



Pedagogical Conditions for Implementing an Interactive Learning Strategy

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Abstract: Development is an integral part of any human activity. By accumulating experience, improving methods, methods of action, expanding their mental capabilities, a person thereby constantly evolving. The same process is applicable to any human activity, including pedagogical activity. At different stages of its development, the society presented increasingly new standards, demands on the labor force. This necessitated the development of the education system. One of the means of such development is innovative technologies, i.e., this is a fundamentally new ways, methods of interaction between teachers and students, ensuring the effective achievement of the result of pedagogical activity. The problem of innovative technologies has been and continues to be occupied by a large number of talented scientists and educators. Among them, V.I. Andreev, I.P. Podlasay, professor, doctor of pedagogical sciences K.K. Colin, doctor of pedagogical sciences V.V. Shapkin, V.D. Simonenko, V.A. Slastenin and others. All of them have made an invaluable contribution to the development of innovative processes in Kazakhstan. The object of research of this course work is the process of development of education as an integral pedagogical system and the subject of research is innovative pedagogical technologies as an integral part of the object of research.

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INTRODUCTION

Scientific innovations which advance progress, cover all areas of human knowledge. There are socio-economic, organizational and managerial, technical and technological innovations. One of the varieties of social innovation is pedagogical innovation^[1].

Pedagogical innovation is an innovation in the field of pedagogy, a purposeful progressive change that brings to the educational environment stable elements (innovations) that improve the characteristics of both its individual components and the educational system as a whole^[2]. Pedagogical innovations can be carried out both at the expense of the own resources of the educational

system (intensive development path) and by attracting additional capacities (investments)-new means, equipment, technologies, capital investments, etc. (extensive way of development).

The combination of intensive and extensive ways of development of pedagogical systems allows to carry out so-called “integrated innovations” which are built at the junction of diverse, different-level pedagogical subsystems and their components. Integrated innovations as a rule do not look fictitious, purely “external” measures but they are realized transformations, proceeding from deep needs and knowledge of the system. By supporting the “bottleneck” of the latest technology you can improve the overall efficiency of the pedagogical system. The main directions and objects of innovative transformations in pedagogy are:

- Development of concepts and strategies for the development of education and educational institutions
- Updating the content of education; change and development of new technologies for teaching and upbringing
- Improving the management of educational institutions and the education system as a whole
- Improving the training of teachers and improving their skills
- Designing new models of the educational process
- Providing psychological, ecological safety of students Development of health saving technologies of education
- Ensuring the success of education and upbringing, Monitoring the educational process and the development of students
- Development of new generation textbooks and teaching aids, etc^[3].

Innovations can be carried out at various levels. To the highest level are innovations that affect the entire pedagogical system.

Progressive innovations arise on a scientific basis and promote the advancement of practice. In pedagogical science, a fundamentally new and important direction arose-the theory of innovations and innovative processes. Reforms in education are a system of innovations aimed at radical transformation and improvement of the functioning, development and self-development of educational institutions and their management system. Pedagogical innovations are implemented according to a certain algorithm. P.I. Pikasisty distinguishes ten stages of development and implementation of pedagogical innovations:

Development of a criterial apparatus and indicators of the state of the pedagogical system subject to reform. At this stage, you need to identify the need for innovation.

Comprehensive verification and assessment of the quality of the pedagogical system to determine the need for its reform with the help of special tools^[4].

All the components of the pedagogical system must be subjected to expertise. As a result, it must be precisely established that it is necessary to reform as outdated, inefficient, irrational.

Searches for models of pedagogical decisions that are advanced and can be used to model innovations. Based on the analysis of the bank of advanced pedagogical technologies, it is necessary to find the material from which it is possible to create new pedagogical constructions. Comprehensive analysis of scientific developments containing a creative solution of actual pedagogical problems (information from the Internet can be useful).

Designing an innovative model of the pedagogical system as a whole or its individual parts. A new project is being developed with specific specified properties that differ from traditional options. Performing the integration of the reform. At this stage, it is necessary to personalize the tasks, identify the responsible, means of solving problems, establish forms of control.

Working out the practical implementation of the well-known law of the change of labor. Before the introduction of innovations in practice it is necessary to accurately calculate its practical significance and effectiveness^[5].

Building an algorithm for introducing innovations into practice. Similar generalized algorithms have been developed in pedagogy. They include actions such as the analysis of practices to search for sites to be updated or replaced, the modeling of innovation based on the analysis of experience and data of science, the development of an experiment program, monitoring its results, implementing the necessary adjustments, final control.

Introduction to vocabulary of new concepts or rethinking of the former vocabulary. When developing the terminology for its implementation in practice, they are guided by the principles of dialectical logic, the theory of reflection and others^[6].

