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G.B. Sarzhanova[1], S.V. Romanenko[2], A.M. Zatyneyko[1]

[1]Ye.A. Buketov Karaganda State University, Kazakhstan;
[2]S. Seifullin Kazakh Agro Technical University, Astana, Kazakhstan
(E-mail: galiya008@mail.ru)

Modern pedagogical technologies in training and education of children in preschool institutions

The article considers the modern effective pedagogical technologies used in the work of the preschool educational institution. It justifies the relevance of the use of modern innovative technologies in the activities of pre-school educational institutions. Lists the most relevant modern innovative technologies used in the work of pre-school educational institutions. Such concepts as «innovative technology», «pedagogical technology» are considered. The essence of these technologies and the purpose of their application are revealed. The conclusion is made about the need for effective use of these technologies in preschool institutions. The forms, methods, classifications of the types of technologies used by kindergarten teachers are described.

Keywords: technologies, information and communication technologies, digitalization, innovations, TRIZ-technology, project, subject-developing environment, research activity, preeschool education, criteria.

The XXI century can rightfully be considered like the century of the heyday of innovative technologies that are actively introduced into the most diverse spheres of human activity, and education among them naturally becomes one of the most significant.

Innovative technologies act as one of the bases for the functioning of social processes, as well as a condition for the interconnection between them. The information space through the global network expands human capabilities, allowing overcoming geographical and political boundaries, making the world cultural values accessible to contemplation to everyone, «visualizing» the sphere of human life. The speed of distribution of information flows leads to a situation of total digitization of social life processes of individuals and growth of education. The change of cultural paradigms occurs right before our eyes in a real-time situation.

- The main, phenomena that determine a single modern digital culture includes a personal computer and all the variety of digital devices:
- The Internet;
- Artificial Intelligence;
- System and application software;
- Computer graphics and virtual reality systems;
- Digital formats of traditional means of communication (books, photographs, audio and video recordings, digital TV, etc.);
- Computer games;
- Technological art.

Today, education continues its path along the road of reforms: standards of education are changing, new technologies are being introduced, and educational levels are being reformed. For example, the primary school became a four-year school, and graduate school ceased to be postgraduate education, but became the third level of higher education after undergraduate and graduate school.

Reforms and innovations have joined the ranks of supporters in the form of innovators, innovative pedagogues, people who aspire not only to keep pace with the times, realizing new trends in the development of education, its latest technologies, putting forward and implementing ideas for improvement, but also with their enthusiasm and activity, trying to infect others, to lead them. At the same time, a considerable part of the teaching staff has joined the ranks of open or hidden opponents of everything new. And this is largely explained. There is not always understanding of the purpose and essence of the innovations introduced, as well as their positive effect and the prospects for their implementation. Activities in conditions where thereforms last for decades, causes the teachers fatigue and mistrust. But for the sake of justice, it should be noted that there is another side to the medal of resistance to innovation. Boloney Process and Higher Reform education «rocked the boat», quietly was sailing before. Innovations violated in many respects the pattern stability that existed for many years. The habitual long-term, and sometimes multi-decade shuttle traffic from point «A» to point «B» and back is broken. Against this background, it remained unnoticed that the boundary

between stability and stagnation had been obliterated long ago and one passed into another. As the researchers note, manifestation of resistance to innovation can be detected as «rejection of the new, fear of innovation, open or veiled skepticism towards the new, and unwillingness to get off the track» [1].

It is impossible to unequivocally positively or negatively assess the consequences of digitalization. They very clearly define the actual for the education system closest to the generation, brought up in the figure, by the generation «next», tasks, in our opinion, connected with the preservation and translation of traditional European values. By themselves, digital technology, digitalization, the massive transfer of cultural heritage into digital does not directly lead to digital culture, as to the personal component, to the type of culture in the traditional sense: culture can both form and not be formed [2].

