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INNOVATION TECHNOLOGY CLUSTERS USE OF TECHNOLOGY IN ILLUSTRATION

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ABSTACT-- *The article provides the theoretical foundations for innovative approaches to building partnerships between schools and universities, the need for creating an innovative cluster of pedagogical education as a new mechanism for mutual control, positive competition and private interests, the main stages of its formation, schools and universities. mechanisms of interaction between educational institutions. The form and content of the activities of the participants of the educational cluster, as well as the establishment of innovative "School-Laboratory" platforms for ensuring connection between the educational process and practice will be considered.*

Keywords--*innovation, cluster of pedagogical education, interaction, collaboration, integration, school lab, fine arts, creative skills, circles, learning process and practice*.

I. INTRODUCTION

As a result of globalization of the socio-economic and political processes in the modern world, finding the right solution to the problems that arise in each field remains a major problem. In addition, existing problems in the education system are also urgent issues that need to be addressed by the international community.

Finding ways and means to improve the quality of student education remains one of the most important tasks of modern pedagogy in the face of profound social and economic changes in the development of our society. After all, education and science are important factors that determine the future of any society, nation and state, and contribute to its development. Education reforms in Uzbekistan are being carried out in conjunction with its transition to democratic, market relations.

One of the most urgent and priority tasks on the agenda is the idea of preparing young people for a new social environment, educating them in the spirit of the times, reforming the education system, radically improving the system, in particular, introducing the experience of foreign countries. Therefore, the concept of development of higher education in the Republic until 2030 is aimed at increasing the level of coverage of the population with higher education, training of highly qualified, creative and physically mature, able-bodied young professionals with international standards, demonstrating their intellectual abilities and Creation of the necessary conditions for the formation of a spiritually mature personality is one of the strategic goals and priorities of the higher education system development. eating is prescribed.

In addition, we are constantly focusing on improving the education system of the Republic of Uzbekistan, identifying the best ways of training qualified specialists, and enhancing the quality of training of highly qualified personnel, expanding the integration of science and production, especially through continuous improvement of

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professional skills and knowledge. Especially in May last year, President Shavkat Mirziyoyev met with scientists at the National University of Uzbekistan to discuss the importance of implementing a new model of pedagogical education, aimed at further development of higher education, improving the quality of staff, integration of science and production. It is not wrong to say that the guidelines were an important impetus for reform in higher education.

In this regard, the task of developing a completely new model of the education system, taking into account the peculiarities of national traditions, customs, lifestyles, is on the agenda as one of the topical issues in the Republic. The emerging market demands in the global labor market have identified the main directions of development of the education system of the country.

Research methods. Society's development laws have common aspects and natural laws that sometimes produce better standards in developed countries, rather than looking for new ways to use them. Based on this, today, serious attention is being paid to the use of innovative practices in the economic sectors, which are tested in international experience and play an important role in the development of productive sectors of the economy. One of such innovations is the “cluster model”, which is now widely used in the agrarian, textile, light and pharmaceutical sectors. In a short period of time, the cluster model has been recognized as a promising innovation trend in the economy, with its implementation in other areas.

The cluster system, which has been tested in international practice and is recognized as an effective model in the manufacturing sector of the economy, is one of those creative experiments. The cluster model is now rapidly entering the education system [6].

Education is a complex system with many independent and interrelated components. Any system will work effectively as a result of the opposite effect. There is no real existence, and as a result of internal and external contradictions, it is always subject to action and change. Therefore, it would be advisable to establish forms of cooperation between schools and universities. For such partnerships, it is advisable to use a cluster model to organize the learning process. It is also worth noting that in the ever-evolving market economy, not only education services, but also competitiveness of the individual are the main objectives of the cluster in the education system. Analyzing the emergence of this model, we can say that cluster-based education is M. Designed by Porter (The Competitive Advantage of Nations, 1990; On Competition, 1998). The scientist analyzed the Massachusetts Education Cluster at Massachusetts and Harvard Universities at that time, and detailed the role of the country's educational cluster in comparison with other states (primarily California) and other countries [3].