Protection of pedagogical innovation from pseudo-innovations. It is necessary to adhere to the principle of expediency and justification of innovations. History shows that sometimes enormous efforts, material means, social and intellectual forces are expended on unnecessary and even harmful transformations. The damage from this is irreparable, so you should not allow false pedagogical innovation. As false innovations that only imitate innovation, the following examples can be cited: formal change of signage of educational institutions; presentation of the old as a fundamentally new one; turning into an absolute and copying the creative method of any pedagogue-innovator without his creative

processing, etc. However, for innovative processes, there are real barriers. I.N. Andreev singles out the following:

- The conservatism of a certain part of the teachers (the conservatism of the administration of educational institutions and educational authorities is especially dangerous)
- Blind adherence to the tradition of the type: “We are doing so well”
- Lack of the necessary pedagogical staff and financial resources to support and stimulate pedagogical innovations, especially for experimental teachers
- Unfavorable socio-psychological conditions of a particular educational institution, etc
- When organizing innovation activities, remember that
- In pedagogy, according to K.D.Ushinsky, not experience (technology) is transmitted but a thought derived from experience
- The teacher must “pass” the “Foreign” experience “through himself” (through his psyche, established views, modes of activity, etc.) and develop his own method, most appropriate to the level of his personal and professional development
- Innovative ideas must be clear, convincing and adequate to the real educational needs of the individual and society, they must be transformed into specific goals, tasks and technologies
- Innovation must master the minds and means of all (or most) members of the teaching staff
- Innovative activity should be morally and materially stimulated, it is necessary to provide legal support for innovation activity
- In pedagogical activity, not only the results, but also the ways, means, methods for achieving them are important^[7]

Despite the obvious need for innovations in pedagogy, nevertheless, there are a number of reasons that prevent their introduction into the educational process which undoubtedly hinders the development of pedagogy to a certain extent^[8].

According to I.P. Podlasoy, an educational institution is innovative if the educational process is based on the principle of environmental protection, the pedagogical system evolves in the humanistic direction, the organization of the educational process does not lead to overloads of students and teachers, the improved results of the educational process are achieved through the use of undisclosed and not previously involved in the capabilities of the system, the productivity of the educational process is not only a direct consequence it means the introduction of costly and media systems^[9].

These criteria allow to really determine the degree of innovation of any educational institution, regardless of its name. Features of an innovative educational institution can be identified in comparison with traditional institutions (Table 1).

This incomplete comparison shows that the fundamental principles of the innovative educational institution are humanization, democratization, individualization and differentiation.

In the conditions of educational reforms, innovative activity aimed at introducing various pedagogical innovations has acquired special significance in vocational education. They covered all aspects of the didactic process: the forms of its organization, the content and technology of instruction and educational and cognitive activities. Innovative technologies of teaching include: interactive learning technologies, technology of project training and computer technologies.

In the psychological theory of learning interactive is called learning, based on the psychology of human relationships. Technologies of interactive learning are considered as ways of mastering knowledge, forming skills and skills in the process of relationships and interactions between the teacher and the learner as subjects of learning activity. Their essence lies in the fact that they rely not only on the processes of perception, memory, attention but above all, on creative, productive thinking, behavior and communication. At the same time, the learning process is organized in such a way that the trainees learn to communicate, interact with each other and other people, learn to think critically, solve complex

Table 1: Comparative characteristics of traditional and innovative educational institutions

Comparable parameters of the pedagogical process	Educational institutions	
	Traditional	Innovative
Aim	Transfer of knowledge, skills and associated education, development of social experience	Promotion of self-realization and self-affirmation of personality
Orientation	On the needs of society and production	On the needs and opportunities of the individual
Principles	Ideologically transformed	Scientific, objective
Educational content	Disparate objects with weakly expressed inter subject connections	Humanized and personal-oriented cultural values
Leading methods and forms	Information-reproductive	Creative, active, individually-differentiated
Attitudes of teaching and learning	Subject-object	Subject-subjective
The role of the teacher	Source and control of knowledge	Consultant-Assistant
Main results	Level of education and socialization	The level of personal and professional development, self-actualization and self-realization

problems based on the analysis of production situations, situational professional tasks and relevant information^[10].

In interactive learning technologies, the role of the instructor (instead of the role of the informer-the role of the manager) and the trainees (instead of the object of influence-the subject of interaction) changes significantly as well as the role of information (information is not an objective but a means for mastering actions and operations).

All technologies of interactive training are divided into non-imitative and imitation. The classification is based on the sign of the re-creation (imitation) of the context of professional activity, its model representation in teaching^[11].

