaching methods;
- increasing the motivation of students to study and master the profession;
- career guidance work with schoolchildren.

In addition, the scientific and educational cluster implements the following main mechanisms for the development of education:

1) Organizational and structural mechanisms of the scientific and educational cluster ensure the distribution of functions and responsibilities and various connections between cluster members in the training of personnel. Each segment of the cluster has its own field of activity in ensuring the quality of vocational education. So, for example, an educational institution of higher education develops cross-cutting (successive) educational programs that provide multi-level training of specialists in the field of mechanical engineering; organizes vocational guidance classes in cross-cutting educational programs within the framework of the scientific and educational cluster, develops and implements innovative educational modules, training programs in the system of advanced training and professional retraining of specialists in the field of mechanical engineering; organization of joint educational, methodological and scientific-practical seminars, conferences, as well as organization of professional skills competitions, other intellectual and creative competitions aimed at supporting students in higher professional education organizations.

2) The psychological and pedagogical mechanisms of the scientific and educational cluster make it possible to link the goals of the system with the educational interests of the cluster members and ensure its movement towards the most complete achievement of the goals determined by the social order.

3) The content-target mechanisms of the scientific and educational cluster in the field of vocational training are: the graduate model; the goals of professional training, specified on the basis of an assessment of the internal and external capabilities of the educational institution.

4) Organizational and technological mechanisms of the scientific and educational cluster are associated with the definition and implementation of technologies for the educational and educational process.

5) Socio-psychological mechanisms of the scientific and educational cluster are associated with adaptation, professional socialization, with the formation of professional culture and professional ethics and are distinguished by a long-term effect.

It is possible to evaluate the effectiveness of the scientific and educational cluster in teaching foreign languages to a future specialist through the following criteria:

- quality of professional training, including in the field of a foreign language (formed foreign language competence);
- the level of social and professional adaptation of students (implementation of the requirements of the industry enterprise for graduates of educational institutions, contributing to their adaptation to the labor market);
- employment of students in production associations of the scientific and educational cluster;
- readiness for self-education, lifelong learning.

V. CONCLUSION

Thus, the "scientific and educational cluster" as a pedagogical concept is characterized by the following features:

- constructive interaction of educational organizations with industries and scientific institutions in the field of personnel training for the industry in which the cluster has been created;
- focus on meeting the interests of all interacting parties in the scientific and educational cluster.

The goals of activity for all cluster entities differ, however, while functioning within the framework of the cluster, all its partners are in search of additional resources to improve the quality of training for the industry. So, for an educational organization, the main goal within the framework of a scientific and educational cluster is to search for additional (in addition to those laid down in state educational standards) opportunities to improve the conditions (material, financial, organizational, personnel, pedagogical, socio-psychological, etc.) training of a specific specialist; addressing the issues of admission of students and employment of graduates: the creation of bases for the practice of students and more. For all subjects included in the scientific and educational cluster, a high degree of mutual responsibility is assumed. The study of a foreign language within the framework of a scientific and educational cluster can be professionally oriented, since professionalization in teaching a foreign language is possible at the level of each educational level.

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