

Methodological cluster as an innovative mechanism for increasing the effectiveness of general secondary and inclusive education

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Annotation: This article presents recommendations for the organization of a methodological service based on innovative approaches that affect the improvement of the quality of education in general educational and special educational institutions. The effectiveness of methodological service depends on the quality of personnel. In particular, the content and stages of the implementation of the innovative approach "methodological cluster" are described. Today, it has been established that the development of professional competence of teachers of general secondary and special educational institutions is mainly due to the formation and improvement in the educational environment of innovation, there is a need for mechanisms that ensure the timely elimination of methodological problems. First of all, the purpose of the educational institution, based on the requirements of social magnification, is based on the need to harmonize the tasks with the qualification requirements of teachers and future specialists. The methodological cluster stages and the content of the work carried out at these stages were brought.

Keywords: general educational and special educational institutions, the quality of education depends on the quality of personnel, methodological service, innovative approach, methodological service efficiency. In particular, "methodological cluster", professional competence, methodological problems, social magnification, qualification requirements, inclusive education.

Introduction. The new image of Uzbekistan is being created based on world standards. The level of development of the state is characterized by the quality of existing schools, the improvement of their content, the scale of social orders for knowledge, skills, qualifications and competencies of graduates. In particular, the position of school teachers, the opportunity for them to be creative, based on democratic principles, is one of the important factors in the effective preparation of young people for the labor market in the information age.

Today, the widespread introduction of inclusive education in practice describes the need to prepare teachers of comprehensive schools to work with children with various problems. The methodological service occupies a special place in training teachers in differentiated work with children of different categories and with different learning abilities.

The "Methodological Cluster" is widely used as an effective way to improve the efficiency of the educational process through targeted organization of the methodological service, optimization of methods and means of working with healthy and disabled students, coordination of the methodological activities of teachers. The need for advancement was determined as a result of experimental work carried out in cooperation.

A number of scientists, including Zh.Yuldashev, R.Safarova¹, J.Tolipova², I.Makukhina³, R.Ishmukhamedov, M.Yuldashev⁴ and others, have implemented into practice recommendations regarding factors influencing the effectiveness of the methodological service in educational institutions. These recommendations are mainly aimed at increasing teachers' creativity in the educational process, popularizing the use of interactive methods, teaching them to set lesson goals based on quality indicators, and achieving the implementation of requirements for the preparation of didactic materials through methodological methods.

The novelty and relevance of the topic is that today, in order to improve the quality of education, an innovative approach is used, the "Methodological Cluster", based on the SMART principles ("Specific", that is unique, arising from the essence of the direction, "Measurable", that is the results have specific indicators, dimensionality, "Attainable", that is orientation to reality, "Relevant", that is urgent, necessary for practice, "Time-bound", that is definition of tasks that are supposed to be completed within a certain period of time) within the framework of tasks provided for in a number of documents related to issues of strengthening the methodological service, applying foreign experience in its practice, strengthening variable approaches from an organizational and legal point of view - this is the disclosure of the essence and creation of an experimental field based on the achieved results. In particular, in the Strategy of Actions for the Further Development of the Republic of Uzbekistan, "Further improvement of the continuous education system, increasing the possibilities of providing high-quality educational services, continuing the policy of training highly qualified personnel in accordance with the modern needs of the labor market" is defined as an important priority task.

The object of the article was the process of modernization of the activities of teachers of general and special educational institutions and the identification of effective methods and techniques, as well as the process of targeted and rapid implementation into practice.

In achieving the intended goal and objectives, the following methods were used: studying experience and sources of work, observation, peer review, analysis of results and presentation.

The development of professional competence of teachers of general secondary and special educational institutions is mainly formed and improved in an innovative educational environment. First of all, it is desirable to coordinate the goals and objectives of the educational institution, based on the requirements of the social dimension with the professional motivation of teachers, to implement plans aimed at adapting to changes.

Therefore, the "Methodological Cluster" that we are implementing prepares teachers for creativity and quick and effective adaptation to changing situations.

The goal of the methodological cluster is to achieve mutual integration of methods used in teaching subjects, prepare teachers to develop their variations, and expand the ranks of innovative teachers through intensive development of pedagogical improvisation skills among practitioners.