Non-imitation technologies do not imply the construction of models of the phenomenon or activity being studied. Simulation technologies are based on simulation or simulation-game modeling that is reproduction in the conditions of training with a certain measure of adequacy of the processes taking place in the real system. Let's consider some forms and methods of interactive learning technologies.

A problem lecture involves posing a problem, a problem situation and their subsequent resolution. The problem lecture simulates the contradictions of real life through their expression in theoretical concepts. The main goal of this lecture is the acquisition of knowledge by students with their direct and effective participation. Among the modeled problems may be scientific, social, professional, related to the specific content of the educational material. The formulation of the problem encourages students to actively engage in thought activity to try to answer the question independently, evokes interest in the material presented and activates the attention of trainees^[12].

The seminar-discussion presupposes a collective discussion of any problem with the aim of establishing ways of its reliable solution. The seminar-discussion is held in the form of dialogical dialogue of its participants. He assumes high mental activity, inculcates the ability to conduct polemics, discuss the problem, defend his views and convictions, concisely and clearly state his thoughts. The functions of the actors at the seminar-debate can be different.

The educational discussion is one of the methods of problem training. It is used in the analysis of problem situations when it is necessary to give a simple and unambiguous answer to a question while alternative answers are assumed. In order to involve all those present in the discussion, it is advisable to use the method of cooperative training (educational cooperation). This methodology is based on mutual learning when students work together in small groups. The basic idea of training cooperation is simple: students unite their intellectual

efforts and energy in order to fulfill a common task or achieve a common goal (for example to find solutions to the problem). The technology of the work of the training group during the training cooperation can be as follows:

- Formulation of the problem
- Formation of small groups (micro-groups of 5-7 people), distribution of roles in them, explanations of the teacher about the expected participation in the discussion
- Discussion of the problem in micro-groups
- Presenting the results of the discussion to the entire training group
- Continuation of discussion and summarizing

“Brainstorming” aims to collect as many ideas as possible to free students from the inertia of thinking to activate creative thinking to overcome the habitual course of thoughts when solving the problem posed. “Brainstorming” can significantly increase the efficiency of generating new ideas in the training group^[13].

The basic principles and rules of this method are the absolute prohibition of criticism of the ideas suggested by the participants as well as the encouragement of all kinds of remarks and even jokes.

The didactic game is an important pedagogical means of activating the learning process in a professional school. In the process of the didactic game, the trainee must perform actions similar to those that can take place in his professional activity. As a result, accumulation, actualization and transformation of knowledge into skills and abilities, accumulation of personal experience and its development takes place. The didactic game technology consists of three stages.

Involving in a didactic game, playing mastery of professional activity on its model contributes to a systematic, holistic development of the profession.

Internship with the performance of the official role is an active method of training in which the “model” is the sphere of professional activity, the reality itself and imitation affects mainly the performance of the role (position). The main condition of the internship is the performance under the supervision of the training master (teacher) of certain actions in the real working conditions. Simulation training involves working out certain professional skills and skills to work with various technical devices and devices. The situation, the situation of professional activity is simulated and the technical device itself (simulators, instruments, etc.) acts as a “model”^[14].

Gaming design is a practical activity, during which engineering, design, technological, social and other types of projects are developed in game conditions that maximize the re-creation of reality. This method is characterized by a high degree of combination of

individual and joint work of trainees. The creation of a project common to a group requires on the one hand, each knowledge of the technology of the design process and on the other hand, the ability to enter into communication and maintain interpersonal relationships with the aim of solving professional issues^[15].

Game design can go into real design if its result is a solution to a specific practical problem and the process itself will be transferred to the conditions of the existing enterprise or to training workshops. For example, work on the order of enterprises work in design student offices, the production of goods and services related to the professional activities of trainees. The technology of project training is considered as a flexible model of the organization of the educational process in a professional school, oriented to the creative self-realization of the trainee's personality by developing his intellectual and physical abilities, volitional qualities and creative abilities in the process of creating new goods and services. The result of the project activity are educational creative projects, the implementation of which is carried out in three stages. Educational creative project consists of an explanatory note and the product itself (service). The explanatory note should reflect:

- Selection and substantiation of the project theme, historical background on the project problem, generation and development of ideas, construction of basic reflection schemes
- Description of the stages of the construction of the object
- Selection of material for the object, design analysis
- Technological sequence of product manufacturing, graphic materials
- Selection of tools, equipment and organization of the workplace
- Labor safety and safety in the performance of work
- Economic and environmental justification of the project and its advertising use of literature
- Application (sketches, schemes, technological documentation)

The designed product is subject to such requirements as manufacture ability, economy, environmental friendliness, safety, ergonomics, aesthetics, etc.