An analysis of scientific studies examining such approaches in education shows that the cluster approach is the needs of industry and educational programs, which are a tool for forming innovation support in the system (education-science-production) [2]; increasing the human resources for the future economy is an effective way of organizing innovative activity [3]; reorganization and integration of different educational institutions (kindergarten-school-HEI) based on the principle of continuity of education system [5].

Results of the study. The ultimate goal of this “cluster” model, which is coming into the education system, is to improve educational and scientific processes, along with significant changes in management, structure and quality, and requires some organizational and structural changes in the training of specialists. At the same time, there is a need to search for new forms and methods at all stages of the work, to strengthen the link between all types of education on the commonality of purpose and the specificity of interests, and to ensure their integration.

In order to solve these problems, the teaching profession has a great responsibility to work hard on it, to use information and communication tools effectively, to keep up to date with new educational ideas, and to ponder new ideas.

However, the knowledge gained in early childhood through traditional education in early childhood education and general secondary education does not provide a person with the lifelong knowledge, skills, and skills needed to solve various social issues. It is clear that they will not be able to apply the acquired knowledge at a rapid pace, with the rapid changes taking place in our lives. The concept of continuing education, adopted by virtually all advanced countries, places the priority on education for citizens as a key area of socio-economic development in the modern world, including Uzbekistan. In turn, the creation of such a new mechanism in the system of pedagogical education becomes a vital necessity that ensures mutual control, competition and satisfaction of interests between the types of educationIn general, one of the main conditions for successful cluster formation in the fine arts, as in other areas, is to provide theoretical knowledge of the teaching process in the entire education system, to identify existing shortcomings, to identify problems and to address them. and the pros and cons of the study. Because the directions that ensure the effective functioning of the cluster related to timely understanding, adapting to new trends in the industry, introducing innovations, forecasting efficiency, and acquiring foreign experience cannot be scientifically ineffective [4].

II. RUSLET

In pedagogical activity, the task of the teacher to solve professional problems is one of the main factors influencing the content of teacher training. One of the main objectives of art education is to develop students' creative abilities, nurture a fully developed personality with the ability to work on them, and create conditions for self-determination [1].

Speaking of the professional competence of a modern teacher, it is worth noting that the level of theoretical and practical training in the implementation of pedagogical activity is unique. In addition, students of pedagogical institutions have a deep knowledge of pedagogy and psychology, are aware of the current state of affairs in modern schools, kindergartens and colleges, and take responsibility for different situations that arise in their pedagogical activities. have the ability to conduct independent research. In other words, the main requirement for the educational process is to train a specialist who will then apply the knowledge gained in the educational process to their subsequent professional activities. The future teacher should not only perform special duties in the course of higher education, but also gain practical experience in social life. This will then help him successfully integrate into the practice and corporate environment, facilitating the adaptation of the educational institution and social production [5].

Therefore, the idea of combining education with practice should be the main tool for teacher-training. Based on this, integration of higher education and school practice will be implemented. Pedagogical Education Cluster - an educational cluster that implements training and innovation goals in training professionals, interacts with and participates in it - to address the needs of competitive geographical areas in a specific geographical area, technology, and human beings. mechanism for enhancing the integration of resources.

The cluster model, which, in our opinion, is a new mechanism in the education system, is associated with emerging processes of integration between labor and education, which are recognized as promising innovation directions in the economy. From the above, we can conclude that the activities aimed at developing students' professional and pedagogical training are theoretical and practical.

The importance of the pedagogical education cluster can be categorized as follows: in the economic sphere: in the formation of an effective educational services market; in social sphere: employment of graduates of pedagogical educational institutions; marketing: promotion of innovative educational technologies, new opportunities in educational work of educational institutions; in the legal field: to create a legal framework related to establishing partnerships within the cluster, as well as the transition to new forms of management of educational institutions; in the field of pedagogy: co-design of teaching staff in the system of continuous education.

An innovative cluster of pedagogical education has been established in Tashkent region with the aim of training specialists with modern education and deep knowledge, providing highly qualified teaching staff with educational institutions.

