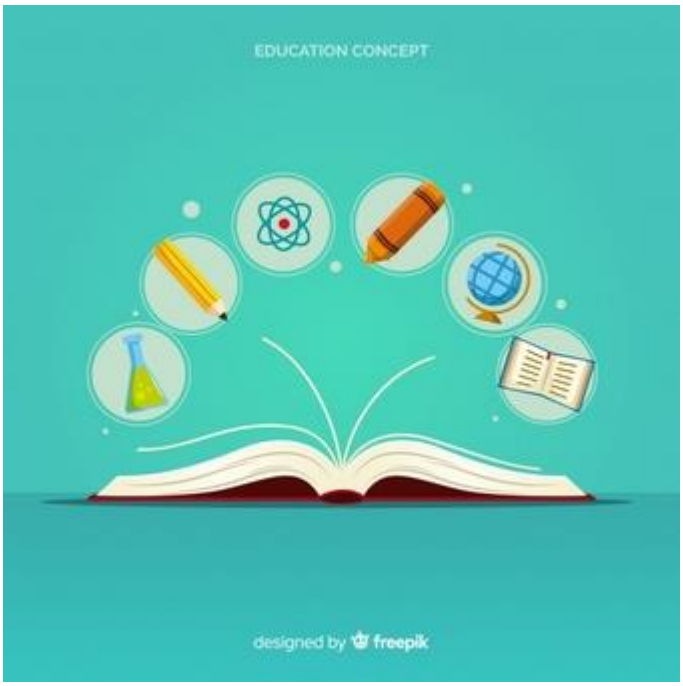
КРАМАРЕНКО Б.В., БЕКЕНОВА Д.У.

PEDAGOGICS

Учебное пособие



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Рецензенты:
Кукубаева А.Х., доктор педагогических наук, профессор, Кокшетауского университета им. А. Мырзахметова, г. Кокшетау
Жумагулова Н.С., кандидат педагогических наук, доцент, Кокшетауского университета им. А. Мырзахметова, г. Кокшетау
Лепешев Д.В., кандидат педагогических наук, асс.профессор, Кокшетауского университета им. Ш. Уалиханова, г. Кокшетау

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Авторы учебника раскрывают общие основы педагогики, проблемы дидактики, теории воспитания с учетом достижений современной науки и педагогического опыта.
Предназначено для магистрантов и преподавателей вузов, а также практических работников системы образования.

CONTENT

INTRODUCTION

Science "pedagogy" has accumulated rich historical experience that is part of modern scientific knowledge and human culture, therefore a complete scientific picture of the world is not possible without the inclusion of this science in the worldview of a specialist - without initial knowledge on pedagogy.

Strategic objective Kazakhstan is among the 50 most competitive countries in the world dictates new requirements for the education system. Kazakhstan integrates intothe Bologna Process. Competitiveness of education and competitiveness of the specialist are among the important components ensuring the competitiveness of our state.

The main goal and objectives - the course of higher education pedagogy and this textbook - the formation of competences in the field of vocational and pedagogical activities of a higher education teacher, his mastering the theoretical foundations modern pedagogical science and the formation of readiness for creative solving professional tasks.

Knowledge of pedagogy helps specialists in modern society independently acquire knowledge throughout life according to the new concept of education - “Education in throughout life. "In addition, in most specialties working in the "person - person" system, there is actually a pedagogical one, and the enlightenment function is a function, be it a lawyer or a police inspector,an economist, manager or marketer, journalist or guide, art historian or a writer, political scientist or psychologist, even an engineer or programmer, and the person himself during life acts as a “teacher” in the family and at work with by colleagues.

The isolation of higher education pedagogy in a relatively independent field of scientific knowledge is caused by the needs of the development of modern society in improving and increasing the effectiveness of training specialists for all branches of modern production. Today, the quality of vocational training is characterized not only by a high level of professional knowledge and skills. The personal factor that determines the possibilities of competent and responsible fulfillment of professional and social roles, the production of new ideas, technologies and solutions, the ability to effectively communicate in the fields of scientific and practical activities and education comes to the fore. Accordingly, higher education should be directed not so much to the student’s knowledge and skills as to the disclosure of the essential forces, the activity abilities of a person to reflect and the need for continuous self-education and self-development. In this set of problems, it is important to train teachers, which largely determine the effectiveness of education. The teacher in modern conditions becomes not so much the carrier and transmitter of information, as the organizer of the cognitive activity of students, their independent work and scientific creativity.

Currently, the educational process in universities has become difficult in its tasks, intensity and content. It requires a deep psychological understanding by teachers of the patterns of learning activities, principles and methods of teaching and education, the formation of personality. The reform of education, the transition to the three cycles of education (undergraduate-master's and doctoral studies) and the credit

system of education actualizes a new layer of knowledge and pedagogical science aimed at competent design and implementation of innovative educational technologies.

Among the many factors that determine the effectiveness of the activities of a higher school teacher, his professional and pedagogical competence comes to the fore.

The present program of the course "Pedagogy" (for university graduates) **is aimed** at preparing undergraduates for teaching in higher education.

The content of the course reflects the modern tendencies of humanization of the democratization of the educational process in higher education, new technologies of training and education, focuses on the individual and creative style of pedagogical activity.

The purpose of teaching the course is to form the basis of the professional and pedagogical culture of a higher school teacher, to form pedagogical competence, to familiarize future teachers with general problems, methodological and theoretical foundations of higher school pedagogy, modern technologies of analysis, planning and organization of training and education, communicative technologies of subject-subject interaction teacher and student in the educational process of the university

Mastering the course should help students **understand:**

• Actual problems of modern higher education and pedagogical science;

• The essence of the educational activities of the university teacher

• The role of subject education in the future professional training;

• Being a subject of professional activity and master the way of self-determination and

To be competent in:

• in the application of effective university technology education;

• main types of pedagogical communicative interaction;

• solving actual psychological and pedagogical problems, evaluating the results achieved

• organization and management of students.

Designed for undergraduates of all specialties.

GLOSSARY ON PEDAGOGY OF HIGHER SCHOOL

CHAPTER 1GENERAL PRINCIPLES OF HIGHER EDUCATION PEDAGOGY

1 DEVELOPMENT OF HIGHER EDUCATION IN THE WORLD EDUCATIONAL SPACE

1. 1. Modern educational paradigm

In the conditions of the increasing interdependence of countries and the strengthening of competition, the issues of transition to a knowledge economy, an intellectual society, become topical. As a result, many countries and educational institutions are forced to revise their approaches in the field of providing high-quality education. The issue of providing a high level of education has become global. In other words, the governments of most countries of the world have come to realize that education plays the same important role in ensuring the competitiveness of their national economies.

Higher education likes the primary and secondary education, developed during the 20th century in the direction of growth of its availability and massization.

The system of higher education itself is a significant sector of the economy, as a source of scientific knowledge and educated workers for other sectors.

According to UNESCO, in the next 30 years more people will receive a university education than in the entire previous history of civilization. So why is getting higher education becoming so important today?

Today, a new type of economic growth has emerged in the global economy based on the use of knowledge, human capital and innovation as the most important resources. The national wealth of the developed countries is only 5 percent natural resources, 18 - physical (produced) capital, and the main place - 77 percent - is occupied by the knowledge and ability to dispose of them. At the heart of the economy of developed countries is intellectual potential. It can be called intellectual economy - as opposed to raw materials.

The formation of an innovative, intellectual economy is impossible without improving the competitiveness of human capital, and education, in turn, is a factor in the growth of the competitiveness of human capital.

Successful implementation of strategic objectives set by the President of the Republic of Kazakhstan N.A. Nazarbayev in his Address to the people of the country "Strategy Kazakhstan-2050" for the coming decades, the leadership of Kazakhstan in the region should be ensured by such major factors as innovative development of the economy and human capital.

In recent years, the interest of the scientific community to the theory of human capital has increased significantly. In our opinion, the basis for the formation and creation of competitive human capital should be a high-quality education of the population, including higher education.

First, the issues of improving the efficiency of higher professional education have gained special importance in recent years due to the dynamically unfolding processes of economic globalization and the challenges facing different countries to achieve competitive advantages in world markets, including the global market for educational services. Kazakhstan has accumulated significant educational and scientific potential, characterized by a high level of vocational training. Indicators of education of the population in the republic are quite high. They are close to the maximum values. The literacy rate is 99.5%, the cumulative proportion of students aged 6–24 years old is 78.7%, of which 99.2% in urban areas and 56.3% in rural areas. Despite the fact that Kazakhstan has a sufficiently developed system of higher education, the emergence of a modern domestic economy based on intelligence and knowledge poses such daunting tasks to higher education, which have no analogues in the past, that their solution requires a review of strategy and forms and management methods of higher education.

So, for example, due to increased globalization, the mobility of both the students themselves and the faculty of universities will increase.

Obviously, the requirements for staff competencies will grow. The transition from industrial society and simple technological operations to the post-industrial type of economy requires a large number of people who can work with modern technology packages in a changing external environment, forcing a person to independently assess the situation and make responsible decisions.

Serious changes in the content of education will be required, the essence of which is to go beyond the limits of the translation of object-organized knowledge. According to many scientists, the central processes of the new education will be communication and the technologies of intellectual activity (thinking), aimed at solving actual problems, and the highest form of educational activity will be strategic project and team work. In such a system, the traditional role of the professor ("subject") is changing, which should be complemented by communication organizers, industry and technology experts, and project managers. It is for these types of professionals that the most intense competition in the international intellectual market has already developed.

In the opinion of P. V. Malinovsky, four global waves of professionalization have been identified.

1) the emergence and spread of representatives of the liberal professions;

2) the massive spread of professionalism of the new type and the emergence of the so-called mass professions;

3) the transformation of standards of professionalism into the image of everyday life and activities through the spread of standard and universal technologies - paraprofessionalization. Today it is a community of experts;

4) global changes that form the core of a new post-industrial economy are associated with the emergence of a new wave of trans professional professionals. Trans professional, unlike paraprofessionals, rely on new universal (cross-cutting) competencies, and are focused on developing unique business proposals for growing global markets based on the formation of new key competencies.

Thus, in Kazakhstan, as in many post-Soviet countries, second-wave professionals are mainly trained and, in a small number, representatives of the first type. Representatives of the third and fourth types in our country are not trained at all.

The second trend is the commercialization of education. By the end of the last century, an entire branch of the world economy formed the international market for educational services with annual sales of several tens of billions of dollars and consumers of several million students. A new export item has appeared - higher education for foreign students [6].

According to estimates of the World Trade Organization, the capacity of the world education market is 50-60 billion dollars. A steady US leader, controlling almost a quarter of the world's financial education turnover. In second place in terms of educational sales UK with 15 percent. Germany and France follow next: the first holds a little more than 10% of the world market, the second holds a little less. Australia, Canada and Spain, having mastered 7-8% of the market [7], complete the leadership list.

Soviet higher education, especially technical, enjoyed worldwide recognition and respect. Of course, it is necessary to recognize that the post-Soviet countries are losing their positions in the global market for educational services in the face of fierce competition. The leadership of the country, realizing the need to improve the quality of personnel, sets the task of entering universities in the world rankings. Thus, one of the important tasks set in the State Program for the Development of Education of Kazakhstan for 2011–2020 is the inclusion of at least two universities in world rankings. Kazakh higher education institutions are actively involved in global rankings, the most successful results they have in the QS ranking. Two domestic universities in 2012 entered the top 400 most successful universities in the world according to the British agency.

We will not be able to compete in ratings with world giants directly - we do not have enough resources, time, reputation. Statistics show that the average age of a world-class university is 180 years, and more than 45% of Nobel laureates are graduates of only 12 universities.