The technology of project training contributes to the creation of pedagogical conditions for the development of the creative abilities and qualities of the student's personality that he needs for creative activity, regardless of the future specific profession.

Computer training technologies are the processes of collecting, processing, storing and transmitting information to a learner through a computer. To date, the most common are such technological areas in which the computer is^[16]:

- A means for providing the educational material to students for the purpose of transferring knowledge
- A means of informational support of educational processes as an additional source of information
- A means to determine the level of knowledge and control over the assimilation of educational material
- A universal simulator for acquiring the skills of practical application of knowledge
- A means for conducting educational experiments and business games on the subject of study
- One of the most important elements in the future professional activity of the trainee

At the present stage in many vocational schools, both separate software products for educational purposes and Automated Training Systems (ATS) are developed and used in various academic disciplines. ATS includes a set of educational materials (demonstration, theoretical, practical, controlling), computer programs that control the learning process^[17].

With the advent of Windows operating system in the field of vocational training, new opportunities were opened. First of all, this is the availability of interactive communication in so-called interactive programs. In addition, it became possible to widely use graphics (drawings, diagrams, diagrams, drawings, maps, photographs). The use of graphic illustrations in educational computer systems allows at a new level to transmit information to the learner and improve her understanding.

Increased productivity of personal computers has made possible a fairly wide application of multimedia technologies. Modern professional training is difficult to imagine without these technologies which allow expanding the scope of computers in the educational process.

New opportunities in the system of vocational education are opened by hypertext technology. Hypertext (or hypertext) or a hypertext system is a collection of diverse information that can be located not only in different files but also on different computers. The main feature of hypertext is the ability to navigate through the so-called hyperlinks which are represented either as a specially formed text or a certain graphic image. At the same time, there may be several hyperlinks on the computer screen and each of them defines its "travel" route^[18].

The modern hypertext learning system is distinguished by a convenient learning environment in which it is easy to find the necessary information, return to the material that has already been traversed and so on. Automated learning systems built on the basis of hypertext technology, provide a better learning ability, not only due to the visibility of the information provided. The use of dynamic, i.e., changing, hypertext allows the

student to be diagnosed and then automatically select one of the possible levels of learning the same topic. Hypertext training systems present information in such a way that the trainee himself, following graphical or textual links can use various schemes of working with the material. The use of computer technologies in the system of vocational education contributes to the following pedagogical goals:

- Development of the trainee's personality, preparation for independent productive professional activity
- Realization of the social order, conditioned by the needs of modern society
- Intensification of the educational process in the vocational school^[19]

Innovative teaching technologies that reflect the essence of the future profession form the professional qualities of a specialist are a kind of testing ground in which students can work out professional skills in conditions close to real ones.

International experience convinces that the quality of training was is and will be a priority in vocational education. Based on the analysis of the Soviet vocational school and modern Russia, it should be noted that this issue has always been given great attention both by the educational management bodies of all levels and by the vocational education institutions themselves. Unfortunately, the result was not always what we would like to have^[20].

During the Soviet period, technology was used to "refine" the quality of knowledge, skills and skills of future workers and specialists directly at state enterprises. In the new market conditions, this technology does not work owners of small and large enterprises do not need unqualified staff and are not going to be patrons of their training. This is one of the main contradictions of this time.

This situation pushes the heads of educational institutions to search for new technologies to improve the effectiveness of training. There are a lot of interesting and most importantly, practical-oriented developments in the Institute for the Development of Vocational Education of the Ministry of Education of the Russian Federation, sponsored by Prof. I.P. Smirnov, A.T. Glazunov, academician E.V. Tkachenko, etc. The paradox is that in the Russian regions this is known by hearsay and from any new including approved, developments are dismissed as from annoying flies, complaining at the same time that there are no necessary recommendations. The reasons are obvious: reluctance to dive into the problem; lack of specialists in innovative pedagogical technologies; lack of necessary conditions to facilitate their implementation. The differences between the Kazakhstan and German vocational education systems are as follows:

The professional education of Germany is based as you know, on a dual system which assumes not only the interest of the vocational school and enterprise-the customer of the personnel but also the responsibility for observing the education standard, the availability of highly qualified teaching staff, the highest professional level of masters of industrial training, modern educational and material-technical base and finally, independent commissions that take exams both at the stage of attestation and at final qualifying examinations^[21].

Democratization of the educational process in German vocational schools, piercing all its participants: from the student to the leadership. Awareness of the need for students to acquire knowledge in order to further their application in practice as well as the fact that the success of professional activity depends on the level of their qualification which means, well-being, a place in society; -Quality for Germans is first of all a moral category that forms a feeling of pride for oneself, your work, your country.