At present, Kazakhstan is tasked with entering the 30 most developed countries of the world, which requires an innovative development and accelerated technological renewal. In his Speech to the people of Kazakhstan, the Head of State announced the Third Modernization, the core of which is digitalization.

«Over the years of independence we managed to enter the list of 50 competitive countries in the world. Now the task is to enter the 30 one, which requires Kazakhstan to innovate and accelerate technological innovation. Therefore, at the beginning of the year, I announced in my Message to the people of Kazakhstan about the Third Modernization, the core of which is digitalization», said Nursultan Nazarbayev [3].

The President of Kazakhstan stressed that digitalization is necessary to increase the competitiveness of enterprises and the country as a whole, as well as to improve the quality of life of people.

In addition, the head of state noted the importance of training highly qualified workers and stressed the necessity to revise the policy in the field of education. He focused on the development of competence centers on the basis of research institutes, preschool institutions, and higher educational institutions and within the framework of innovative clusters.

In this regard, at present the pedagogical teams of the preschool educational institution intensively introduce innovative technologies into their work. Therefore, the main task of preschool teachers is to choose methods and forms of organization of work with children, innovative pedagogical technologies that optimally correspond to the stated goal of personal development.

Undoubtedly, innovative processes at the present stage of the development of society primarily affect the system of preschool education, as the initial stage of revealing the potential abilities of the child. Development of the preschool education, the transition to a new qualitative level cannot be carried out without the development of innovative technologies.

Undoubtedly, innovations define new methods, forms, means, technologies used in pedagogical practice, focused on the personality of the child, on the development of his abilities. However, modern pedagogical technologies in preschool education are aimed at implementing state standards of preschool education. Therefore, the main task of preschool teachers is to choose methods and forms of organizing the work with children, innovative pedagogical technologies that will optimally correspond to the stated goal of personal development [4].

Undoubtedly, the most important aspect in pedagogical technology is the position of the child in the educational process, the attitude to the child on the part of adults. The adult adheres to the situation in communication with children: «Not near, not over him, but together!». After all, its purpose is to contribute to the development of the child as a person. What does the term «technology» itself mean?

Technology — a set of techniques used in any matter, skill, art [5].

Pedagogical technology — a set of psychological and pedagogical attitudes, forms, methods, methods of teaching, educational tools; it is a tool for the pedagogical process [6].

Pedagogical technology is a systemic set and the order of functioning of all personal, instrumental and methodological tools used to achieve pedagogical goals [7].

According to G.K. Selevko, any pedagogical technology should satisfy some basic methodological requirements:

1. Conceptuality presupposes reliance on a certain scientific concept, including philosophical, psychological, didactic and socio-pedagogical justification for achieving educational goals.

2. Systematic includes the presence of all signs of the system: the logic of the process, the interrelation of all its parts, integrity.

3. Manageability makes it possible to diagnose goal-setting, planning, designing the learning process, phased diagnostics, variation by means and methods with the aim of correcting the results.

4. Efficiency sees optimality in terms of costs, a guarantee of achieving a certain standard of training.

5. Reproducibility implies the possibility of using (repeating, reproducing) pedagogical technology in other similar educational institutions, other subjects [8].

Based on the analysis of various definitions and descriptions of the essence of pedagogical technology allows us to adopt the following maindefinition:Pedagogical technology is an integral scientifically grounded project of a specific pedagogical system from its theoretical design to implementation in educational practice, reflecting their goals, content, forms, methods, means, results and conditions of organization.The main criteria of pedagogical technology can be classified, as shown in Figure 1, for different reasons:

- ❖ Healthy technologies;
- ❖ Technology of project activities;
- ❖ Technology research activities;
- ❖ Information and communication technologies;
- ❖ Portfolio technology of the preschooler and educator;
- ❖ Technology «TRIZ»;
- ❖ Technology of the subject — developing environment.