In order to achieve international competitiveness, domestic universities should carefully analyze and rationally use foreign experience, but at the same time develop and apply their own approach. First of all, it is necessary to focus on the release of competitive graduates in all regional subsystems of the higher education system of the Republic of Kazakhstan. Continuity and systematicity in the field of education is important: secondary specialized education (bachelor) must correspond to the profile of higher education (master), higher education must correspond to the profile of post-university education (Ph.D.).

The third factor that has a powerful influence on the field of higher education throughout the world is the informational transformation. The explosive development of digital technologies and the Internet has led to the fact that the content of education in general and the content of subject knowledge in particular are no longer the unique property of a particular professor, and more recently of a particular university. And

this forces us, at a minimum, to reconsider the forms of delivery and evaluation of knowledge in the educational process.

In the relevant literature a lot is written about the change of learning technologies in accordance with modern technical and socio-humanitarian achievements. The lecture-seminar model of education will undergo significant changes; online courses developed by the best universities will be actively used. Universities will switch to active learning methods. New technologies can not be imposed from the outside, they will bring with them new professionals who will come to our universities. And new educational technologies, in our opinion, should be aimed at forming the actual competencies of the adult population demanded by the labor market.

Most often, the problems of the national education system are associated with insufficient funding. The lack of funding, along with a fairly high level of depreciation of the fixed assets of Kazakhstani universities, makes it difficult to organize the educational process in higher educational institutions of the country.

Over the past 15 years, spending on education in the republic has increased by 9.5 times. Thus, according to the information of the Ministry of Finance of the Republic of Kazakhstan, expenditures on education in 2012-2014 amounted to 1 trillion 132 billion tenge. Including in 2012 - 365 billion tenge, or 105 billion tenge higher than planned figures for 2011 [9].

However, the share of government spending on education as a percentage of GDP was 3.6%, which is still 1.5-2 times less than in developed countries (Figure 3, table 1).

In the world, the level of spending on education of 5-6% of GDP is considered the norm. In OECD countries, the level of expenditure on education averages 6.2% of GDP, and 85% of expenditures on education are financed by the state. In Kazakhstan, from 1991 to 2012, the level of public spending on education to GDP fell from 6.5% to 3.6%. In 2008-2012. The share of government spending on education in GDP fluctuated at a level of 3.5-3.8%.

A striking indicator of the state of education in Kazakhstan is that on average only 15% of high school graduates can apply for admission to universities on state orders. As a result, approximately 80-90 people per 10 thousand people study in Kazakhstan at the expense of state budget funds.

For comparison, we note that in Russia, in accordance with the law, at least 170 students per 10 thousand people should be trained at the expense of the state budget. population.

In European countries, this figure is even higher - 300 students per 10 thousand people with costs at the level of 10 thousand US dollars per year per student. In particular, an analysis of the education system in developed countries showed the following picture:

In Finland, there are 20 universities and 28 polytechnic institutes. This country has developed one of the best education systems in Europe. The main principle that guides the educational system in this country is “to earn not by training, but by

applying acquired knowledge". Education is free, including for foreigners, despite the fact that the country's population is 5.4 million. People.

In Australia, where the population is 19 million, students study at 40 universities, with only 2 of them being privately owned.

In France, with a population of 65.4 million, students are trained at 87 universities, including 3 national polytechnic universities and only 5 non-state ones. 99% of all education expenses are financed by the state, and higher education is free.

In Germany, with a population of 82.6 million people, there are 345 educational institutions, 98% of which are state-owned. Higher education is free for domestic and foreign students.

In Japan, the population is 127 million, there are 600 universities, including 425 private, 42% of the population have a higher education. It should be noted that the excessively extensive network of universities, the emergence of "dwarf" universities have led to a decline in the quality of higher education.

In the United States, the population is 307 million people, 2500 universities and colleges with a four-year course of study (bachelor's) carry out training, and a total of 15 million students study.

Sources of financing - 50% of government, 50% of private spending.

In Kazakhstan, with a population of 17 million people, there are 139 higher educational institutions, of which only 43 are state civilian universities, and the majority are private universities - 83. Most of the students, namely 81%, are studying on a fee basis.

The main problem of Kazakhstan education is the problem of underfunding. In Kazakhstan, one of the components of the reform of the higher education system is the desire to reduce government costs for the maintenance of universities, include self-financing mechanisms and provide indirect financial assistance to the most capable applicants.

The appropriate quality of the infrastructure can be ensured through adequate funding, which is possible only if the state approach to higher education is maintained as a national priority.

Budget funding should be used as an economic mechanism to improve the quality of educational services. Higher education is forced to constantly adapt to the requirements of rapidly developing societies and economies. Due to these circumstances, there is a deep crisis of traditional financing systems. State budget funds are limited everywhere, and additional sources of funding are required. The majority of educational institutions, although they have learned how to attract extrabudgetary funds, are not able to successfully continue their activities today without the support of the state.

A study of key trends in the modern system of higher education, an analysis of the state of development of education in Kazakhstan in comparison with other countries of the world allowed to draw the following conclusions and suggestions:

1) Education becomes the main means of achieving a new quality of life, preserving human health, mastering new areas of activity and entering the

information space. Education in general and higher education, in particular, is the main component of human potential and the main resource in the modern world.

In the Republic of Kazakhstan, education, and training traditionally occupy a key position in the value system. Kazakhstan has been in the top four countries with the highest education development index for three years. According to the UNDP human development index, it is in the group of countries with high HDI

2) According to scientists V.Nikitin and S.Datsyuk, the education system consists of three levels:

the lower or the first is the real ordinary consciousness;

medium - object-procedural scientific consciousness;

top - principles and ideology.

Consequently the need to train competent specialists who think at the level of principles and could produce innovations in education in all 4 foci, at the same time reaching the world level of educational services If we consider the approaches to change education, then the following should be noted The trouble with educational reforms not only in the post-Soviet countries, but also in all countries, including the United States and Europe, is that there is no picture of a new approach to education. In order for it to emerge, we need ideas about previous approaches or paradigms of education. There are five paradigms of education:

1. Traditional, where there was a transfer of knowledge and skills through cults and rituals.

2. The estate where the elite was trained in management systems in a rigid class framework, and the rest studied in workshop schools and scholastic universities.

3. Industrial, where the educational pipeline first appears, when a student moves through the curriculum. The Bologna system is an industrial education adapted to the consumer society.

4. Theoretical, where they teach how to work with ideal ideas and their practical research testing. A separate subspecies is methodological education, where the basis of training is methodology and systems thinking.

5. Technological, where the Master disappears altogether, and the relationship goes to a consumer-network pair. This includes the so-called "distant education."

So, most countries in the world have chosen to abandon most of these paradigms and make single-paradigm education - industrial, within the Bologna process.

Scientists argue that it is necessary to develop a higher form of education - the formation of an approach paradigm. In general, to launch the innovation process in Kazakhstan, we need people who all understand this and have new competencies. What are these competencies?

Possession of the main types of mental competence (memory, interpretation, understanding, thinking, reflection) - our universities create only the first two. The ability to take a theoretical position and to distinguish it from the survey and research positions. To be able to analyze the future through complex social models, to be able to design, program and strategize.

3) The observed growth in the number of trainees, which can be called "massive", is obviously an indicator of the strengthening of the national economies of the countries of the world and the increase in the standard of living of citizens living in them. However, the “massive” nature of this process requires the attraction of more and more financing and improvement of the quality of educational services. In turn, the analysis of indicators shows that the country does not provide an adequate level of funding for the infrastructure of universities. So in Kazakhstan it remains low (3.6% of GDP). Understanding that improving the quality of education depends, among other things, on the level of state financing of the industry, we believe that it is necessary to increase state financing of education in Kazakhstan to 6% of GDP.

1.2. Megatendency development modern higher education

The Rome Club of Scientists and Managers made a great contribution to the awareness of the global problems of mankind. It was created by a group of scientists in 1968. The ideas of the Club of Rome and the history of its formation are consecrated in the book "Human qualities" by Aurelio Peccei, who is called the founder of the club. The club’s problems along with various global problems of the threat of nuclear war, poverty and hunger included illiteracy and an outdated education system, the decline of moral values, the loss of faith, etc.

The main task of mankind is the improvement of its quality. The main goal of "satisfying human needs" should be the self-realization of man. The main emphasis in the understanding of general development should shift from what a person wants to have and how he can achieve this, to what he is and what he can become. Only through the development of human qualities and human abilities can change be achieved.

Club members advocated the need for the full development of new education systems based on "humanism" and "humanistic revolution" (Pechchei A., 1968).

Humanization is a key element of the new pedagogical thinking. The main meaning of education in this case becomes the development of personality, and this means a change in the tasks facing the teachers, methods and techniques of the teacher. The humanization of education presupposes the unity of the general cultural, socio-moral and professional development of the individual, which in turn leads to a revision of the goals, content and technologies of education.

Humanization of education is the orientation of the educational system and the entire educational process towards the implementation of the following points: the development and establishment of relations of mutual respect among students and teachers, based on respect for the rights of each person; preservation and strengthening of their health, self-esteem and development of personal potential. It is this kind of education that guarantees students the right to choose an individual development path.

The process of humanization is the strengthening of the measure, the degree of humanity of the education system.

The implementation of the new paradigm of education and the humanization of education is reflected in the introduction of personality-oriented learning and the transition to a competent approach to the formation of the personality of a professional — a specialist in a new formation.

The tendency of humanization of education is manifested at the present stage through the humanization of education, i.e. expansion of the social and humanitarian disciplines in the content of education; and also change of approaches in the organization of training with the main emphasis on the disclosure of the personality and education of its qualities.

Humanitarianization is a system of measures aimed at the priority development of general cultural components in the content of education, orienting it regardless of the level and type of studying social problems, for the benefit of a person, his ability to communicate freely with people of other nationalities and peoples who have any profession and specialty, for a good knowledge of the native language, history and culture, for fluency in foreign languages, for legal and economic literacy of a person and, thus, for the formation of personal maturity.

Another scientist is the Russian philosopher N.N. Pakhomov sees the crisis of education in three gaps 1) between education and society, in other words - this is a problem of socialization, i.e. youth adaptation to reality; 2) the growing gap between education and culture - the school teaches knowledge, not values and norms; 3) an increase in the lag of education from science.

These three features that characterize the crisis of education clearly demonstrate today's diseases of higher education - this is the graduate's inability to adapt to society, lack of cultural development, low ethical inculcation, lack of knowledge of modern progressive technologies, methods, mismatch of knowledge and practically required professional knowledge, inability to assess problems in a complex, covering all aspects - from purely professional to social, ethical, ecological, and, finally, immersion in a specialty occurs after graduation and it takes time to enter it, etc.

N.I. Pakhomov also writes: "In the 20th century, there was a change in the type of cultural and historical inheritance. If, in M. Heidegerr's figurative expression," a person entered history backing away, then now "time is passing from the future". The type of inheritance was previously in the form of the transfer of a set of past images, which were so convenient to present in the form of a logically complete system of knowledge and rules. From centuries of this type of inheritance, mankind in a matter of decades made a turn to a new innovative type of socio-cultural inheritance, in which the main thing was not the assimilation of previous recipes, but preparation for mastering the methods and content of knowledge and practices that did not previously exist. "Thus, education should provide the specialist with not only fundamental knowledge in the specialty, but also a methodology of knowledge, methods of lifelong learning.