Along with the above, it is necessary to note a new direction in the professional school of Germany. This is not just a slogan or a call but a whole system of measures that provides for a high efficiency of using budget funds and material resources in achieving the final result. In such circumstances, any proposed project or innovation is subject to thorough examination by the board of the vocational school, employers and organizations involved in its financing. With a positive conclusion, the project receives approval, a grant for its implementation and material encouragement of its developers.

For the sake of justice, it should be recognized that there are many creative collectives in domestic vocational education institutions. An example is the trade unions of Almaty, Taraz, Astana regions, territories. However, the general state of the quality of training in the system of vocational education remains at a rather low level. The main and widely known reasons for this are: low pay for the vocational school staff, hence, their low qualifications, lack of motivation to use new pedagogical technologies; a negative impact on the quality of training for the abolition of the institution of basic enterprises that were guarantors of vocational schools. The same problem generates uncertainty of graduates in the future. I note that the experience of countries with developed economies shows that the well-being of owners directly depends on the well-being of young people which is in demand on the labor market.

In connection with the existing objective reasons (disintegration of the USSR, low salaries of educators, outdated equipment), the introduction of innovations in the educational system of the Kazakhstan is difficult. While the Western education system is subject to change much more. However, in our country there are also

institutions in which the pedagogical process passes through innovative technologies. In many respects it is a merit of teachers-enthusiasts.

The change in the role of education in society determined most of the innovation processes. From passive, routineized, occurring in traditional social institutions, education becomes active. The educational potential of both social institutions and the personal is being updated.

Previously, the unconditional reference point of education in Kazakhstan was the formation of knowledge, skills, skills, providing readiness for life, understood as the ability to adapt the individual in society. Now, education is increasingly focused on the creation of such technologies and ways of influencing the individual in which a balance is ensured between social and individual needs and which by launching the mechanism of self-development, prepare the personality for the realization of one's own individuality and the changes in society.

Public transformations in our country have brought to the fore the problem of modeling in the educational sphere. Kazakhstan's exit from the crisis, the rationale for the development of education, the definition of immediate and long-term programs require innovative action and broad modern thinking. Modeling takes a special place here as a high-tech method of scientific analysis and foresight.

Modeling is a specific multifunctional technology, but its main task is to reproduce on the basis of the similarity with the existing other substitute object (model). Its objectives on the one hand are to reflect the state of the problem at the moment, identify the most acute contradictions and on the other hand to determine the development trend and those factors whose influence can correct unwanted development:

- Activization of activity of state, public and other organizations in search of an optimal solution of problems
- Let's single out two groups of requirements that the model must meet
- Be simple, more convenient; give new information contribute to the improvement of the facility itself
- To contribute to the improvement of the characteristics of the object, the rationalization of the methods of its construction, management or cognition

Therefore, when drawing up a model development algorithm on the one hand, strict targeting, linking its parameters with expected results and on the other hand, sufficient "freedom" of the model should be ensured, so that, it is capable of transformation depending on specific conditions and circumstances could be an alternative, have the largest number of options in stock^[22].

Kazakhstan scientists noted the relevance of the proposed new principles for the organization of primary vocational education. This is due to the fact that the Concept for the Modernization of Kazakhstan Education for the period up to 2010 has formulated the task of outstripping the development of primary and secondary vocational education which is new in its formulation. This involves the formation of an open education system, its interaction with the surrounding world, primarily with labor markets and educational services.

Today, more intensive scientific research is needed on the ways of transition to the state-social model of professional education management, the redistribution of a number of functions in favor of employers, their inclusion in the formation of the content of state standards of vocational education, curricula and programs. The system of primary vocational education needs to be freed from social isolation, giving it an open character and the ability to self-development on the basis of new principles of organization oriented towards the labor market and social partnership.

Since, the adoption of the Federal Law "On the Approval of the Federal Program for the Development of Education" significant changes have taken place in the Kazakhstan education system and its financial provision. The implementation of numerous medium and long-term large-scale experiments on the development of elements of modernization of education at various levels has begun. For example, the Russian government approved a number of federal target programs in the field of education which are implemented in parallel with the Federal Program for the Development of Education. The volume of their financing is close to the amount of funding for this program and for such a program as "The development of a unified educational information environment", it significantly exceeds.

For the modern stage of the development of Russian education is characterized by ever greater integration into the global educational space. In 2000, Russia, like most of the countries that are members of the United Nations, signed the Dakar agreements on the implementation of the Education for All program. In 2003, Russia became one of the European countries participating in the Bologna process. Therefore, for the development of the Federal Program for the Development of Education for a new period, it was necessary to clarify the purpose, status and structure of the program from the point of view of their more dilapidated regulation.