Taking into account the importance of pedagogical education in the sustainable development of society, the Department of Fine Arts of the Chirchik State Pedagogical Institute develops methods of teaching fine arts in the Tashkent region, encourages young people in this area, challenges and challenges in the system. cluster development of continuous pedagogical education to ensure the link between science and education in their solution RCM systems are as follows:

- Distribution of powers between our partner schools, public education departments, and the department;
- Promoting information sharing and promoting news exchanges with educational institutions;
- creation of new opportunities, such as increasing the innovative activity of small businesses and private entrepreneurship and the innovative attractiveness of the institute;
- Increasing attention to the quality of training in the field;
- revision and improvement of curricula and programs based on advanced international experience in the field of fine arts and engineering graphics;
- formation of students' skills in using modern pedagogical technologies in the educational process;
- Improvement of the infrastructure of pedagogical education is the main goal of the department conducting research on the implementation of the innovative cluster model of pedagogical education.

At the same time, we aim to investigate a cluster of regional, regional and regional educational institutions, employers, as well as a cluster of coordinating and authorities related to the closest production and innovation products.

Researchers argue that clusters cannot be artificially formed. Therefore, the cluster is the product of natural connection, which is its main goal of ensuring competitiveness, increasing quality and effectiveness. The method is clusters [9].

Innovative cluster of pedagogical education and innovation-practice platforms "School-Lab", which is a form of its implementation, will strengthen the continuity and communication in the education system, integration processes between the types of education. One of the major challenges facing the scientific community is to view this as an innovation in education and to develop mechanisms to measure its effectiveness and implementation. The cluster approach will radically change the content of public education policies, allowing for a relationship of

subjects with the criteria of development and effectiveness. As a result, the cluster creates a powerful mechanism for the integration of human resources, organizations and technologies in the region as an innovative approach to education [7].

The U.N. Khodzhamkulov's research shows that the chairs of HEIs and schools of public education can determine their common goals as a prerequisite for the principle of natural connection. In addition, in the present study, it was stated that the goal setting and the targeting of each activity should be a prerequisite for the orientation of the pedagogical education cluster created at the ChSPI. Here, the unification of partner institutions around the sole purpose of implementing a long-term strategic plan is the key to their future success.

Of course, the overall objectives of the planned cluster should reflect the interests of all the clusters. This requires partner institutions to come together and agree on all issues openly. It is important that each party understands that the private interest is directly linked to the common goal, and that the "voice" of each entity constituting the cluster is taken into account when determining the overall goal. Because the private interests of their subjects ultimately serve the common good.

As part of the Pedagogical Education Cluster Model, students of the Fine Arts and Engineering Graphics have signed several collaborative agreements that provide educational, research, innovation and design activities for all their faculty members, providing teaching practice, and acting as teaching and experimental basis. , secondary schools, children's music and art schools.

In order to solve and solve these problems several exchange seminars were held on the implementation of the activities of the Department of Fine Arts of the Chirchik State Pedagogical Institute in the plan of action of the School-Laboratory experimental areas.

At the present time, the future specialist is faced with the challenge of creativity, rapid adaptation to the environment, development of professional skills and constant self-improvement. Consequently, the emphasis here is on developing these skills to create the conditions for the professional growth of a well-respected educator, a skilled professional, and the ability to independently handle life or professional problems. Consequently, the emergence of professionalism affects not only the personal characteristics of the teacher, but also the environment. The teachers of preschool and general education schools will exchange ideas and work on the following workshops at the Department of Fine Arts with partner organizations on the Innovation Cluster of Pedagogical Education:

- development of new forms of mutually beneficial relationship between HEIs and HT;
- Training for several professions at the same time, taking into account the changing social and economic processes in the society;
- Expanding creative circles in institutes and schools in order to realize the talents of young people in the field of painting and fine arts;
- Finding ways to stimulate students and students to read;
- Strengthening the integration of HEIs and BTAs for the purposeful training of specialists in fine and applied arts, drawing;
- Improvement of the skills of the trained specialists to the modern labor market requirements;
- Meetings with academicians of the Academy of Arts of Uzbekistan, national artists, leading professors and teachers of related universities.

