E.R. Kamolov

Senior Teacher of Chirchik State Pedagogical Institute

S.M. Raximov

Senior Teacher of Chirchik State Pedagogical Institute

R.O. Sultanov

Teacher of Chirchik State Pedagogical Institute

M.A. Maxmudov

Student of Chirchik State Pedagogical Institute

INNOVATIVE METHOD OF DEVELOPING CREATIVE THINKING OF STUDENTS

Abstract. It is obvious that the role of the education system in socio-economic, technical and cultural development is indeed very great. Only the power of knowledge determines the characteristics of the state and its place in the world community, as well as the status of each person in society and people around the world, and higher education is the basis of intellectual, scientific and professional forces. Currently, much attention is paid to the development of higher education, increasing the importance and role of universities and the beneficial use of human development opportunities.

Key words: system of continuous pedagogical education; educational cluster; training of future teachers.

The structure of professional educational services has recently acquired a pronounced regional orientation, since it is the regions that are interested in a high

level of provision of the territories with professional educational services. The relevance of the idea of regionalization is determined by global trends in the socio-cultural development of mankind, aimed at recognizing the value itself, the uniqueness of national and regional variants of cultures, their unity, integrity and significance as an integral part of human culture. The development of regional education systems that are adequate to the characteristics of the educational needs and interests of students and the specifics of the region is a step forward in the development of Russian education, its movement towards democratization and modernization. It is known that an education system that is focused on the educational needs of the citizens of the region is the most promising. This necessitates a timely solution of a number of problems in the vocational education system at the regional level, including pedagogical. Moreover, the need to improve the quality of training of future teachers is currently acquiring the status of a global problem of professional pedagogy; therefore, modern pedagogical science requires new approaches to the training of future specialists.

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.

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.

Positive conditions conducive to the development of clusters, including educational ones, include:

• the existence of appropriate technological and scientific infrastructures (D. A. Yalov); psychological readiness of the participants for cooperation (D. A. Yalov, V. P. Tretyak); availability of a sustainable regional cluster development strategy; possibility of successful application of the project management method; sustainable development of information technologies that ensure the exchange of information between the subjects of the cluster (A. A. Migranyan).

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.

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
- 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 second important property of the concept of lifelong education, implemented within the educational cluster, is the continuity of all links of this system. Each previous link should be a full-fledged anticipation of the next one. This is achieved by introducing cross-cutting curricula and adapted programs, as a result of which duplication of educational material becomes impossible. As a result of the end-to-end vertical integration of the stages of continuing education and the horizontal coordination of structures, a high level of organizational unification of various aspects of the activities of the subjects of the pedagogical process is ensured.

The educational cluster provides the opportunity for continuous "immersion" of students in the sphere of their future professional activities, allows them to study, summarize and accumulate innovative experience, quickly test the achievements of pedagogical science, update and generalize the organization and

content of professional pedagogical training, including by attracting experienced teachers and teachers at the university.

Therefore, the result of the experimental work showed us the advantage of the methodological complex in the development of creative thinking of students of the pedagogical institute. Thus, the experimental work indicates the need to implement the integration into a single holistic complex program of individual, group and pedagogical influence on the development of creative thinking of students of the institute. The main content of such a program is pedagogical conditions for the formation of students' creative abilities when organizing scientific projects, holding regional and republican Olympiads, and preparing electronic educational and methodological complexes.

REFERENCES:

- 1. Камолов Э.Р. (2020). Каолинни бойитиш технологик жараёнини оптимизациялаш алгоритмини ишлаб чикиш. Фан ва Жамиат 1(1) 10-14
- 2. Камолов Э.Р. (2020). Методика идентификации математической модели. Международный научный журнал, 3 (79), 33-38.
- 3. Normatov, E. Kamolov. (2020). Development of an algorithm for optimizing the technological process of kaolin enrichment. IEEE International IOT, Electronics and Mechatronics Conference (IEMTRONICS), Vancouver, BC, Canada, (2020), 1–4.
- 4. Камолов, Э.Р. (2017). Основные виды и типы неопределенности информации, характерные для сложных биотехнологических систем. Молодой ученый, 27, 36-39.
- 5. Камолов, Э.Р. (2020). Моделирование предпочтений в биотехнологических системах при принятий решений с нечетками параметрами. Academic research in educational sciences. 1(4), 396-400.

- 6. Султанов, Р. О. (2020). Idea блокли шифрлаш алгоритмини такомиллаштириш методлари. Academic Research in Educational Sciences, 1 (3), 397-404.
- 7. Жураева, Н. В., Султанов, Р. О., Абдуллаева, С. А., Рахимжонова В. А. (2020). SYSTEMATIZATION OF WORD COMBINATIONS IN THE UZBEK LANGUAGE. Наука и мир, 2(6), 65-68.