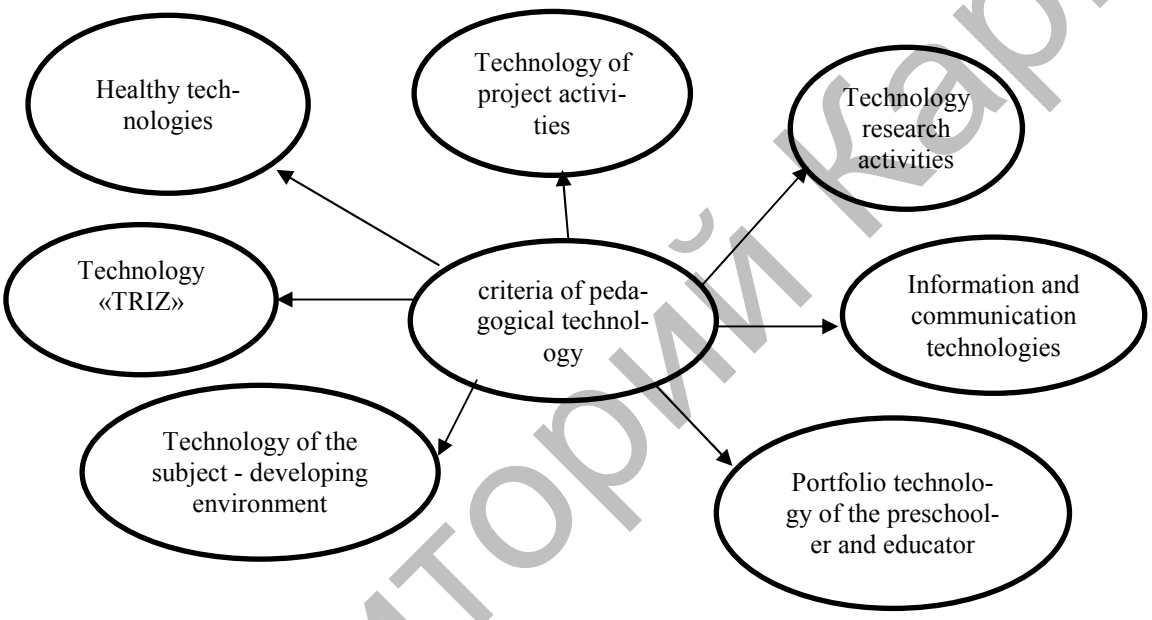

Figure 1. The main requirements (criteria) of pedagogical technology

Health-saving technologies. The goal of health-saving technologies is toproviding the child with the opportunity to preserve health, forming the necessary knowledge, skills, skills for a healthy lifestyle.

In modern conditions, human development is impossible without building a system for the formation of its health. The choice of health-saving pedagogical technologies dependson:

1) from the type of preschool;
2) the length of stay of children in it;
3) from the program for which teachers work;
4) specific conditions of the PFD;
5) professional competence of the teacher;
6) indicators of children's health.

All health-saving technologies can be divided into 3 groups:

- ❖ Technologies of preservation and stimulation of health;
- ❖ Technologies of teaching a healthy lifestyle;
- ❖ Correction technologies.

The teacher, who stands guard over the child's health, educates the child's and parents' health culture, first of all, must be healthy, have valeological knowledge, are not overworked, should be able to evaluate objectively the advantages and disadvantages associated with professional activity, draw up a plan for necessary self-correction and proceed to its implementation.

*Technologies of project activity.*The goal is development and enrichment of social -personal experience by including children in the sphere of interpersonal interaction.

Teachers who actively use the project technology in the education and training of preschool children unanimously note that the life activity organized in it in the kindergarten allows them to get to know the pupils better, to penetrate the child's inner world.

In addition, this includes the classification of training projects:

- «Game»;
- «Sightseeing»;
- «Narrative»;
- «Constructive».