In other words, we turn to the paradigm "Education is not for life", but "education through life", "lifelong education" - **"lifelong learning"** (LLL), "lifelong education". This paradigm began to take shape in the 60s of the twentieth century. At

its core is the concept of continuity of education. It was first presented at the UNESCO conference in 1965 by P. Langrand. Since the mid-1970s, the idea of continuing education has been supported in almost all countries, becoming the main principle of educational reforms.

The increase in the volume of information, knowledge, the emergence of new technical means, communications and telecommunications dictate the requirements of educating a new person:

1 able to independently acquire knowledge, mobile, creative worker;
2 with a high level of responsibility, both professional and universal;
3 with a high culture of personality, balanced professional, moral, ethical, aesthetic component of a person;
4 with complex new scientific knowledge, having mastered a new modern layer of science, a new scientific picture of the world;
5. able to independently regulate, control themselves, as well as unload, etc.

The presented requirements for the specialist of the new century have something in common with the complex of the following requirements for the content of education formulated in the pedagogical literature (Kolesnikova IA, 2003):

- formation of a picture of the world, adequate to the level of development of modern knowledge;
- ability to work with information flows in a changing society; New education paradigm
- culture of communication in the systems "person - person", "person - computer", "person - computer - person";
- the development of project activities as a way to change reality;
- the development of new socio-economic realities;
- preservation of health;
- the study and development of its own human development potential;
- spiritual development in the noospheric era.

Thus, the specifics of the information society define new requirements for the professional activities and education of the future specialist.

- "In the XXI century, each person will have to learn and engage in self-education throughout his life,"
B.S. (Gershunsky B.S., 1998).

Computerization of education is considered in a broad sense as a complex of social and pedagogical transformations connected with the saturation of educational systems with information products, means and technology; in a narrow way, as the introduction of information tools based on microprocessor technology into institutions of the education system, as well as information products and pedagogical technologies based on these means (Russian Pedagogical Encyclopedia, 1993). Computerization of education is a part of the process of Computerization of society, a

complex of social and pedagogical transformations associated with the introduction of computers and information technologies in educational institutions, in the educational process. Computerization of education has received the most widespread throughout the world in recent decades - due to the availability of various types of modern video, audio equipment and computers for the education system and the relative ease of use.

Computerization of education is the widespread introduction of computer and IT technologies into education.

We understand computerization more widely. Three properties of information: novelty, diversity and dynamism, as it were, are transferred and characterize modern education. This thesis will be called the pattern of computerization of the educational process and decipher it.

By *novelty* is understood:

1. Updating educational paradigms;

2. Updating the content of education - both in each of the disciplines, and the emergence of new disciplines. It is expressed in general, in updating the entire content of education, and in the daily hard work of the teacher in each discipline.

3. Updating the forms and methods of teaching, etc.

Dynamism- dictates the pace of updating knowledge, accelerating the pace of the learning process itself, exchanging information in the learning process, etc.

Diversity- entails diversification of education, which is expressed in the diversification of educational institutions, sources of funding, as well as the diversification of curricula, plans, courses, etc.

Education diversification is one of the key megatrends of modern higher education. Diversification is the orientation of the educational system to a wide variety of educational institutions, educational programs and government bodies.

Understood in a broad sense: not only diversification of institutional structures, but also as diversification

The pattern of computerization of the educational process of courses, plans, programs, sources of funding, internal and governing structures of the institute, access conditions, etc. There are 4 types of diversification of higher education:

1) the development of private higher education institutions along with state ones;

2) the development of regional higher education institutions;

3) the development of the so-called non-university sector, implying a short-cycle and more professionally-oriented;

4) the development of non-traditional types of institutions, such as "distance" (discovery) and short-term for working people (European Journal of Education, 1994). Diversification results in new educational properties, such as variability (choice of a learning trajectory or educational programs), profile (choice of a training profile in the upper secondary level), etc. This becomes a feature of modern education.

Globalization and democratization of education.

Kazakhstan has the following key characteristics of globalization:

• "localization" - the penetration and adaptation of Western methods and techniques, technologies, and forms of education. However, the internal content either remains the same or undergoes serious adaptation processes (for example, the credit system of education);

• "horizontal communication" - the introduction of forms of Western universities in the education system of Kazakhstan (for example, International University - Nazarbayev University); the emergence of international universities on the basis of two states and funded by them (for example, Kazakh-British Technical University, Kazakh-Russian University, etc.);

• implementation of joint research and educational projects;

• openness of the education system, contributing to an increase in the number of foreign students, as well as the existing opportunity for citizens of the RK to study and improve their qualifications abroad, and the percentage of such students is gradually increasing (for example, the state program "Bolashak", the number of young people going abroad to study has increased to 3000 by 2005)

• the development of a distance learning system;

• the desire to enter the international educational space contributes to the unification of training levels (undergraduate - graduate - doctoral Ph.D.), educational standards, recognition of educational documents, degrees, etc .;

• unification of training specialties according to the International Standard Classification of Education (UNESCO)

• the entry of universities and higher education institutions into international and regional associations;

• international accreditation of educational programs in foreign accreditation centers, etc.

The global educational space is becoming a reality thanks to globalization processes. It brings together national education systems in which the same development trends appear while maintaining diversity. This is the democratization of education, i.e. the accessibility of education for all and the continuity of levels of education, the provision of autonomy and independence to educational institutions; equal rights to education for everyone; organization of the educational process in which a creative and free-thinking person is formed (A.N. Dzhurinsky, 2000).

ATTENTION!

- *Democratization of education is the accessibility of education for all people*

The principle and megatrend of democratization has deep historical roots in pedagogical science. This is the idea of pansophism Ya. A. Komensky - a synthesis of knowledge gained by civilization and delivering it through the school in their native language to all people. In modern education, the theory that really embodies the idea of forming a free and creatively thinking person is personality-oriented learning. We will look at it in more detail in the following sections.

The following identical properties are the expansion of the educational services market; education becomes a priority object of financing in developed countries; a departure from the orientation towards the average student, an increased interest in gifted children and young people, to the peculiarities of the disclosure and development of their abilities in the process and means of education; search for additional resources for the education of children with developmental disabilities, disabled children (Bordovskaya N.V., Rean A.A., 2001).

Standardization is the orientation of the educational system for the implementation of primarily the state educational standard - a set of mandatory academic disciplines in a clearly defined amount of hours.

Multivariance means creating in the educational system conditions of choice and providing each subject with a chance to achieve success, encouraging students or students to independently choose and make responsible decisions, ensuring the development of alternative and independent thinking. In practice, multivariance manifests itself through the ability to choose the pace of learning, to achieve different levels of education, to choose the type of educational institution, and also through the differentiation of learning conditions depending on the individual characteristics of students or students (in class, group, individually, using a computer, etc.) .

Multilevelness is the organization of a multi-stage educational process that provides the possibility of achieving at each stage a level of education corresponding to the interests of the person. Each level is a period that has its own goals, terms of training, and features. The moment of completion of training at each stage is characterized by the qualitative completeness of education.

Fundamentalization presupposes an intensification of the relationship between the theoretical and practical preparations of a young person for modern life activity. Particular importance is attached here to the deep and systemic development of scientific and theoretical knowledge in all disciplines of the curriculum of the educational system, whether it be a school or a university.

Individualization is the accounting and development of the individual characteristics of students and students in all forms of interaction with them in the process of training and education. Individualization of learning is aimed at overcoming the discrepancy between the level of learning activities that are set by the program and the real possibilities of students. Individualization of training allows you to create optimal conditions for the realization of the potential of each student.

Continuity of education is a philosophical-pedagogical concept, according to which education is considered as a process covering the whole life of a person, as a continuous, purposeful mastering of sociocultural experience by a person, self-education of a person during the whole activity in connection with rapidly changing

living conditions in modern society. The continuity of education in the Soviet Union since 1970 was proclaimed as a general approach to the development of the education system in the country. In 1986, the task was to create a unified system of continuous education. Currently, in Kazakhstan, the development of continuous education problems is caused by a departure from the rigid centralization of state regulation of education, the social need to develop a more flexible educational system, the integration of the existing educational system and educational institutions of new type, coordination and integration of Kazakhstan education with the global educational space.

1.3 History of the Bologna process

The history of the Bologna process can be divided into three stages:

1) Prehistory: from the Great Charter of Universities (1988) to the Bologna Declaration;

2) the beginning: the Bologna Declaration (1999);

3) development: after the Bologna Declaration.

The ideas of creating a European university community and a single European higher education space emanate from the University of Bologna, the oldest in Italy and throughout Europe. Back in 1986, in preparation for his 900th anniversary, he addressed all universities in Europe with a proposal to adopt the Great Charter of Universities - Magna Charta Universitarum. The idea was enthusiastically picked up, and during the anniversary celebrations in 1988, this document proclaiming the universal and enduring values of university education, as well as the need for close ties between them, was signed by the rectors of 80 universities.

Gradually, the process of European integration of higher education began to rise from the university to the state level. In 1998, a meeting of the ministers of education of four countries (France, Great Britain, Germany, Italy) was held in Paris at the famous Sorbonne University, also during the celebration of its anniversary. The Sorbonne Declaration “On the Harmonization of the Architecture of the European Higher Education System” signed by them for the first time substantiated the strategic goal of creating a European Higher Education Area and accelerated further developments.

In the next 1999, in the home of Magna Charta, in Bologna, took place the historic First Conference of thirty European ministers responsible for education. Their declaration “European Higher Education Area”, defined the main objectives leading to the achievement of comparability and, ultimately, the harmonization of national educational systems of higher education in Europe.

Later meetings of European education ministers became regular with an interval of two years, each time new countries joined the Bologna process. In 2001, the ministers hosted Prague, in 2003 - Berlin. The number of participants reached forty, including Russia, which signed the Bologna Declaration during the Berlin Conference. The fourth meeting took place in May 2005 in the Norwegian city of Bergen. Here, five countries of the former Soviet Uniondeclared joining the Bologna

process. The fifth meeting was in 2007 in London, the sixth - in 2009 in Leuven / Louvain-la-Neva, the seventh - in 2010 in Budapest, the eighth - in 2012 in Bucharest. Kazakhstan signed the Bologna Declaration in 2010.

In addition to the landmark conferences of ministers in the framework of the Bologna process, a number of international events are held on its individual aspects.

ATTENTION!

Kazakhstan signed the Bologna Declaration in 2010.

The main objectives of the Bologna process

The text of the Bologna Declaration sets forth six main objectives of the integration process:

1. Adoption of a system of easily understood and comparable degrees, including through the introduction of a pan-European Diploma Supplement, to provide employment opportunities for European citizens and enhance the international competitiveness of the European higher education system.

2. The adoption of a system based on two main cycles - gradual (udergraduate) and graduate.Access to the second cycle will require the successful completion of the first training cycle of at least three years. The degree awarded after the first cycle should be claimed in the European labor market as a qualification of the appropriate level. The second cycle should lead to a master's degree and / or a doctor's degree, as is customary in many European countries.

3. The introduction of a system of loans by type of ECTS - the European system of re-calculation of credit units of labor-intensiveness, as an appropriate means of supporting large-scale student mobility. Credits can also be obtained in non-tertiary education, including lifelong learning (LLL), if they are recognized by host universities.

4. Promoting mobility by overcoming obstacles to the effective implementation of free movement, paying attention to the following:

- students should be provided with access to educational opportunities and practical training, as well as related services;
- teachers, researchers and administrative staff should be recognized and credited for periods of time spent on research, teaching and internship in the European region, without prejudice to their rights established by law.

5. Promoting European cooperation in ensuring the quality of education in order to develop comparable criteria and methodologies.