It should be noted that a number of issues were resolved when in August 2004, Federal Law No. 122 was issued, amending the Education Act. In particular, provisions on the competitive procedure for the development of the Federal Program for the Development of Education and its legislative approval were deleted and by status it was equated with other targeted federal programs^[23].

As a result of the intensive work of the team created by the Ministry of Education and Science of the Russian Federation with the active participation of the Russian Educational Establishment, a large group of scientific and practical workers, the Concepts of the Federal Program for the Development of Education and the program itself integrated with the Federal Target Program "Development of a Unified Educational Information Environment". Thus, the Federal Targeted Program for the Development of Education is the logical continuation of these joint programs, a document that largely determines the financial fate of Russian education in the coming years.

The protocol of the meeting of the Government of Russia dated August 11, 2005, the Federal Targeted Program for the Development of Education is included in the list of federal target programs for 2006. Taking into account the comments received from the Ministry of Economic Development, the Ministry of Finance and other ministries and departments, the text of the program has been finalized and submitted for consideration by the Government of Russia and its activities are closely interrelated with the Priority directions of reforming the educational system of the Russian Federation.

Priority Directions for the Development of the Educational System of the Russian Federation, approved by the Government are a concretization of the main provisions of the Concept of the Modernization of Russian Education for the period up to 2010, taking into account modern conditions.

The federal target program is developed taking into account the priority directions of the industry development, therefore, the implementation of its activities will become the basis for effective implementation of the state educational policy of Russia at the present stage.

The principal differences between the new program and the 1992 sample program are first of all in the approaches to its formation and implementation. The most important among them is the focus on achieving measurable results, estimated on the basis of socio-economic indicators and support for "growth points" (so-called development programs and projects).

All-Russian and system-wide significance of the problems to be solved and the proposed changes; selection of projects in terms of their compliance with modern educational and information technologies and world quality criteria: active involvement of civil society institutions in the formation and implementation of activities. For the first time, a comprehensive approach to project implementation has been applied including scientific and methodological support, approbation and dissemination of the results, regulatory and legal, personnel and logistical support and the introduction of information and communication technologies.

The target program for the development of education for 2006-2010 is a set of interrelated activities and resources that cover changes in the structure, content and technologies of education, the management system, organizational and legal forms of subjects of educational activity and financial and economic mechanisms. It is noteworthy that in the new program considerable attention will be paid to projects related to solving the actual problems of the modern school: renewing the content and technologies of education, improving the quality of educational services, introducing new models of remuneration for teachers and regulatory budget financing, introducing new state standards on the basis of a competence approach, profile education in high school, models of public-public management in educational institutions *deniyah*, creating nationwide system education quality evaluation, a single information infrastructure educational space.

For example, up to now, federal programs for development and education (the content of education, the development of educational methods and technologies) and a single educational information environment (computerization of educational institutions) have been involved in the formation of a unified educational space throughout Russia. As a result of the integration of these programs in the years to come, these directions will be implemented in a single way: first of all, by filling educational Internet resources and providing online access for students and teachers.

The increase in the contribution of the state should be accompanied by an increase in the efficiency of the use of the funds by the education system itself and the elimination of non-earmarked expenditures.

An important strategic feature of the new program will be the actual refusal of the targeted allocation of funds to the subjects of the Russian Federation. It is assumed that the regions themselves will have to determine the best, promising educational institutions that can follow the path of innovative development. They will participate in the contest, the winners of which will be given a state order for the development of the educational infrastructure, the purchase of equipment, internships for trainees abroad and other purposes. Thus, the winners will be megaprojects which will allow you to get the system product at the output. In addition, it is supposed by means of autonomization to give educational institutions the possibility of independent economic activity for obtaining additional sources of income.

And educational institutions that do not meet the necessary requirements for the level of education in general, may be deprived of funding.

The federal target program also presupposes the implementation of such an important project for the country's education system such as the introduction of normative per capita financing for educational institutions^[24].

The program consists of a system of activities in accordance with the main tasks grouped into four major blocks in the main areas of activity. The peculiarity of such a block structure is that if financial resources for an event are not enough, it will be eliminated and the funds between other activities will not be redistributed.

According to the plan of the developers including the experts of the Kazakhstan Education Ministry, the main task of the program is to systematically transform the Kazakhstan school as a whole (both general and higher) for a significant increase in the efficiency of using budgetary funds and creating a unified educational information environment.