Technology of researching activity. The goal of researching in the kindergarten is to form the core competencies of preschool children, the ability to explore the type of thinking.

The content of cognitive-research activities includes: experiments (experimentation), collecting (classification work), *information and communication technologies.*

The world in which a modern child develops is fundamentally different from the world in which his parents grew up. This presents qualitatively new requirements for preschool education as the first link in continuing education: education using modern information technologies (computer, interactive whiteboard, tablet). Undoubtedly, there are requirements to computer programs of preschool education (Fig. 2).

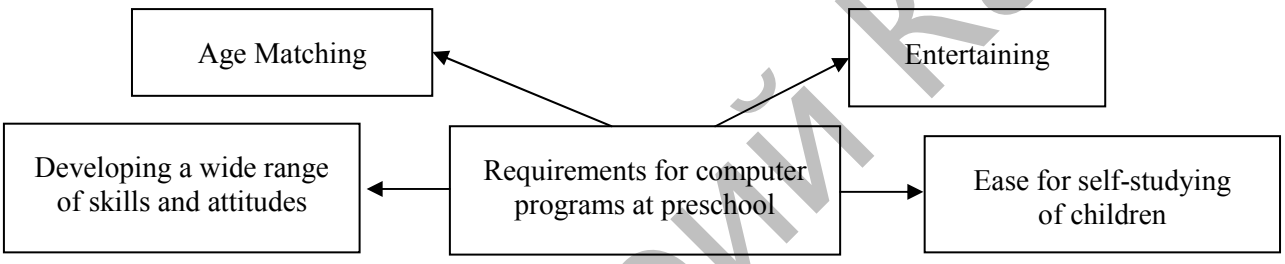

Figure 2. Requirements for computer programs of preschool education

Benefits of the computer:

- presentation of information on the computer screen in a game form;
- carries in itself a figurative type of information, understandable to preschoolers;
- movement, sound, animation for a long time attracts the child's attention;
- has an incentive for cognitive activity of children;
- provides an opportunity for individualization of training;
- in the course of his activity at the computer, the preschooler acquires self-confidence;
- allows you to simulate life situations that can not be seen in everyday life.

The preschooler's portfolio technology. Portfolio is a collection of personal achievementsa child in a variety of activities, his successes, positive emotions, the opportunity to once again experience the pleasant moments of his life, this is a peculiar development of the child.

The process of creating a portfolio is a kind of pedagogical technology.

There are a lot of portfolio options. The content of sections is filled gradually, in accordance with the capabilities and achievements of the preschooler. The technology of modern education needs a new type of teacher:

- creatively thinking,
- owning modern technologies of education,
- methods of psychological and pedagogical diagnosis,
- ways of self-construction of the pedagogical process in the conditions of concrete practical activity,
- the ability to predict your final result.

Portfolio allows you to take into account the results achieved by the teacher in a variety of activities (educational, academic, creative, social, communicative), and is an alternative form of assessment of the professionalism and effectiveness of the work of the teacher.

Technology «TRIZ». TRIZ (the theory of solving the inventive problems), which was created by the scientist-inventor T.S. Altshuller. The main objective pursued by the TRIZ — teachers are: — the formation of children's creative thinking, that is, education of the creative personality, prepared to a stable solution of non-

standard tasks in the various fields of activity. The TRIZ method can be called a school of creative personality, since its motto is creativity in everything: in the formulation of the question, in the methods of its solution, in the presentation of the material. Often, the teacher already conducts Trisian studies, not even knowing about it.

The main task of using TRIZ technology in preschool age is to instill in the child the joy of creative discoveries.

The main criterion in working with children is the intelligibility and simplicity in the presentation of the material and in the formulation of a complex, seemingly, situation. It is not necessary to speed up the introduction of TRIZ without understanding the children of the main provisions on the simplest examples. Fairy tales, gambling, everyday situations — this is the environment through which the child learns to apply Triz solutions, the problems facing him. As the contradictions are found, he himself will strive for an ideal result, using numerous resources [9].