6. Promoting the necessary European views in higher education, especially regarding the development of curricula, inter-institutional cooperation, mobility schemes, joint training programs, practical training and research.

From what has been said it is clear that the model for the future harmonized European was a two-tier system of higher education typical for Great Britain and the

United States (bachelor's degree - magistracy), which is used in various ways in most of European, and not only European, countries. There are very good reasons for choosing a two-tier system. Currently, knowledge is becoming obsolete very quickly. Therefore, it is desirable to give a graduate relatively extensive training and teach him to replenish, and update knowledge, skills, and abilities as needed bachelor's degree aimed at such training (in different systems - from 3 to 4 years). In this replenishmentthe bachelor's degree provides a completed higher education and n A master's degree (usually 1 - 2 years) implies a narrower and deeper specialization, often the undergraduate student is focused on research and / or teaching work.

The principal feature of the modern approach to vocational education is its continuity, the need for continuous training, lifelong learning (LLL). The Bologna Declaration pays special attention to this.

The main objectives of the Bologna Process are:

- building a European higher education area as a key direction for the development of citizen mobility with the possibility of employment;
- formation and strengthening of the intellectual, cultural, social and scientific and technical potential of Europe;
- increasing prestige in the world of European higher education;
- ensuring the competitiveness of European universities with other educational systems in the struggle for students, money, influence;
- achieving greater compatibility and comparability of national higher education systems;
- improving the quality of education;
- increasing the central role of universities in the development of European cultural values, in which universities are considered as carriers of European consciousness.

ATTENTION!

Basic principles of the Bologna process:

- Multi-level higher education system;
- Introduction of academic credit system;
- Academic mobility of students, teachers and administrative staff of universities;
- United European Diploma Supplement;
- Quality control of higher education;
- Creation of European research space.

CREDIT EDUCATION SYSTEM

The credit system of education originated in the USA in 1869. The President of Harvard University, Charles Eliot, introduces a credit hour system. 1870-1880 it is gradually being promoted to the US college and school system. In Europe, the credit system of learning breaks a long way: 1969 - Sweden, since 1988, France, Spain,

Germany, and the United Kingdom. In 1997, the European Commission developed the ECTS system - the European Credit Transfer System. The introduction of the credit system of education and ECTS makes it possible to measure the content of higher education in credit hours, which makes it possible for mobile specialists and students to be mobile.

The essence of the credit system of education is expressed in the framework parameters of the organization of the educational process in the undergraduate program based on credit technology (Source: MES RK website www.edu.gov.kz).

1. The credit technology of education is introduced in the system of higher education of the Republic of Kazakhstan with the aim of internationally recognizing national educational programs and ensuring the mobility of students and faculty.

2. Credit technology of education is an educational technology that increases the level of self-education and the creative development of knowledge on the basis of individualization, electiveness of the educational trajectory within the framework of the regulation of the educational process and accounting for the amount of knowledge in the form of loans.

3. Credit - a unified unit of measurement of the student's study. One loan is equal to 1 academic hour (50 minutes) of student work per week during the academic period of 15 weeks. Each academic hour is necessarily accompanied by 2 hours (100 minutes) of independent student work.

4. A mandatory condition for the completion of studies is the student's receipt of a set number of credits by component: compulsory and optional, at least 128 theoretical training credits, of which at least 8 are learning English.

5. One academic year is, as a rule, 34 weeks, of which 30 are theoretical studies, 4 - mid-term / final control. The academic year is divided into two semesters or three terms. The introduction of a summer semester with a duration of up to 10 weeks is allowed to meet the needs of accelerated, additional training and to eliminate the difference in curricula.

6. The average score (GPA) is the weighted average of the level of achievement of the student in the selected program (the ratio of the sum of the work of credits to the digital equivalent of the total grade for the discipline to the total number of credits for the current period of study).

7. The university sets the GPA pass rate when translating from course to course.

8. If a student under the state order did not receive the required number of credits, as provided for in the working curriculum, he has the right to re-examine the relevant courses on a fee basis.

9. The 4-year undergraduate program consists, as a rule, of 40 academic disciplines.

10. The volume of the discipline should be an integer number of credits.

Each discipline is studied during one academic period.

11. During the academic period, various forms of student's current control are envisaged.

12. General educational disciplines (GLC - GER) - (cycles of social-humanitarian and natural sciences) make up 35-45 credits. 7 disciplines are obligatory: History of Kazakhstan, Philosophy, Kazakh (Russian) language and Foreign language, Mathematics, Computer science. Physical culture is implemented in the framework of additional types of training and is not included in the total amount of credits, additional elective disciplines are chosen depending on the direction of training. All types of practices and other types of training are implemented as part of additional educational programs and are not included in the total amount of loans.

13. The student builds his educational program under the guidance of a mentor (adviser).

14. To assist students in the development of academic disciplines, the formation of the institute of tutors is recommended.

15. To implement the educational process, it is necessary to have an educational and methodological complex of a teacher and a student for each discipline, including a description of the course in print and electronic form, forms and means of controlling the level of self-mastery of the student's CDS, indicating the content and timing of their implementation.

16. To ensure high efficiency of the CDS, it is necessary to introduce an IWST (office hours) - independent work of a student under the guidance of a teacher with hours indicated in the schedule. The remaining hours of the CDS must be confirmed by the tasks of the tutor, which require the student to work independently every day.

17. Each student must be provided with a reference guide for the entire period of study and educational-methodical complex for each discipline.

18. The guidebook includes: • rights and duties, Student's Code of Conduct; • working curriculum for the period of study; • GPA calculation method; • requirements for final state certification.

19. The educational-methodical complex for an academic discipline for a student consists of: • a training program (Syllabus) for each discipline; • plan of practical (seminar) classes; • tasks for independent work of the student; • and etc.

20. Training sessions should be conducted in active creative forms (case studies, training, debates, round tables, seminars, etc.)

21. A form of knowledge control of students in academic disciplines is an exam held at the end of their study. Knowledge is assessed by a multi-point letter system:

1.4 Competitiveness of education

The competitiveness of any country depends on its natural and human potential. However, many states have convincingly proved that even with few natural resources, a country can be among the most advanced countries. Consequently, it is human potential that is of key importance and, above all, education, competence, creative abilities of people and the conditions for their realization.

It is advanced education that becomes the main source of competitive advantages in the 21st century. Competitiveness is a property of an object, characterized by the degree of real or potential satisfaction of a specific human need and ability to withstand competition compared to similar objects represented in this market. One way or another, and the competitiveness of higher education is determined primarily by the competitiveness of its graduates and the success of their activities in the sectors where they work. In this aspect, the high competitiveness of the Russian higher education system is not yet talked about, because it does not ensure the success of its graduates in most areas of their employment. This is indicated by the results of international comparisons.

In early 2003, the United Nations Industrial Development Organization presented the report “Competition through Innovation, Innovation and Training”, which presents the results of a study of 87 countries. The top three were Finland, Singapore, Switzerland, Ireland. With a low level of production in the machine-building complex (40th place), patent work (66th place), research works (33rd place), Russia, for example, was on the 6th place in terms of training and skills. The initial determinant of a country's competitiveness is how well it copes with new technologies. And this is possible only on the basis of appropriate training of personnel, and above all higher education.

According to the World Economic Forum, a composite index of a country's competitiveness is measured on the basis of macroeconomic indicators that are most important for economic growth and correlate with the country's medium-term and long-term prospects. One of them is the level of education of workers.

The reality is that global competition between states in the 21st century goes into the fields of education and science, which are of strategic importance for economic growth and human development. It is intellectual educational capital that will determine the vector and dynamics of the development of countries and their competitiveness on the world stage. In the competition in world markets, the winners will be countries that offer new, high-quality products and services that are developed and produced by personnel with high professional training.

In the 21st century, education can be competitive only when young people are ready for constant changes and renewal, for continuous learning, and adaptation to rapidly changing conditions and requirements.

Competitiveness is revealed in practice, and in education it presupposes a practical return, i.e., that graduates have not only knowledge, but also competencies and abilities to apply them. This is the weak link in improving the competitiveness of Kazakhstani education. At the same time, it is quite obvious that the renewal of higher education, its innovative potential, the content and forms of organization today are increasingly lagging behind the rate of change in the world, the dynamics of the modernization of universities in developed countries. Although in America, not everything is perfect with education. So, in the US, according to the latest data, 90% of adults do not know how to use the knowledge gained in school. Only 40% of American schoolchildren have no reading problems. The average level of knowledge in the exact sciences is much lower than necessary. Only a third of teachers are able

to use higher technologies in their work. It is not by chance that the United States annually attracts hundreds of thousands of highly qualified foreign specialists to high-tech manufacturing and the field of information technology.

In the XXI century a global international educational environment is being formed with increasing competition. This is evidenced by the intensity of student exchanges and connections, as well as the rapid development and revitalization of international educational organizations that conduct Internet-based training. Every 20th student is enrolled in distance learning programs. At the present stage, international competition is intensifying in the market of educational services. Thus, in the last decade, Universities in Singapore, Australia, New Zealand, Canada, France and Germany have sharply intensified on the world stage.

1.5. National educational systems

The world educational space unites national educational systems of different types and levels, significantly differing in philosophical and cultural traditions, the level of goals and objectives, and their quality state. Therefore, one should speak of the modern world educational space as an emerging single organism, while in each educational system along with global trends growing desire to preserve national identity to preserve diversity.

The reforming of the education system in Kazakhstan is characterized by the search for the optimal correspondence between the established traditions in the national pedagogy and the new trends connected with entering the world's educational space.

The modern development of Kazakhstan society requires the development of innovative, future-oriented learning. Innovations in the education system are mainly associated with changes related to the purpose, content, methods, technologies, educational support, management system, financing system, curriculum.

Very important tendencies are characteristic of the world educational space, which were especially pronounced at the end of the 20th century.

The first trend is the ubiquitous orientation of most countries towards the transition from elite education to high-quality education for all.

The second trend is to deepen interstate cooperation in the field of education. The development of this process depends on the potential of the national education system and on the degree of equality of the conditions of partnership between states and individual participants.

ATTENTION!

- On June 19, 1999, in the Italian city of Bologna, the Ministers of Education of 29 European countries signed the Declaration on the European Higher Education Region.

The third trend suggests a significant increase in the world education of the humanitarian component due to the introduction of human-oriented scientific and academic disciplines: political science, psychology, sociology, cultural studies, ecology, ergonomics, and economics.

The fourth trend in the development of world education is a significant spread of innovations while preserving the existing national traditions and national identity of countries and regions. Therefore, the space becomes multicultural and focused on the development of man and civilization as a whole, more open to the formation of an international educational environment, supranational in the nature of knowledge and familiarizing the person with world values.

Organizational regulation of the world educational space is carried out by UNESCO

To date, the following educational models have emerged in the world:

American, French, German, English and Russian (secondary school - high school or college - institute, university or academy - postgraduate study - doctoral studies).

The main objective of the Bologna process is to create a pan-European system of higher education, which will help increase the mobility of citizens in the global labor market and strengthen the competitiveness of European higher education. Currently, the United States is the absolute leader in providing international educational services.

Self Test Questions

1. The modern education paradigm is….
2. Describe globalization as the megatrend of higher education.
3. What trends in the development of education can be called megatrends and why?
4. Expand the basic parameters of the world educational space.
5. What caused the emergence of the Bologna process? What are his goals?
6. What determines the competitiveness of educati

2. SYSTEM OF THE HIGHER PROFESSIONAL EDUCATION IN KAZAKHSTAN

2.1. HISTORY OF UNIVERSITY EDUCATION

The word "university" is translated from lat. as an aggregate. In etymology there are several interpretations of its appearance. Already in the period of the birth of universities in the "aggregate" put a different meaning. In the first place, the organizational aspect was emphasized; in fact, the university began to call the result of combining different types of universities. According to another version of the famous book of the late XIX century N.Suvorova about medieval universities, "the university means the wholeness or combination of all sciences, all branches of human knowledge (Universitas literarum)".