In accordance with the Concept of the Federal Targeted Program for the Development of Education, its strategic goal is to provide conditions for satisfying the needs of citizens, society and the labor market in quality education by creating new institutional and public mechanisms for regulating the educational sphere, updating its structure and content, developing the fundamentality and practical orientation of educational programs to form a system of continuous education. To achieve a strategic goal, it is necessary to solve a set of specific tasks in the following specific areas: improving the content and technologies of education; development of the quality assurance system of educational services; improving management effectiveness in the education system; improvement of economic mechanisms in the sphere of education.

The main result of the program's implementation should be to ensure equalization of access to quality education by introducing educational programs for children of senior preschool age, introducing profile education in high school, introducing a system for assessing the quality of education and creating a system of continuing professional education. Among the expected results, the leading development of a number of leading universities, called to become centers for the integration of science and education, exemplary training of highly professional personnel should be specially mentioned.

The implementation of the federal target program for the development of education is divided into three stages: the first stage (2006-2007) envisages the development of models for development in individual areas, their testing, as well as the deployment of large-scale transformations and experiments; The second stage (2008-2009) is designed to implement measures to ensure the creation of conditions for the implementation of effective models developed at the first stage; The third stage (2010) is the introduction and dissemination of the results obtained in the previous stages.

To assess the effectiveness of solving the tasks of the program, a system of indicators and indicators characterizing the course of its implementation and the impact of program activities on the state of the education

system was developed. The most significant of them, reflecting strategic priorities are the development of human capital and the training of professional human resources of the required skill level; assistance in strengthening the institutions of civil society, improving the quality of life of the population.

In the course of the implementation of the Federal Targeted Program for the Development of Education, it is envisaged: to develop and implement fundamentally new educational standards in <60% of educational areas in 1.3 times in comparison with 2005 to increase the number of vocational education programs that have received international recognition which will allow Russia to enter the international labor market in 1.5 times in comparison with 2005 to increase the proportion of students enrolled with the use of information technology to raise the rating of Russia in international surveys of the quality of education to the average for the OECD countries, etc.

In addition to the federal budget, funds from the budgets of the constituent entities of the Russian Federation will be used to finance the program's activities and funds from non-budgetary sources will be focused on the implementation of joint projects within the framework of federal and regional educational development programs.

Education in Kazakhstan is obliged to pass to a special innovative development mode in which it is possible to preserve the best traditions of our education and simultaneously take into account the world trends in the development of educational systems to correlate our education with world standards and standards. The fundamental principles of education are accessibility, transparency, quality, continuity and constant renewal, competitiveness.

The most important step in this direction is the priority national project "Education" which sets strategic goals for innovative development of education.

In the materials of the report at the State Council it is said "... the pedagogical universities (which are already a very weak link in the Kazakhstan higher school) are extremely inefficient both professionally and from the point of view of using budgetary public funds in terms of their corporate interests which preserves their abundance, prevents them from getting rid of non-core types of educational activity and concentrate on the main tasks of training a teacher of modern times the demand of modern society and all levels of Kazakhstan education. The reform of higher pedagogical education should be ahead of the reform of the school".

And the capital shows an example in this. It is in the universities of the Department of Education of Moscow that a new content of pedagogical education is being formed without waiting for the introduction of a new generation of state standards for teacher education:

- A significant increase in the share of psychological, pedagogical, philosophical-cultural and ecological-hygienic cycles
- The focus on practical-oriented training-mastering innovative forms, methods; technologies of educational, educational, organizational, project, psychological and consultative activities and communications
- Introduction of simultaneous preparation of every future teacher of the general education school, both in the main subject and additionally (if desired) one or two
- Inclusion in the preparation of a primary school teacher specialization in various areas of music, art, theatrical, technical, applied and folk art
- Preparation of pedagogical staff for free computer skills use of information and telecommunication technologies, knowledge bases in the educational process
- Generative compulsory pedagogical practice (internship) including the writing and protection of qualification work on the basis of comprehending the experience of their own pedagogical activity in the context of broad educational practice as well as passing state examinations
- Continuity and preparation of the scientific and pedagogical shift (postgraduate study, doctoral studies in 35 scientific specialties, dissertational councils, Russian Teacher Support Foundation, “Teacher of the Year” contests in the nomination “Pedagogical Debut”, “Leader of Education”)
- Moral and material incentives (various bonuses, surcharges from VFU, awards, diplomas, letters, gratitude)

Educational and educational unit: structure and content of specialist training (training in 35 specialties and 48 areas, continuous pedagogical practice, elective researchers courses and programs, elective courses).

Quality control of training specialists (attestation and accreditation, the Center for the Quality of Education of the University, the University Scientific and Educational District).