Methodological stages of the cluster:

1. The presence of advanced and experienced innovative teachers in the institution is studied. At the same time: A list of teachers with high human qualities, who know their subject well, who effectively use ICT in practice, in particular, Internet services, who participate in various types of activities in the republican media, who have a high academic performance rating of their students, who are open to cooperation, who have high communication skills, who are flexible, who have their own image in their behavior (simple, clean, modern) and who are respected by students and parents will be compiled.
2. The work plan of methodological associations is analyzed. It is studied that the content of the plan pays attention to the popularization of methods used in teaching subjects, with the name of each method or technology, the appropriate selection of responsible teachers, and the reflection of support for young teachers.
3. Allocate a place in the "Methodological Cluster" corner for teachers who have returned from advanced training courses. In this case, teachers who have returned from advanced training courses and started working prepare a folder with the contents of the new methods and

¹ Yuldashev Zh.G., Usmanov S.A. Fundamentals of pedagogical technology. - T.: Teacher, 2004. 101 p., p.7.

² Tolipova Zh.O. Pedagogical qualimetry. Tutorial. - T.: 2017. P. 20.

³ Makukhina I.V. Pedagogical conditions for the integration of areas of knowledge in the formation of concepts about the holistic world. Abstract of the dissertation of the candidate of pedagogical sciences. - T.: 2005. 23 p.

⁴ Ishmukhamedov R., Yuldashev M. Innovative technologies in education and training. T.: "Nikhol", 2013. -275 p.
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technologies they have studied. This stage is very important. Because this stage is the starting point of the cluster. This is the step that ensures the implementation of the new method. The most important thing is that the teacher should be prepared not only with a textual presentation of the method or technology, but also with handouts with educational tasks. Otherwise, as always, the studied method is "**taken into account**" only by those who participated in the seminar or meeting. Also at this stage, a pedagogical round table or a protocol of the "Master Class" is held. As a result, it will be analyzed whether the method studied in the advanced training courses is a novelty or a variation of some technology.

4. Each teacher shares the adaptation of the method or technology to their subject. That is, "**Simulation exercises**" will conduct a predictive minute. At the simulated moment, depending on the teacher's activity and involvement in the situation, it is analyzed whether the given method is suitable or not for teaching a particular subject.
5. **Primary testing phase.** The teacher uses the method in class. Analyzes the results obtained.
6. **Correction and adaptation stage.** Based on the results of the first check, the teacher makes and applies certain changes in the method or technology. New ideas appear in the teacher and rise to the level of innovation. As a result, the next stage of the methodological cluster will be passed.
7. **Transformation stage.** The method or technology takes on a new form, changing its form, technique and content.

The methodological cluster mainly encourages the teacher to work on himself. The most important thing in this is the responsibility of the cluster leader or the teacher coordinating his activities. Because he must be able to manage a team. For this, he himself must have a number of resources of methods and technologies, as well as new approaches (methods, technologies, didactic means...) of his own authorship.

The experience of organizing methodological services in general secondary and special educational institutions of the Tashkent and Fergana regions and studying the preparation of students for this process in higher defectological education is analyzed. When studying the activities of a number of schools in the regions of the "Methodical Service-Competitive Link", "Methodical Resource", "Differential Education" of teachers who returned from advanced training courses and continue their work, as well as those who have just finished began working after completing higher education. It was noted that opinions on "personally oriented education" were not purposefully studied or analyzed.

The reasons for this situation are as follows:

1. In some schools, teachers say: "You can't touch me, I can't touch you" or "everything is going smoothly, why do you need to change it", "why are you laughing so much, who needs it?" so much effort", "who has the time and money to prepare handouts", "if you have a computer, then I don't" they get stuck in a circle of relationships.
2. Lack of innovation and inattention to the quality of education on the part of school leaders.
3. Low motivation of teachers to work on themselves. The fact is that he was limited to knowledge of his science.
4. Methodological support for young teachers is not organized purposefully.
5. Methodological work is carried out only for reporting.