The university (from the Latin word Universitas - the aggregate) is a higher educational institution where not only universal knowledge is taught, but also scientific research is being conducted, a culture is being developed, new knowledge is being produced, as well as service activities for the nearest socio-cultural environment. In our opinion, such features of the university are formed from the very beginning of its formation in the European culture of the XI-XII centuries. The first prototypes of the universities were the famous centers of antiquity - the Pythagorean Union, the Academy of Plato, the Likey of Aristotle, and the Alexandria Museum, founded by Ptolemy, with the richest library. These ancient educational institutions left a big mark in world culture, but, ahead of their time, remained units. The need of society for educational institutions of this type appeared much later. One of the first universities in the full sense of the word was Bologna, which was opened in 1088. The inevitability of the university, both as an idea and a form of its concrete realization, is associated with a new stage in the development of society. The Marxist approach to the sociology of education connects the emergence of universities with economic, political factors — the development of a monetary economy, trade, the growth of cities, the improvement of agricultural production, and the growth of people's well-being. But many researchers reject it, believing that these facts themselves did not entail the emergence of universities in each specific case.

The prototypes of universities in ancient Greece were philosophical schools that operated in Athens:

- The Academy, founded by Plato, founded in 387 BC, existed for about 1000 years and was closed in 529. It studied: philosophy, which included dialectics, anthropology, ethics; mathematical disciplines - arithmetic, geometry, stereometry; rhetoric and astronomy;
- Likey, created by Aristotle (peripipathic school, where Aristotle, while reading a lecture, was walking with his students);
- School of the Stoics,
- School of Epicureans.

In Alexandria, Ptolemy II (308-246 BC) was founded Museum (the sanctuary of the Muses). The best scientists were invited here. Among his teachers and pupils

are Archimedes, Euclid, Eratosthenes and others. At Museum there was an enormous repository of manuscripts for its time (by 250 BC - about 500 thousand) - the Alexandria Library, an observatory, a botanical garden. It studied all the then science

The first universities were organized in the Middle Ages, XI-XV centuries: Bologna (1088), University of Paris (1200), University of Naples (1224), Oxford (1206), Cambridge (1231), Lisbon (1290), etc.

The vitality of universities is confirmed by the point of view of F. Mayor that out of 80 European organizations that emerged before 1520 and continue to exist to this day, almost 70 are universities. In the history of university education there are 5 stages of development:

1) XI - XII century - the emergence of universities;

2) the end of the XII century - the beginning of the VI. - the birth of the institutions of the Universitas Magustrum and Scholarium or the Stadium of the General (Studium Generale);

3) II half VI - the end of the XVIII century. - period of recession and reduction of universities;

4) XIX - I half of the twentieth century. - the restoration of universities and the German transformation, the formation of the tradition of research universities;

5) after World War II - the present period - the mass and diversity of universities (Aldo Geuna, 1996).

University, as the famous Russian scientist and teacher of the early twentieth century wrote, S.I. Hesse, is an autonomous in its essence union of scientists, literally a "self-continuing union." Principles of university education, he called:

- completeness of scientific knowledge presented at the university;
- the spirit of freedom and creativity in the process of teaching and learning;
- the ability of the university to self-fulfillment by training teachers and scientists (N. Bordovskaya, A. Rean, 2001).

2.2. HISTORY OF HIGHER EDUCATION KAZAKHSTAN, THE STAGES OF ITS FORMATION.

If not to consider the Orenburg Institute of Public Education formally as the first higher education institution in Kazakhstan, the Abai Kazakh Pedagogical Institute founded in 1928 is objectively the first higher education institution of Kazakhstan. He became one of the centers of national pedagogical science and education, which solved the most important tasks of preparing specialists for public education.

As previously noted, in the 20-30s a network of schools is rapidly developing, wishing to get an education is growing every year, which caused the opening of the second educational institution in the west of the republic. So, it was organized in the 30s Ural Pedagogical Institute. Today, it is a multidisciplinary educational institution, which is among the first after Kazakhstan joined the Bologna process, began to solve

the problems of the quality of training of specialists and the satisfaction of the needs of the individual and society.

The third educational institution that was opened in Kazakhstan is the Kazakh State University. Its formation, as well as the two previous universities accounted for the most difficult thirties of the XX century affected every Kazakhstani family. The official opening of the Kazakh State University was January 15, 1934, two faculties were opened - Physics, Mathematics and Biology, where the first 54 students were enrolled. Until the end of the 1930s, three more faculties were opened (chemical, foreign languages, philological), a preparatory department for Kazakh youth, and the list of specialties was expanded. During the war years, the Kazakh State University switched to abbreviated programs and actively trained specialists for the front — nurses, doctors, radio operators, radiologists, translators, chemical service specialists, and others.

1941 was the year of the creation of the Almaty Pedagogical Institute of Foreign Languages. Wartime in its own way placed accents, making the problem of relations with the West urgent. Kazakhstan youth with a special desire studied the leading European languages, at the same time being interested in the history and culture of the leading world powers.

In 1944, the girls were invited to their walls Kazakh Women's Pedagogical Institute. Widespread humanitarian education was offered to future teachers, musicians, choreographers, psychologists and speech therapists.

In the same year, the Kazakh State Conservatory announced admission to musicological and performing faculties. Not only the piano, violin and flute inhabited the Conservatory space. For the first time, kobyz and dombra, button accordion and balalaika sounded in the halls of its halls. The vocal department of the Conservatory has found talented, promising students.

The Kazakh State Institute of Physical Culture also opened in the last military year in 1945.

In 1963, the Institute of National Economy was formed, which reflected the trends of the progressive period in the history of socialism. The students of the Institute received a wide knowledge of economic and social sciences.

Since 1975, the Alma-Ata Energy Institute has begun to train energy professionals for the needs of the republican industry and the urban economy.

In 1976, the Alma-Ata Institute of Railway Engineers began training engineers on this vital profile in the structure of transport services.

1978 donated to creative youth the Theater and Art Institute - a smithy of personnel for republican theaters, Kazakhstani cinema and television, masters of artistic and choreographic art known all over the world.

In 1980, the Alma-Ata Institute of Architecture and Civil Engineering began its training, the activity of which still gives the republic talented architects, developers, designers, designers and smart engineers.

A certain contribution to the development and formation of the pedagogical thought of the republic was made by prominent statesmen S. Asfendiyarov, SD Zhandosov, T. Zhurgenov, S. Mendeshev, T. Ryskulov, N. Torekulov, I. Omarov and

others, classics of Kazakh literature M.O. Auezov, S. Seifullin, I. Dzhansugurov, B. Maylin, S. Mukanov, G. Musrepov, G. Mustafin, artists and science workers A. Zhubanov, S. Amanzholov, E. Bekmakhanov, M. Gabdullin, S. Zhienbayev, Kh. Zhubanov, K. Dzhumaliyev, A. Margulan, M. Sarybaev, K. Satpayev, N. Sauranbayev, D. Tursunov, M. Khamrayev, etc.

By the early 1990s, there were 61 universities in Kazakhstan, where more than 280 thousand people studied. The conditionally elapsed period of time since Kazakhstan gained sovereignty can be divided into the following stages.

The first stage is from 1991 to 1994. The main tasks of this stage were the creation of a network of higher educational institutions and the renewal of higher education specialties in order to ensure sufficient independence of the republic in personnel training, meeting the needs of the labor market. The measures taken were defined in the Law of the Republic of Kazakhstan "On Higher Education" (1993). In 1994, the State Standard of Higher Education of the Republic of Kazakhstan was approved, which for the first time established the introduction of a multi-level structure of higher education in the country, academic degrees of bachelors and masters.

ATTENTION!

- *A special role in training during this period was played by the Bolashak international scholarship, established by the President of the Republic of Kazakhstan N.A. Nazarbayev in 1993. It is based on the unique idea of helping talented young people to receive quality education abroad for the further use of their experience for the benefit of the state.*

This experience was the first in the history of the post-Soviet states. By this decision, Kazakhstan declared itself as a state oriented towards accelerated improvement of the level of knowledge of its own population and the development of the country's personnel potential. For Kazakh students, this provided unprecedented opportunities.

The second stage is from 1995 to 1998. This stage is characterized by a conceptual definition of the development of the higher education system, which is reflected in the Concept of State Education Policy, approved by the National Council on State Policy under the President of the Republic of Kazakhstan on August 4, 1995, the adoption of new regulatory and legal frameworks. regulations governing the activities of higher education institutions. The basis for the further improvement and creation of state standards of the second generation was the introduction of new laws "On Education", "On Standardization", "On Certification" and other regulatory legal documents, including the State Program "Education" for 2000-2005.

The third stage is from 1999 to 2004. At this stage, there is a real decentralization of the management system of educational organizations. The principles of admission to higher educational institutions have changed dramatically, the transition to training specialists with higher professional education based on the state educational order has been made. Since 1999, a new model of forming a student contingent of higher educational institutions has been introduced through the provision of state educational grants and state educational loans to applicants on a competitive basis. In order to integrate into the world educational space in accordance with the requirements of the Bologna Declaration on the adoption of a system of easily understood and comparable academic degrees and ISCED (1997), since 2004, a multistage structure of higher and postgraduate education has been introduced: undergraduate - master's - doctoral (PhD) and Classifier of directions and specialties of a bachelor degree and magistracy. In the same year, the Unified National Testing was introduced - a general one-time test that sums up secondary education and serves as an entrance exam for universities. A new Law of the Republic of Kazakhstan "On Technical Regulation" is being adopted, on the basis of which the third generation of state standards is being developed. The work on restructuring the network of state universities was carried out. Taking into account the specifics of the country's development, Decree of the President of the Republic of Kazakhstan dated July 5, 2001 No. 648 gave special status to 8 leading universities, which should become flagships of the education system. In order to develop regional education in the country, 18 regional universities have been identified, which should become centers of education, culture and science in each field. Government Resolution No. 912 of June 17, 2000 initiated the privatization of state universities, in accordance with which a decision was made to reorganize 12 higher education institutions into joint stock companies.

The fourth stage is from 2005 year to the present. The new stage of modernization of higher education is associated with the State Program for the Development of Education in the Republic of Kazakhstan for 2005–2010. The priorities of educational policy are aimed at finding the best ways to adapt the higher education system to the conditions of a market economy.

2.3. LEGISLATIVE BASE OF DEVELOPMENT IN THE REPUBLIC OF KAZAKHSTAN OF HIGHER EDUCATION

In accordance with the new Law of the Republic of Kazakhstan "On Education" of 2007, the structure of the Kazakhstani system has been brought in line with the classification criteria of educational programs of the International Standard Classification of Education ISCED 1997, recommended by UNESCO. The educational system includes seven levels: pre-school education and training, primary, basic secondary, secondary, post-secondary, higher and postgraduate education. The accreditation of educational organizations received legal consolidation. The Interim State Control was introduced to assess the knowledge of second-year students of

higher educational institutions. (Now it is canceled, external assessment of educational achievements is used instead).

By the beginning of this stage, the number of institutions of higher education increased by 3.3 times compared to the beginning of the 1990, and this was due to the development of the non-state sector. In the WEF Global Competitiveness Index in terms of "enrollment in higher education", Kazakhstan ranked between 34th and 36th. However, the study of the experience of training in private higher educational institutions showed that most of them provide educational services at a low quality level, which did not allow the system of higher education to develop as a whole.

