

CLUSTER METHODS FOR THE DEVELOPMENT OF THINKING OF STUDENTS OF INFORMATICS

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Abstract: *the purpose of this research is to analyze basic prerequisites formation and development factors of educational clusters for studying the possibility of cluster policy introduction and creating educational clusters in the Informatics lessons. Concluded that educational cluster could be regarded as a relatively new phenomenon, therefore it was little studied. Nonetheless, it has already been widely used, and, due to its diversity, is characterized by high potential.*

Keywords: *system of continuous pedagogical education; educational cluster; training of future teachers.*

From the point of view of the content of the activity, the educational cluster is considered as a system of training and self-learning tools in the innovation chain science - technology - business, based mainly on horizontal links within the chain [1].

The literature highlights the following specific features of clusters, which are today considered as:

uniform dynamic structures; a stable core of dissemination of new knowledge, technologies, products; innovation centers; interdisciplinary; high degree of informatization; have no clear boundaries.

The educational cluster is being created with the aim of streamlining and coordinating the training and advanced training of teaching staff, finding optimal ways to manage the system of professional teacher education. The ultimate goal of creating a cluster is the organic merger of all interested organizations into a single complex of lifelong pedagogical education [2].

The factors hindering the development of clusters include the low level of development of associative structures that cannot cope with the task of developing and promoting regional development priorities, a short-term planning horizon, since real benefits from cluster development appear only after 5-7 years. The latter fact compels attention to the issue of the scale of regional development management. If the scale of governance is limited to 4 years (pre-election cycle), then it is difficult to talk about any long-term strategy. The successful implementation of projects on special incentives for clusters is possible only if there is an appropriate long-term regional strategy [3].

The most important components of the scientific and pedagogical direction "educational cluster" are also:

- management of the quality of education, understood as a purposeful resource, a secured process of interaction between the controlled and managing subsystems to achieve the quality of programmed results by the individual and society [4].

- continuity of the content of pedagogical education and professional training of pedagogical personnel;

- development of the subject of pedagogical activity as an important condition for the continuity of the content of pedagogical education in the system "pedagogical college - pedagogical university";

- systemic organization of level pedagogical education.

The theoretical basis for the formation of an educational cluster is the concept of lifelong education, which contributes to the definition of the structure, content, forms of activity of each of the cluster members, the unity and interconnection of all links of education. The most important property in this regard is its integrity. An educational cluster is a collection of educational organizations that develops in the structure of lifelong pedagogical education as an integral pedagogical object that streamlines numerous connections both within it and with the external social environment. The goals and objectives of each stage of cluster formation should be successively linked not only to the goal of the entire system, but also to the goals and objectives of the previous and future stages.

The organization of an educational cluster also provides a solution to the most important task of professional training of a modern teacher - the transition from mass-reproductive production of specialists to their individual and creative training, to the formation of a creative competitive personality of a teacher. In the context of a cluster, it becomes possible to solve the problem of variability of professional training, the opening of new promising specialties, the introduction of new disciplines, modern teaching technologies [5-8].

Thus, the educational cluster as a system-forming component and the most important condition for the functioning of the regional model of continuous training of pedagogical personnel is a holistic education, including organizational, managerial, technological, content levels, allowing to ensure a purposeful process of development of lifelong pedagogical education.

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