It has been determined that the listed problems represent a special mechanism for monitoring the quality of education, conducting pilot studies on the topic of "Studying the effectiveness of post-qualification and postgraduate activities". The following methods were used in implementing this mechanism. They are:

1. **Interview with teachers.** The interview was conducted mainly on the basis of personal interviews with teachers.
2. **Questions and answers.** It was studied with the students who came to the course, during the exercise "Hour of the coordinator", and also through questions and answers during the "Professional activity defense".
3. **Questionnaire.** Special questionnaires were prepared. The questionnaires contain the following questions: what method or technology did you use in practice? Was a seminar or round table organized after your return from the course? How could you share your experience? What did you learn from the teacher? Is there a method or technology of your own authorship? and other.

The pilot work on the implementation of the "**Methodological Cluster**" is motivated not only by the environment in general education and special schools, but also by the content of advanced training courses. Because among the answers "...they recommended old methods, methods used for more than 10 years, such as "Fish Skeleton", "Venn Diagram", "Conceptual Analysis", "6 Hats", "Brainstorming",

"Sinkveyn", "SWOT Analysis" and so on, and some of them are not suitable for elementary grades at all. From this follows the conclusion that "...it is time for the teacher of teachers to work on themselves, even if it is already too late".

Among the teachers there are those who love their profession (regardless of age), strive for innovation, "thirst" for new methods to keep up with the times, are "idols" and "authorities" in the eyes of today's children. It is nice to have practitioners who are capable. Through experimental work, a conclusion was made about the need to create a **"Methodological Cluster"** for such teachers in the institution itself, saving time and distance. The Methodological Cluster creates healthy competition between teachers and the staff. In addition, the methodological cluster moves the training courses away from the dogmatic content, from the attitude that "... technologies are unchangeable, use them as they are".

Practical recommendations are as follows:

1. Regularly study and collect innovative ideas from creative teachers, make a list, sort them into categories and create a "Menu of Experiments" (practitioners choose what they want by viewing the list and video selections)
2. If the institution's management staff does not consider themselves to have sufficient methodological qualities (most of them are strong managers, competent organizers, experienced consultants...), they should learn to avoid expressing one-sided opinions by considering a narrow analysis in class. At this stage, it is recommended to give priority to the culture of teacher self-assessment.
3. If an innovative idea or method does not work, do not allow teachers' motivation to decrease, on the contrary, take measures to further stimulate research activities. To do this, it is recommended to create an environment of equal experience among teachers and achieve coordination of experience.

Through this article, we, the authors, want to comment on the possibilities of technologies that should be applied in practice in general and special educational institutions.

Today, in the conditions of virtualization of life and social communication, new flexible approaches to the needs of the student of the 21st century are being implemented. Recently, the technology of "Flipped Classroom" (this technology was used in this study) has been widely used in the system of advanced training education; this technology is a form of blended learning. The use of this technology is primarily associated with the change of times, the humanization of the student and teacher's activities, creative freedom, and the ability to make independent decisions. In addition, the regularity of economic and social changes encourages students to use forms and approaches to independent learning. Therefore, teachers of educational institutions are required to be professional in choosing the forms and methods of organizing educational activities that allow them to prepare high-quality personnel.

Distance learning, electronic and Internet resources, as well as hybrid or blended learning technologies that combine elements of digital technologies are widely used in Europe. In particular, in France, the technology of "Flipped education" is used in organizing classroom and extracurricular activities. The "flipped education" method is based on the principles of problem-based learning and, due to its exceptional flexibility, allows students to fully engage in the process, resulting in students developing creativity, critical thinking, and collaboration skills. problem solving to achieve a set goal. The most important aspect of the "flipped education" technology is the replacement of the process of knowledge transfer in whole or in part with the process of independent learning. The difference between this technology and other technologies is that the main part of the training is carried out at home, and homework is done in an educational institution. The home becomes a classroom, and the classroom becomes a home.

N.V. Tikhonova revealed the importance of using the "Flipped Education" technology in higher education institutions. In her book about "Flipped Education" M. Lebrun says: "'Flipped Education" is not a new method, but a new way of thinking, through which class work is optimized through extracurricular activities, in which the teacher's task is to make students independent outside of class - this is to stimulate the search for knowledge, while attention is taught not only to search for information, but also to analyze the reliability of this information".