Technologies of creation of the subject — developing environment. The environment in which the child is located largely determines the pace and nature of its development and is therefore considered by many educators and psychologists as a factor in the development of the personality. The environment should perform educational, developing, educating, stimulating, organizational, communicative functions. But most importantly, it must work for the development of the child's independence and self-activity.

Thus, the introduction of innovations requires the participants in the educational process to formulate certain competences. Development of e-learning course, its educational content presupposes formed «digital competence» educator: Each element of the interaction, «preschooler - content» should not only be clearly built, but also to be technologically advanced. All this requires a significant «adjustment», an orientation toward the continuous education and self-education of the educator, the development and application of a new technological tool.

It is important not to lose sight of the psychological side of the question: in the event of difficulties can manifest problems of the psychological barriers that may arise at each stage of the implementation of innovation and lead to the abandonment of implementation of innovations. Therefore, entering this path, it is important to consider the issue of professional support of the implementation process.

Getting into the digital environment is an unavoidable reality for our time. This occurs long before the individual's awareness of their professional interests and inclinations.

Undoubtedly, the special need to introduce educational technologies in preschool institutions acquires in the new socio-economic conditions associated with the modernization and technologicalization of the educational space, with the introduction of state educational standards.

In any case, the main goal of educational activity as a social phenomenon today cannot be achieved outside the «technological» field — that sphere of professional pedagogical activity that corresponds to modern scientific views.

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Г.Б. Саржанова, С.В. Романенко, А.М. Затынейко

Мектепке дейінгі мекемелерде балаларды оқыту мен тәрбиелеуде пайдаланылатын заманауи педагогикалық технологиялар

Мақалада мектепке дейінгі білім беру мекемелерінде қолданылатын заманауи педагогикалық технологиялар қарастырған. Сонымен қатар мектепке дейінгі білім беру мекемелерінің қызметінде заманауи инновациялық технологияларды пайдаланудың өзектілігін негіздейді. Мектепке дейінгі білім беру мекемелерінде қолданылатын «инновациялық технологиялар», «педагогикалық технологиялар» сияқты ең өзекті заманауи инновациялық технологиялар мазмұны жіктелген. Осы технологиялардың мәні және оларды қолданудың мақсаты анықталған және бұл технологияларды мектепке дейінгі мекемелерде тиімді пайдалану қажеттілігі туралы қорытынды жасалды. Ғылыми еңбекте балабақша оқытушылары пайдаланатын заманауи технологиялардың түрлері, әдістері, жіктелуі сипатталған.

Кілт сөздер: технология, ақпараттық-коммуникациялық технологиялар, цифрландыру, жаңашылдық, ТРИЗ-технологиясы, тақырыптық дамытушы орта, ғылыми-зерттеу қызмет, мектепке дейінгі білім, көрсеткіштер.

Г.Б. Саржанова, С.В. Романенко, А.М. Затынейко

Современные педагогические технологии в обучении и воспитании детей в дошкольных образовательных учреждениях

В статье рассмотрены современные эффективные педагогические технологии, используемые в работе дошкольного образовательного учреждения. Обосновывается актуальность применения современных инновационных технологий в деятельности дошкольного образовательного учреждения. Перечислены наиболее актуальные современные инновационные технологии, применяемые в работе дошкольного образовательного учреждения. Рассмотрены такие понятия, как «инновационная технология», «педагогическая технология». Раскрыта суть этих технологий и цели их применения. Сделан вывод о необходимости эффективного использования данных технологий в дошкольном учреждении. Описаны формы, методы, классификации видов технологий, применяемых педагогами детского сада.

Ключевые слова: технология, информационно-коммуникационные технологии, цифровизация, новизна, ТРИЗ-технология, предметно-развивающая среда, исследовательская деятельность, дошкольное обучение, критерий.

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