In this area it is planned to carry out the following activities on the formation of innovative school platforms:

- Providing students with the opportunity to apply the knowledge gained in the classroom and to develop their mentoring and mentoring skills;

- Identification and involvement of teachers capable of conducting research in secondary schools;

- Implementation of program work on improvement of teaching of fine arts in secondary schools, creation of high quality educational literature, textbooks in cooperation with pre-school education institutions;

- Introduction of scientific innovations, innovative educational projects in the field of continuous education into the system of continuous education, development of practical proposals based on the existing conditions;

- Conducting regular seminars for students to maintain school regulations in collaboration with qualified IT teachers, deputy directors for academic affairs;

- Identification, classification and elimination of existing problems in fine arts and drawing from pre-school education, secondary schools and universities;

- Organization of practical visits to HEIs and schools through the exchange of experience between students and high school students within the established Project teams;

The main objective of the abovementioned task is to implement the innovative educational cluster:

- Creating opportunities for faculty members and teachers of science to work together to achieve a common goal;

- Involve as many students as possible in scientific, creative and professional circles, to have a meaningful leisure time and to provide additional vocational training opportunities;

- Involve students and students of other specialties into the circles of the department. Identification of gifted students, their involvement in the teaching profession, the organization of creative exhibitions of the members of the circle, the successful participation in various contests and Olympiads;

- Students' interest in books through drawing, drawing, designing of books for children, the use of these books in kindergartens and schools, through the "Reader's" competition in schools with cluster partnership agreements;

- Formation of interaction forms of HEIs and HTs and integrated communication systems. Achievement of deep knowledge of students in their specialties, development of skills for their practical application;

- Increasing the competitiveness of the specialists trained in the department, adaptation to any environment in socio-economic conditions;

- Introduce students to academicians, professors, highly qualified teachers-artists, academics of BA, national artists and their life experiences working in the higher education system of the Republic;

- The ability to apply the knowledge gained in the classroom to students, to prepare them for the teaching profession, and to develop coaching skills under the principle "Teacher - Student, Student - Teacher".

By establishing innovative school platforms "School-Lab":

- Capacity building of qualified scientific personnel in order to conduct scientific research in collaboration with teachers of secondary schools and professors of the department;

- Creation of textbooks (textbooks, manuals, lectures) in secondary education institutions involved in the cluster module in collaboration with teachers, teachers and teachers of the department;

- Attracting talented students in the field of Fine Arts and Engineering Graphics to the School-Laboratory Experience and supporting their innovative initiatives;

- sending students to school as trained professionals;

- Overcoming the problems related to teaching science in general education schools and improving the quality of education;

- Organization of practical visits of high school students to schools and students of the department, as well as the exchange of experience, students are encouraged to work in the future, students are encouraged to study in the university. In addition:

- Institute and school teachers will be able to help each other in achieving their goals;

- As a result of involvement of students in scientific, creative and professional circles, the conditions for meaningful leisure and acquiring additional professions are created;

- Close contact between the teachers of the school of fine arts and professors of the higher educational institutions, students and pupils, the possibility of methodical assistance to them is expanded;

- Selection of talents of students and pupils in fine arts, applied arts, national crafts, designing, directed on their professional activity;

- The gifted students will be interested in the teaching profession. Achieving positive results by participating in art exhibitions, Olympiads and competitions;

- Students read books that are necessary for painting, and students are more interested in reading books;

- A form of interaction between HEIs and HTs and integration systems will be formed, which will lead to deep learning of students;

- Increased flexibility of trained specialists to different conditions, increasing their professional skills;

- Students get a sense of their ideals in the pedagogical profession and creativity;

- Students will have the skills to work with students before they graduate and go to school; they will be interested in science and creativity.