Information and analytical work (participation in government funds, commissions, competitions, monitoring service, science days, conferences, round tables), expertise.

At the interuniversity scientific and practical conference organized by the Department of Education of Moscow on the basis of the Moscow State Pedagogical University last summer, the most important issue was raised for the development of the Republic of Kazakhstan’s education on innovative directions in pedagogical activity:

According to the scientists, the validity and importance of the higher school in the innovative development of the system of professional education of the capital, its special role in the implementation of the priority national project “Education” in creating the basic prerequisites for a breakthrough in innovative development and strengthening the competitiveness of the educational system. They have a powerful scientific, methodological and educational potential, actively participate in the implementation of a set of measures ensuring the full-scale inclusion of the Russian higher school in the Bologna process in improving the quality and strengthening the practice-oriented nature of vocational education that meets the current and future needs of the region in the development of university complexes.

In Kazakhstan, the topic of innovative pedagogy and information technologies in the additional vocational education is active, specifying that the implementation of the ideas of informatization leads the educational system in accordance with the needs of the information society, providing it with ample opportunities for development.

For example, the rector of the Moscow Humanitarian Pedagogical Institute, Doctor of Pedagogical Sciences, Professor A.G. Kutuzov expressed the opinion that the

Creation of a system of basic educational institutions as innovative and resource-methodological centers for the development of education in accordance with the needs of the regions as well as for the organization of effective forms of pedagogical practice and internship at higher education institutions.

For example, Universities of Russian: Pedagogical universities of the Moscow City Department of Education work in an innovative mode. The following blocks provide the directly innovative field of the Moscow City Pedagogical University.

Material and technical block: Modern equipment (<1200 computers, local fiber-optic network, 41 computer classrooms, 22 multimedia classes), various service departments, modern laboratories for classes:

- Culture-laboratory areas (18 educational buildings, training center “Istra”)
- Fundamental scientific library (650 thousand units of storage, electronic catalog, Russian and international book exchange, single ticket system)
- A block of scientific and pedagogical staff
- Professional qualification of scientific and pedagogical staff, professional knowledge of modern pedagogical information technologies (more than 70% of teachers with academic degrees and titles, internships, advanced training)

standards of pedagogical education do not dovetail with the standards of general education, all of them, practically without exception are focused on the teacher's ability to prepare students only for socialization and nothing more. Therefore, it is necessary to unite efforts to create an interuniversity group that will be able to develop fundamentally new standards and test them on its base.

Also, the Rector of the Moscow State Academy of Business Administration, Doctor of Philosophy, Professor TI Kostina touched upon the problem of forming a new system of interaction between educational institutions with all subjects of the labor market as well as regional authorities aimed at maximum coordination and realization of the interests of all participants in this process by organization of a permanent dialogue on a mutually beneficial and equitable basis, stressing that in new socio-economic conditions universities are doomed to be innovative.

As the pedagogical universities transfer the functions of preparing teachers for preschool and primary education, the mission of secondary pedagogical education can be reduced to training specialists for the additional education sector. The inevitable reduction in the training of teachers with an average professional in the future will make it possible to re-orientate a number of pedagogical colleges into educational institutions of an economic profile with the organization of training in professions that do not require large financial costs (social worker, sign language interpreter, secretary-referent, clerical, logistic, etc.) freeing from these functions the city's economic colleges. On the basis of one of them it would be possible to realize the concept of a social college specializing in the education of disabled people. In conclusion, the conference participants summarized that innovation activity is not a tribute to fashion but an engine for modernization of education, a point of growth. The high school of the capital makes a significant contribution to the solution of various problems, not only education but in general the social sphere of the city.

It is clear that Almaty and Almaty oblast have the greatest opportunities for integrating innovations into the pedagogical process. This is due to many factors such as: proximity to Europe, a significant concentration of financial resources in addition, the vast majority of the outstanding minds of the Russian Federation live in the capital.

CONCLUSION

Pedagogy, like any other science is subject to numerous changes and development. This is due, first of all to the fact that the society has more and more new requirements for specialists. NTP encourages pedagogy to find more effective, effective ways of transforming the common man into a socially significant person.

The result of constant development, improvement of methods of pedagogy are innovative technologies, i.e., technologies, thanks to which an integrative process of new ideas for education takes place.

However, the introduction of such technologies involves a number of difficulties (financial means, conservatism of some officials in the educational sphere, insufficient development of technologies). In addition, despite the obvious need for innovation, nevertheless, they should be introduced with caution. Otherwise, reckless innovation can lead to a crisis in the educational system. And yet it is important to understand that pedagogical innovations are an integral part of the development of pedagogy and they are necessary for improving the education system.

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