As a result of mass verification, the network of universities was reduced by 21%. This was a significant step in improving the image of higher education, aimed at improving the quality of education. Currently, the system of higher education of the Republic of Kazakhstan includes 147 higher educational institutions. Kazakhstan education objectively integrates into the world education system, which leads to certain structural and institutional innovations.

In 2010, Kazakhstan officially joined the Bologna Declaration and became the 47th participant in the European Higher Education Area. The Lisbon Convention on the mutual recognition of diplomas and qualifications in higher education has been adopted. Kazakhstani universities actively participate in the international programs Tempus, Erasmus Mundus, INSPIRE, and others. 38 Kazakhstani universities have double-degree education programs with foreign universities. 60 Kazakh universities signed the Great Charter of Universities. Thus, the reforms carried out in the field of higher education have achieved the democratic character of education management; a new national model has been formed, the powers of educational institutions have been expanded; introduced the principle of trilingualism; legalized non-state education sector and the right to receive education in the Republic of Kazakhstan on a par with citizens of Kazakhstan for people of Kazakh nationality who are citizens of other states.

2.4. STATE PROGRAM OF DEVELOPMENT OF EDUCATION AND SCIENCE OF THE REPUBLIC OF KAZAKHSTAN FOR 2011–2020

A new stage and directions of development of higher education in Kazakhstan are defined in the State Program for the Development of Education of the Republic of Kazakhstan for 2011–2020. They are associated with integration into the European educational space. In 2011, a very important step was taken - the implementation of the main global trend of higher education - academic mobility in Kazakhstan was ensured. Now, at the expense of the state, students of national universities can study for a semester at the best European universities, students of other regional universities of Kazakhstan - at our national universities. In addition, changes are foreseen in the Bolashak program. Thousands of students were able to study abroad for a short period, for example, a semester, and therefore return to their own university. Credit technology allows you to count such training in another university. Under the same program, there will be a gradual transition to training abroad only for masters and

doctors of PhD. The entire load on bachelors will remain in domestic universities - they should already cope at a level close to the world level. Another important innovation is the provision of academic freedom to universities. Its main meaning is that the component of choice will be increased in educational programs: up to 70% in undergraduate education, up to 80% in graduate education, up to 90–95% in doctoral studies. For the first time in the country the question of autonomy of universities. This is independence in the implementation of educational, scientific, financial, international and other activities. Nazarbayev University is already following this path; in the future, the mechanisms worked out in it will be extended to other universities. State universities will become autonomous non-profit organizations - this approach is widely used in world practice. This will allow each university to have its own face, to be recognizable on the world stage. But for this you need to dramatically improve the quality of training. One of the main factors hindering the development is the division of education and science inherited from the USSR. Therefore, after the first stage of the state program was completed, it was taken into account and in the new edition it received a new name that reflected the leading priorities: strengthening the role of science.

In high school, there is a lack of quality training, when students do not learn to apply knowledge in scientific practice, do not develop a creative style of thinking. The breakthrough in solving this problem was Nazarbayev University, created as a triple fusion of education, science and innovation.

Thus, we are already really moving away from the many years of isolation of science from higher education. The next step is being taken today - the concept of a research university has been introduced in the new Law of the Republic of Kazakhstan “On Science”. Such universities in different countries are the main suppliers of the intellectual elite. It is envisaged that such universities will implement special programs for their development, approved by the government. But the demand from them will be special - to ensure the integration of research and education, to widely involve students in science, to issue world-class scientific results. Accordingly, the classification of universities will change.

Now there will be six graduations: national research universities, national higher education institutions, research universities, universities, academies and institutes. Requirements for higher education will increase. Based on the analysis of international experience, rather stringent criteria are formed for each level, similar to world practice. And universities that do not meet these criteria will be reduced in the category and, ultimately, objectively withdraw from the market of educational services of this level. Significantly the system of accreditation of universities strengthened. Since 2012, it has been conducted by non-profit non-governmental accreditation agencies that work according to international standards and will eventually be included in the European register of quality assurance agencies. Since 2015, the practice of state certification of colleges and universities has been replaced by national institutional accreditation. These and other measures stipulated by the state program, allow to achieve a high level of quality of higher education that meets the needs of the labor market, the individual, the objectives of the industrial-

innovative development of the country and the best international practices in the field of education.

2. 5. TYPES OF HIGHER EDUCATIONAL INSTITUTIONS

According to the Law of the Republic of Kazakhstan "On Education", the following types of educational institutions are defined in the republic:

Academy - a higher education institution that implements educational programs of higher vocational education and postgraduate vocational education, carrying out training, retraining and (or) advanced training of specialists with higher vocational education for a specific field of industrial, scientific and scientific-pedagogical activity; performing research mainly in one of the areas of science or culture;

Institute - a higher educational institution that implements educational programs of higher professional education and carries out applied research;

University - a multidisciplinary higher education institution that implements educational programs of higher professional and postgraduate vocational education in a wide range of specialties; carrying out retraining and (or) advanced training of specialists with higher professional education, scientific and scientific-pedagogical workers; conducting basic and applied research; being a leading scientific and methodological center in its fields of activity;

types of postgraduate education are also defined there

Internship - a form of one-year training of medical students in a specific specialization

spiritual (religious) educational organizations - educational institutions that implement professional educational programs for the training of clergy;

juncture - a form of training of scientific and pedagogical personnel of higher qualification in military schools

Postgraduate and doctoral studies are a form of training highly qualified scientific and pedagogical personnel in educational institutions and scientific institutions.

Assistance-internship - a form of training of scientific and pedagogical personnel of higher qualification in educational institutions of art; Bachelor, Master - academic degrees and qualifications awarded to persons who have mastered relevant educational programs of higher professional education

Clinical Residency - a form of postgraduate advanced medical education;

It is assumed:

distance learning (education at a distance) is one of the forms of education, purposeful and methodically organized management of educational and cognitive activity and development of persons distant from educational organizations, through electronic and telecommunication means; professor: academic titles conferred by the relevant higher educational institution; academic titles conferred by the state certification body of the Republic of Kazakhstan at the request of a higher educational institution or research organization

Nostrification of documents on education - a procedure carried out to determine the equivalence of documents issued to citizens who have received education in other states, international or foreign educational institutions (their branches) established in the Republic of Kazakhstan

The leadership of Kazakhstan sees that only a small share of GDP has so far been allocated to the development of education in comparison with other countries and is taking measures to solve this problem. Thus, the President of the country N. Nazarbayev, in his lecture to the students of the L. N. Gumilev Eurasian University indicated that in the next three years, Kazakhstan should increase public spending on education and bring it to 4.1%.

Time will tell whether this will radically change the situation in higher education in Kazakhstan. Until the level of remuneration of workers in education and science becomes higher than the level of remuneration in the respective branches of production, it is difficult to expect significant changes in the issue of improving the quality of higher education.

2.6. MODERN MULTILEVEL EDUCATION IN UNIVERSITY

A new three-level educational program of higher educational institutions has officially been introduced in Kazakhstan. What are the cardinal differences of the new system? After four years of study at the university, the student receives a bachelor's degree. Bachelors can continue their studies in the program of the 3rd level in the magistracy (1-2 years) or become a graduate with a full higher education.

The Master of Science program is an exploratory one. You have a master’s degree diploma. Complete a graduate training program. Multi-level education system is one of the promising means of conscious management of educational reforms. The task of making the reasonable changes necessary to overcome major difficulties is facing national education.

The basis of a positive opinion embedded in the idea of multi-level education is the use of various personality characteristics, improvement of the quality of education through the development of individual educational activities of students and the provision of equal opportunities for all. What is the goal of multi-level education? The main goal is the adaptation of education to Western standards. There is a huge gap between the formation of domestic and western, which arose in Soviet times. The tendency to open joint educational programs allows our students to study in other countries. Western education brings science to the fore. That is, research work is actively encouraged. A researcher studying future master’s work gives students the opportunity to learn how to solve their tasks. There are compulsory subject courses that students need to attend, but mostly he spends a large amount of time in the invention. Mandatory educational program is missing.

For Kazakhstan, the English-American model of a multi-level education system is of undoubted interest, although it cannot be copied completely due to the lack of necessary conditions.

The integration of multi-level higher technical and professional engineering education in a single structure of a technical university is also beneficial for the state and society from the standpoint of the economics of education. It is known that the cost of education in higher education is 25-30% lower than when studying in specialized autonomous institutions.

Test questions for self-test:

1. Expand the main stages of the history of higher education in Kazakhstan
2. What is the legislative basis for the development of higher education in Kazakhstan?
3. What are the main directions of development of higher education in Kazakhstan?
4. State program for the development of education in the Republic of Kazakhstan for 2011-2020.

3 METHODOLOGY OF PEDAGOGICAL SCIENCE AND METHODOLOGICAL DEVICE OF PEDAGOGICAL RESEARCH

3.1. UNDERSTANDING THE METHODOLOGY OF PEDAGOGICAL SCIENCES AND ITS LEVELS

Methodology — from method ("method, path to goal") and logic ("scientific study") —the study of structure, logical organization, methods and means of activity. The presence of a methodology is a sign of the scientific organization of any activity, because thanks to its methodology, an activity becomes the subject of awareness, learning and rationalization. There is a methodology for various activities. For example, A.M. Novikov and D.A. Novikov [1] distinguish the methodology of scientific research, practical activities, educational activities, as well as artistic and game activities.

In the structure of methodological knowledge can be divided into two parts: the descriptive and prescriptive (normative) parts. Descriptive methodology describes the scientific approaches, concepts, principles, methods and means of activity. Prescriptive methodology characterizes the content of the activity, the sequence of the main stages and individual actions, contains instructions and standards of activity.

Some provisions of methodological knowledge are common to a number of sciences, others reflect the specifics of a particular science. The following levels are distinguished in methodological knowledge (E. G. Yudin):

Philosophical - (general principles of knowledge and the categorical structure of science in general. Methodological principles: objectivity, determinism, interconnection and interaction, development)

General scientific theoretical concepts applied to most sciences. Methodological principles-approaches: systemic, synergistic

Specific scientific level - a set of principles, methods, and procedures used in a particular discipline. Methodological principles-approaches: personal (person-oriented), holistic, poly subject, activity, cultural, anthropological, ethnopedagogical.

Technological level - methods and techniques of research, i.e. a set of procedures that provide reliable empirical material and its primary processing, after which it can be included in an array of scientific knowledge. It is clearly defined in nature.

3.2. METHODOLOGICAL APPROACHES

The general scientific level of pedagogy methodology reflects the systemic and synergistic approaches. It is known that any object, phenomenon, considered as a system, have several levels of organization: conceptual (the level of system-forming properties); structural (the level of system relationships); level of system elements.

The category "pedagogical system" can be considered an illustration of the use of a systems approach in educational science. The holistic pedagogical process, as already noted, has its own structure: co-processes - training, education, development,

and scientific activity. In the structure of any activity, one can distinguish universal elements: the goal, objectives, content, methods, means, forms, control, result.

According to Yu.K. Babansky can call these elements: targeted, informative, organizational-activity, analytical and productive.