The following results will be achieved through the establishment of innovative school platforms:

- Experiments of research work carried out in the innovation cluster of pedagogical education in collaboration with teachers from universities and secondary schools;

- Creation of qualitative educational literature on improvement of teaching of fine arts, corresponding to the interests of the partner organizations;

- Implementation of scientific innovations, innovative educational projects in the field of fine arts in the system of continuous education;

- Graduates who have graduated from the Institute and have gone to school do not have to deal with paperwork;

- identifying and finding positive solutions to existing problems in teaching fine arts, applied arts and drawing in Chirchik and Tashkent region;

- Exchange of experience through the organization of practical visits of high school students to schools and students of the department. Students will gain future employment, skills in their profession, and students will be interested in entering the university

The mechanism of implementation of the planned tasks of the Department of Fine Arts to ensure the connection between the educational process and practice:

- Teachers of the department and school science teachers are involved in the development of new forms of mutually beneficial cooperation between HEIs and HT;

- Students are involved in various scientific, creative and professional circles in the department;

- Organizing professional circles of fine arts, applied arts, national crafts, designing. There will be exhibitions, various creative competitions and the conditions for their participation in the Olympiads;

- In the classroom drawings will be drawn from books for children to books, ready-made books will be delivered to the school and a reading event will be held. Active students will be provided with illustrated books by students;

- A system will be developed to cover a wide range of types of interaction between HEIs and STBs;

- The knowledge gained by students in the subject areas is further strengthened by scientific, creative, and professional circles, where they are taught several professions;

- The department holds various competitions, exhibitions, meetings and seminars for students interested in creativity;

Students have the opportunity to open their own circles as part of their own education.

The following results will be achieved in the implementation of innovative school platforms:

- The department develops information resources that help identify, support, educate, educate and develop gifted children in connection with the activities of the Pedagogical Education Cluster and the innovative School Pilot Projects.

III. CONCLUSION

A new project called "Talent", which aims to create a supportive environment for talented students to help them implement and fulfill the aforementioned tasks, provides an environment for active implementation of innovation processes and information support, and encourages teachers to support innovative projects. “Innovator” project teams have been established. During this short period of time, most of the teaching staff of the department were involved in the "School-lab". Talented students involved in the process participate in conferences with their research papers and test their academic ability; fostering students' adaptation to the teaching profession through attendance at schools, direct participation of students in higher education, and the organization of work with students in circles; There is an increase in the effectiveness of the pedagogical education cluster and the strengthening of cooperation between the school, pre-school institutions and the institute through the introduction of innovative school platforms "Laboratory".

REFERENCES

1. Mirziyoev Sh.M. Speech on the video selector on May 19, 2019 - Website of the National Information Agency of Uzbekistan.
2. Mirziyoev Sh.M. The development of school education should become a national movement // Speech on the video selector on August 23, 2019, - The National News Agency of Uzbekistan.
3. 3.Stenyakova N.E., Gruzdova O.G. Cluster model of partnership organization of educational institutions // Internet-magazine "World of Science" 2017, Volume 5, C. 3. https: //mir-nauki.com.

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4. Mukhamedov F.I., Khojamқulov U.N. Teacher Talim Innovation Clusters: Tarif, Tavsif, Tasnif, T .: ЎзМУ, 2019, B. 4.
5. Seer EF Theoretical and methodological foundations of the professionally educational space of a person // Theory and practice of professionally-pedagogical education: collective. monograph / Ed. G. M. Romantseva. - T. 2. - Yekaterinburg: Publishing House of Ros. state prof. University, 2010.228 s.
6. Sultanov H.E., Khojamқulov U.N. Tasviry san'at: pedagogic talim clusters wa uning istiқbollari, Maktab vaayet, No. 7. T.-2019. 33-35- b.
7. Koklevsky A.V. The cluster approach as an effective development of higher education. S.145.
8. Sokolova E. I. The term “Educational cluster” in the conceptual field of modern pedagogy / E. I. Sokolova // Continuing Education: XXI Century. - 2014. - No. 2 (6). - S.153-160.
9. Khojamgulov U.N., Mactab-laboratory (usluba Ullanma), ЎзМУ. Toshkent 2019. B.13.
10. Baymetov B. B., Sultanov H.E., Muratov H.H. “Psychological foundations of activating the creative abilities of students in the process of practical training” International Journal of Herald of Science No. 7 (16) Vol. 1, Tolyatti, 2019.
11. Sultanov Kh. E., Khudayberdiev P. U., Sobirov S. T. “Continuing education in Uzbekistan as a requirement of the time” 386 Pedagogy “Young scientist”. No. 4 (138). January 2017.

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