In practice, many regular questions arose about the content, form and meaning of the tools listed by students in the scientific context and space. In addition, it was noted that stereotypes had formed in the students' minds that a scientific article is "taking information from sources, translating and creating a text in an appropriate sequence". In order to eliminate factors that have a negative impact on the effective

organization of students' activities in the listed series of independent educational processes, we have formulated recommendations for improving the mechanism of systematic work with information.

There was a need to implement ways to increase the enthusiasm of teachers and future specialists for the effective organization of research activities in the library. In this regard, we recommended the system of rational actions for working in the library "Booklet". The purpose of the booklet is to achieve systematic and useful implementation of the activities of teachers and students in the library. **Parts of the booklet:**

- an idea of the structure of the information resource center and the activities of its divisions;
- the structure and activities of the divisions of the information technology center;
- a list of educational and methodological literature on the specialty;
- a list of Internet addresses and sites related to the field and related areas.

When working with the "method cluster", it is important to develop teachers' skills in working with information. The use of a schematic record of what was read when working with information was positively received by teachers and students as a very convenient method. The most common schemes are the "Tree of Thoughts", "Perception Map", and "Family Tree". These schemes highlight the main components of a more complex concept, key words, etc. In this case, thoughts serve to illuminate in sequence from top to bottom - from the general concept to its individual parts. It was recommended to use fragments of text, explanations, excerpts in the scheme. This type of writing allows the student to formulate the content correctly and fully when answering questions. The use of mixed writing method also had an effective impact on the successful completion of projects. Such mixed notes combine all (or several) of the above-mentioned techniques. The most important thing is that the creative approaches of teachers and students are manifested in the use of vertical or horizontal schemes when recording and memorizing information.

We have included the following among the social competencies required by teachers of general and special educational institutions and future specialists:

- communication skills;
- tolerance;
- self-analysis;
- self-expression;
- setting goals for the near and long term.

It is known that the listed competencies relate to socio-cultural competencies and are more specific to a particular area. That is, they are combined with the specifics of pedagogical activity. Their development in teachers allows them to become familiar with professional values and becomes the basis for effective professional activity in the conditions of socio-cultural communication.

Through the "Methodological Cluster", we organized training for teachers in designing their own activities in the following stages:

1. Motivational stage. The stage of mastering the knowledge necessary for the activity and effective development of communication about the profession. At the same time, the tasks of setting the goal of the work performed and forecasting its implementation are also solved. This stage was interpreted as a stage of developing skills and qualifications in its content and essence. Because teachers were engaged in searching and selecting information and using it in professional communication (with teachers, students, parents and other specialists). This is the composition of the professional competencies of a teacher, consisting of elements of communication.

2. Constructive stage. A plan of work is drawn up, which teachers must carry out independently. It is predicted how many parts the project will consist of. In addition, wherever the project is carried out, that is, the work that is planned to be done, the tasks of preparing the work are also carried out there.

3. Corrective stage. A preliminary analysis will be carried out to ensure that the work is carried out correctly. As a result, if there is a need to change the work plan or the general situation, appropriate additions will be made. Most importantly, an important component is determining how much time will be required for these changes. Because in practice it turned out that students do not allocate the time necessary to prepare and present the results of the work that they must complete during the independent work period. In order to prevent such a situation, we have presented recommendations that allow teachers to understand the importance of determining the time for completing each task.

4. Reflexive stage. At this stage, teachers evaluate their work themselves and then submit it to experts for analysis. The task of this stage ends with the presentation of the project (by type) created by the teachers.

The listed approaches ensured the effective organization of teachers' activities in general and special educational institutions. Practitioners realized that it was necessary to correctly distribute work between teachers, especially in the areas of the "Methodological Cluster" methodological service.

The "method cluster" is a mechanism that makes it clear that everyone is equally responsible for the quality of education. There is healthy competition between teachers. Monitoring each stage of the cluster and the teacher's activities in it also allowed us to objectively assess the degree of use of personality-oriented principles in general and special education.

In conclusion, it can be said that teachers need to be allowed to be creative, they need to be given favorable conditions for learning new things, they should not be demotivated by various tests, and most importantly, they should be told "... give me time, I can learn, I am capable of it," - you should answer with a smile.

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