The synergistic approach as a continuation of the systems approach in pedagogy is characterized by the following provisions. Each structural component of the pedagogical system (student, teacher, student group, etc.) is an open information system that exchanges energy and information with the environment. Information plays a key role in synergetics, unlike other sciences. Unlike natural systems, social systems are purely informational, and without the exchange of information they cannot exist. Therefore, modern pedagogy is based on the scientific methods of cognition and management of a complex object. The synergetic approach is the development of systemic-functional methods used in pedagogy. The principles of the synergetic approach are: the subjectivity of the cognitive consciousness; complementarity (the concept of complementarity: opposites for development do not go away by removing / dialectics), but by complementing each other, a compromise combining opposites; the teacher's monologue gives way to dialogue, interaction, partnership for a developing personality); openness of educational and educational information (Kozhakhmetova K.Zh., etc.). It is well known that synergistic education is realized in the planes of humanitarianization and ecologization of the content of education, integration of natural science and humanitarian cultures and disciplines of higher education, education of value relations to the world and formation of a new style of scientific thinking - nonlinear thinking (Mukashev B.A, 2006).

Person-oriented, activity-oriented and dialogical approaches determine the methodology of humanistic pedagogy. Personality-oriented approach. The theory of student-centered learning is the realization of the humanization of education, originated on the basis of the personality-developmental training of educators and innovators, determines the awareness of the learning goals, and assumes the activity of the learner.

1) At the heart of the theory of student-centered learning is the PERSONALITY - the identity of the child, the student, the student. It is important to understand that a person becomes a goal, a subject, a result, a criterion for evaluating the effectiveness of the entire educational process. Disclosure and implementation of the student’s personality in the pedagogical process, in future professional activity, in life is the dominant position of the whole theory of personality-oriented education.

2) Subject-subject relations dominate in relationships, interaction, and communication in education. For a long time, a student was perceived in theory and practice of education as an object of influence by a teacher, educator, and teacher. It was believed that the teacher, like a sculptor, "molded" the student. The task of the modern teacher is to contribute to the disclosure of the child’s abilities, his development and self-improvement. Today the student is an equal partner, participant in the pedagogical process. Without its activity, initiative, creativity, it is impossible to effectively carry out the educational process. The student, along with the teacher,

is the creator of the process of training and education. The object of the activities of the teacher and the student becomes a holistic pedagogical process.

3) An important component of student-centered learning (LOO) is the awareness of the personality of the process of its formation and development, understanding and acceptance of responsibility for these processes, knowledge of the laws of its development, capabilities and abilities of personal self-improvement and growth.

Person-oriented, activity, and poly subject approaches form the basis of the methodology of humanistic pedagogy. Activity, as an active transformation of the surrounding reality, has its main elements: motives, goals - results, actions, conditions, and mean. The main type of human activity that has played a decisive role in the development of human properties is labor.

Each age has its own leading type of activity (children - the game, schoolchildren - the teaching, adults - professional work). Important for the teacher is the student's conscious training in goal setting, activity planning, organization and regulation, self-analysis and performance assessment. It is also necessary to form an internal need and an actively positive motive of activity. These provisions characterize the activity approach.

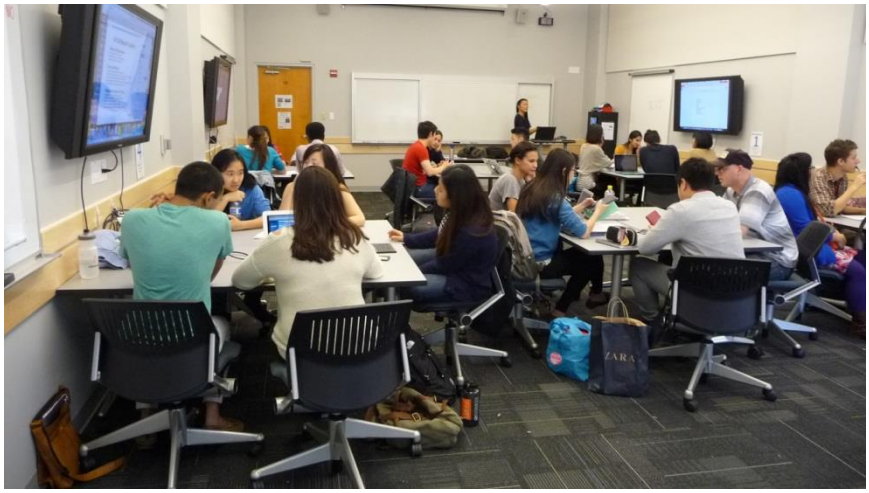
Dialogic (poly subject) approach. One of the well-known and natural needs of the individual is the need for communication. It is in communication that a person expresses himself as a person, joins the values of society and another person, defends his opinion and forms his position, sees a personality in another person, can co-participate, empathize with another person, identifies himself with another person, proves his uniqueness.

During the dialogue, the learner masters the ability and ability to lead him at different levels. This is a dialogue with your own Self, communication with yourself, your own mind - the personal level. The next level is the understanding of dialogue as a process of interaction of qualitatively different value-intellectual positions — the interpersonal level.

The third level occurs when discussing problems in small groups of 5-7 people. In the process of learning should be an interpersonal dialogue between the teacher and the student.

By M.M. Bakhtin is a “free self-revelation of personality”, where a student is looking for various ways of expressing his thoughts, defending and mastering his new values (V. Zagrekova, 2002). Dialogue is a necessary component of the humanization of education, its orientation towards the student’s personality. The dialogue begins when a student wants to say his opinion - “I want to say”, “my opinion”, “my point of view”.

K. Rogers said that the dialogue of the teacher is based on the “four pillars”: on the spiritual and moral foundations of the teacher’s inner world; on faith in a child, addressing his sense of dignity; prompting him to his own search, active growth and self-development.



The idea of a dialogue of individuals and cultures is rapidly developing at the present time due to globalization processes in the world. Interpersonal and intercultural communication is actively promoted by UNESCO. The idea of a dialogue of cultures rests on the idea of M. Bakhtin on culture as a dialogue ("any culture is a living process of sociable communication"), the idea of L. S. Vygotsky about the development of intelligence to the internal dialogue.

The result of educational activities is the basic culture of the individual. The main thing in culture is values and norms, ways of thinking and creativity. In each idea, word, image - a dialogue of different cultures, different eras, different nations. The result of co-creation is new feelings, new ideas, new relationships. These provisions reflect the cultural approach in pedagogical science.

Competence approach

The concept of "competence" goes back to the Latin "competo" - "I achieve, I correspond, I reach, I come up", means the area of knowledge and practice in which a person has extensive, accurate knowledge and practical experience. Competence approach appeared in the 60-70s in America. In the 1970s, language competences were explored and the concept of "communicative competence" was introduced (D. Hymes).

The model of professional competence of a modern specialist consists of three components: special, social, and personal-individual.

In addition to special knowledge and skills, the special competence includes the ability to design their professional activities, update their professional knowledge, skills, as well as the knowledge and skills of professional decision-making technology. Social competence includes the communicative culture of the individual, the willingness to use information and communication technologies, the ability to work in a team, cooperate with colleagues, the willingness to take social responsibility for their work, professional decisions, the impact on the environment, skills for self-knowledge, possession of ways of self-expression, ability for self-reflection, self-development of a person in professional activity, resistance to

professional and personal strains, willingness to develop individuality within the profession, commitment to personal and professional growth and self-organization.

In Europe, the following key competencies have been proposed that need to equip young people.

Social - the ability to take responsibility, develop solutions and participate in their implementation, tolerance.

Communicative - mastering the technology of oral and written communication on different languages, including computer programming, the ability to use the Internet.

Informational - possession of an information resource, possession of information technologies, a critical attitude to the information received.

Special - preparedness for independent, creative execution professional functions, an objective assessment of yourself and the results of your work.

Cognitive - willingness to constantly improve their educational level, the need for updating.

Typology of pedagogical research.

Research in the field of pedagogy is a process and result of scientific activity aimed at obtaining new knowledge about the laws of education, its structure and mechanisms, content, principles and technologies. Pedagogical studies can be divided into fundamental and applied studies.

Basic research is research that results in generalizing concepts that summarize theoretical and practical achievements of pedagogy or suggest models for the development of pedagogical systems on a prognostic basis.

Applied research is research aimed at the in-depth study of certain aspects of the pedagogical process, the discovery of the laws of multilateral pedagogical practice. Developments are aimed at substantiating specific scientific and practical recommendations, taking into account already known provisions (Slastenin, VA and others, 2002).

3.3. TYPOLOGY OF PEDAGOGICAL RESEARCHES, THEIR STAGES, METHODOLOGICAL PARAMETERS AND CRITERIA

On financing:
- budget
- contractual
- unfunded

By purpose:
- fundamental
- applied
- development

By duration:
- long term
- short-term
- express studies

Forms and methods of research

Experimental:

• methodical
• descriptive
• historical bibliographic
• mixed type

Any scientific study involves the determination of known methodological parameters: problem, topic, object, subject of research, purpose and objectives, hypothesis and defended position.

Criteria for assessing the quality of research: relevance, novelty, theoretical and practical significance.

Any scientific research begins with the choice of the object area of research, that is, the field of activity where problems have been accumulated that need to be solved. In pedagogy, for example, preschool education, high school, civic education, patriotic education.

Methodological parameters of pedagogical research (topic, problem, object, subject, purpose, hypothesis, tasks, ...)

Methodological criteria for pedagogical research (activity, novelty, theoretical and practical significance ...)

On the one hand, the choice of the object domain depends on the importance, the existence of problems, the prospects of their research, on the other hand, on the interests of the researcher, his research and teaching experience, and the direction of research of the research team, the scientific school of the head.

The choice of problems and research topics. The problem is synonymous with a practical task; "Knowledge of ignorance"; the bridge between the known and the unknown, the path from the known to the unknown. The essence of the problem is the contradiction between the established facts and their theoretical understanding, different interpretations of facts, explanations. The problem is the result of deep learning practice. The scientific problem expresses the main contradiction, which should be resolved by the means of science.

Problem solving is the purpose of the study.

The object is what the learning process is directed at.

The subject of study is the side of the object. These are theoretically significant properties, sides, and features of the object that are to be directly studied.

In accordance with the goal, the object, the subject, the research tasks are defined, which are aimed at testing the hypothesis — a combination of assumptions whose truth is to be verified in the course of the study.

Pedagogical research usually has two sections: methodological and procedural.

Relevance indicates the need and timeliness of the study.

Scientific novelty is new theoretical or practical conclusions, patterns of education, structure, mechanism, methods, models, principles, concepts, approaches, etc.

The theoretical significance of the research is a criterion of scientific research, reflecting the influence of the obtained results of research work on existing concepts,

ideas, methods in the field of training and education, theory and history of pedagogy. He characterizes the changes in theoretical ideas that occur in the pedagogical consciousness under the influence of the data obtained (problem, disciplinary, general pedagogical). The practical significance of the research is the impact that (or may have) the results of the study on the teaching and educational process, teaching and learning methods, the organization of educational work, etc.

Organization of pedagogical research

The organization of pedagogical research is the orderliness of methods of pedagogical research, specific actions and operations, allowing to achieve results in accordance with the objectives of the study.

3.4. METHODS OF PEDAGOGICAL RESEARCH

Methods of pedagogical research are ways of studying pedagogical reality. There are several approaches to the classification of pedagogical research methods. According to one of them [2], methods of pedagogical research are divided into empirical (methods of studying pedagogical experience), theoretical (methods of theoretical research) and mathematical (statistical).

ATTENTION!

- Methods of pedagogical research are divided into
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- and mathematical (statistical

Any method of pedagogical research is not universal, each of them is effective only when used correctly. The correctness of the method implies two aspects:

- possession of this method;

- the ability of the researcher to choose the most effective method based on the existing research conditions, specific research objectives.

When choosing methods of pedagogical research, one should be guided by the following principles:

• a set of methods (to solve any scientific problem, not one but a set of complementary research methods is used);

• the adequacy of the methods of the essence of the phenomenon being studied, the expected results, the capabilities of the researcher;

• non-harm (prohibition of the use of research methods that are contrary to moral norms that can harm the subjects, the pedagogical process).

Empirical methods of pedagogical research

Empirical methods include observation, conversation, questioning, pedagogical testing, the study of school documentation, the study of products of activity. Their common feature is the focus on the direct study of the object, the collection and systematization of factual material.

Observation is the most common empirical method. His results are fixed, the data are summarized.

Researchers can familiarize themselves with the subject being studied.

The disadvantages of observation in pedagogical research are that

the reliability of the results is strongly influenced by the personal characteristics of the observer, his interests, beliefs and stereotypes.

Many facts may remain unidentified.

Questioning is a method of gathering information using a questionnaire for specially designed questions.

The main types of profiles:

- open (respondents must formulate a response on their own);
- closed (respondents must choose the most appropriate answer from several ready-made options);
- mixed (combined), providing the possibility of choosing an option.

Questioning is the most effective method if it is required to reveal a collective opinion. Depending on the objectives of the survey, teachers may be involved in labeling, students, their parents, representatives of the nearest social environment. Applying this method, one should take into account that the results of the survey, even the results on large samples, reflect the opinions, attitudes, stereotypes of thinking and perception of the respondents, the characteristics of this social group, and therefore they can significantly differ from the established scientific facts.

ATTENTION!

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With the help of questioning it is possible to cover a large number of people with a survey in a relatively small period of time, and the standard wording of the questions in the questionnaires makes it possible to process the data obtained relatively easily. When conducting mass surveys, the factor that reduces the truthfulness of the answers becomes the opinion of other people (for example, filling out a questionnaire simultaneously with other people, a person can write off the answer from a neighbor so as not to stand out, or vice versa: answer differently from the desire to be different, not because he really thinks otherwise).

Conversation (diagnostic conversation) - a method in which the receipt of information occurs in the mode of individualized dialogue. Like any method, the conversation has a specific goal, and its results are analyzed. Like the survey, it is conducted on the basis of pre-designed questions, but the wording and the sequence of questions are not strictly asked, they can vary. The conditions of success of the conversation include its individual character ("one-on-one"), the concentration of the researcher on the interlocutor, and the creation of a confidential environment. Conversation as a research method, as compared with questioning, has a number of advantages due to direct contact with the person being surveyed. These include features:

- manage the influence of external irritating factors on the answers of the respondent (avoid the presence of third parties; choose the most appropriate setting, lighting, time; change intonation when formulating questions, etc.);
- change the wording of questions in the course of the survey, making them more "convenient" for the respondent;
- ask clarifying questions, seeking more specific answers;

The disadvantages of the diagnostic conversation are related to the individual nature of the survey carried out with its help. In contrast to the survey, the conversation is not suitable for mass surveys.

Studying school documentation (school statutes, students 'personal records, diaries, medical records, work plans, class journals, reports, analysis, etc., as well as financial and business documentation) makes it possible to cover a significant amount of data presented in the documents. in the already systematized form and, as a rule, in standard forms, with rather long periods of archival storage of a number of school documents.

Disadvantages of the school documentation study method manifest themselves mainly in two aspects:

- standardization and business style of documents impose strict restrictions on the nature and number of documented facts, as a result of which the facts that do not appear in the document remain outside the field of view of the researcher, namely, they may be especially important for learning new properties and phenomena in the object under study.

The study of products of activity is a method in which the subject of study are essays, drawings, wall newspapers, crafts and other student work, as well as the products of the activities of adults in the educational process. Thus, in addition to various student works, the subjects of study can be: elements of aesthetic design of a

class room, made by the teacher personally or with his participation, under his leadership; products of activity, reflecting the hobbies of teachers, passions of parents and family hobbies, as well as various kinds of achievements, etc.

The products of the activity are material, their presence and quantity are easy to check, unlike their fixed documentary reflections, in which the descriptions of the objects may well not reflect some important parameters at the moment, and quantitative indicators may be accidentally or intentionally distorted ..

Pedagogical testing is a method in the process of application of which the subjects perform certain actions on the task of the examiner. At present, a lot of test methods have been developed for the school, which make it possible to identify the level of training in various subjects, the level of personal development of students and teachers, to study and evaluate the abilities, interests and needs of the participants in the educational process. Computer testing is becoming increasingly widespread, making it possible to significantly simplify and speed up the verification and initial processing of results.

The pedagogical experiment is a special method of empirical research, consisting in the fact that the researcher intervenes in the pedagogical process in order to create the best conditions for the study of pedagogical phenomena. There are two types of pedagogical experiment: ascertaining and formative (transformative). In the ascertaining experiment, the specially created conditions make it possible to reveal new facts. In the case of the formative, they allow you to change the course and result of the pedagogical process.

Theoretical methods of pedagogical research

The theoretical methods of research include the study of literary sources, theoretical analysis, methods of logical generalizations and modeling.

The study of literary sources in the pedagogical study allows you to find and select the necessary information. Subjects of study when using this method are scientific and methodological literature, regulatory and legal acts in the field of education, educational standards, model curricula and programs, as well as various electronic documents. In the implementation of this method, traditional methods of working with literature are used: note-taking, abstracting, compiling a bibliography, annotation, quotation, and compilation of logical schemes of the text. In addition, when studying electronic documents, it is possible to completely copy and save the source on an accessible medium, compress and archive the document, print the entire document or its fragment (for example, table of contents, e-mail address or attached annotation), search for data by keywords, etc.

Theoretical analysis as a method of knowledge involves the comprehension of the results of research based on theoretical tenets and models developed by pedagogical science.

In a theoretical analysis, the data obtained empirically can:

- to be compared with scientifically grounded and repeatedly confirmed facts in practice;
- be compared with data of the same class obtained earlier in the same or a similar system;

- relate to the goals and objectives of the managed process;
- interpreted as the final or intermediate results of a certain activity;
- summarized in the form of brief conclusions.

Induction and deduction are methods of logical generalizations. Induction as a path from the particular to the general involves identifying common properties and dependencies based on known particular facts. During deduction, the logic is inverse: the manager, knowing the general properties and dependencies of objects of this class, concludes that these properties and dependencies are present in particular cases of phenomena and processes of the same class. In induction, reasoning is built from particular facts to general conclusions; with deduction, from general principles known in advance to the researcher to reveal and explain particular facts.

Pedagogical modeling is a method of creating and studying scientific and pedagogical models. Scientific and pedagogical model is a mentally presented or materially implemented system that adequately reflects the studied subject of pedagogical reality.

Signs of a scientific model:

1) an ideal system optimized for learning;
2) adequately reflects the object of study;
3) is able to replace the object being modeled;
4) the study of the model provides new information about the subject of the study.

The main advantage of the model is the integrity of the information provided, which makes it possible to carry out a synthetic approach in the knowledge of this object. Pedagogical modeling helps to comprehend the subject of study in various conditions.

The entire system as a whole is the object of research, and the connection of the selected components is the subject of research. For research, it is the object that is needed, and in order to correctly isolate it from the object, without losing anything important, a model is created in which you can change the components of the system or change its internal structure, reflecting on how these or other changes will affect the object of study.

So, the simulation allows you to select in the object of study the most significant - that relates to the object under study. Having created a model, in the future you can focus on studying it, theoretically develop an optimal system - and only then check it in real conditions of the pedagogical process.

Self Test Questions

1. Name the group methods of pedagogical research.
2. Expand the logic of the pedagogical experiment, indicate its stages
3. What are the methodological approaches and principles in pedagogical research.

4 PROFESSIONAL COMPETENCE OF HIGH SCHOOL TEACHER

4.1. TEACHER AS A SUBJECT OF THE EDUCATIONAL PROCESS, ITS QUALITY

The teacher is a key figure in the pedagogical process of higher education, he has a strategic role in the development of the student's personality during his professional training. The pedagogical encyclopedia gives the following definition: A teacher - in the broad sense of the word - an employee of a higher, secondary special or general education school who teaches an academic subject, in the narrow sense of the word - is a full-time position in universities and specialized secondary schools.

The teacher conducts practical and seminar classes. In universities and special educational institutions the teacher is charged with educational and methodical work in his specialty, management of educational and industrial practice, independent studies and research work of students. The main content of the teacher's activity includes the performance of several functions - teaching, educating, organizing and research. They are perceived in unity, although for many they weigh upon others. The most specific for a higher school teacher is a combination of teaching and research activities; research work enriches his inner world, develops his creative potential, increases the scientific level of knowledge.

If pedagogical activity is not supported by scientific work, professional pedagogical skills are quickly extinguished.

Professionalism is precisely expressed in the ability to see and formulate pedagogical tasks on the basis of an analysis of pedagogical situations and to find the best ways to solve them.

The teacher's creative individuality is the highest characteristic of his activity, and like all creativity, it is closely connected with his personality. The teacher's profession consists of three components: pedagogical activity, pedagogical communication, personality.

Personality is a pivotal factor that determines his professional position in pedagogical activity and in pedagogical communication. Pedagogical activity is a technology of labor, pedagogical communication is its climate and atmosphere, and personality is the value orientations, ideals, inner meaning of the teacher's work.

Pedagogical activity is the professional activity of the teacher. Such activity includes five components: the gnostic, the decisive task of obtaining and accumulating new knowledge about the laws and mechanisms of the functioning of the pedagogical system, designing, associated with the design of the objectives of teaching the course and ways to achieve them; constructive includes actions for the selection and composition of the course content, forms and methods of conducting classes; organizational solves the tasks of the implementation of the planned; communicative includes actions related to the establishment of pedagogically expedient.

The orientation of the personality is one of the main professionally significant qualities of the personality of the teacher. According to N.V. Kuzmina, personal orientation is one of the most important subjective factors in reaching the pinnacle in professional and pedagogical activity. The choice of main strategies of activity determines, according to N.V. Kuzmina, three types of orientation: 1) truly pedagogical, 2) formally pedagogical, and 3) falsely pedagogical. Only the first type of orientation contributes to the achievement of high results in teaching. Truly pedagogical orientation consists in sustainable motivation for the formation of the personality of the student by means of the taught subject, restructuring of the subject in the calculation of the formation of the student's initial need for knowledge, the carrier of which is the teacher.

4.2. ESSENCE AND ROLE OF PEDAGOGICAL THINKING

Man's thinking is a product and the ability of his brain to reflect and comprehend real reality through mental operations, to penetrate into the essence of the laws of nature, society, and intellectual activity itself. This is the basis of the relationship of man to the world, knowledge, appropriation, transformation of reality. Depending on which area of the objective world a person perceives, his thinking, reflecting the specifics of the dialectics of the development of things and phenomena in it, acquires characteristic features, is transformed and formed into a certain type. Pedagogical thinking arises as a result of knowledge, understanding of objectively-subjective educational relationships, interactions of children and adults, directly influencing the development and formation of a personality, its gradual and abThe working curriculum t transition from childhood to adulthood. Pedagogical thinking is shaped as a professional thinking ability of an educator, which makes it possible to comprehend, analyze, compare, summarize, evaluate educational practice, create pedagogical theories and concepts, make methodological discoveries, actively, creatively and effectively implement education and training. The logic and content of thinking that is late in thinking, analyzing and evaluating reality, lagging behind the real dialectics of development and life change, must be periodically rethought and brought into line with the logic and content of the movement of things, phenomena, attitudes, events, situations. When a system of obsolete habitual thinking with its stereotypes of attitudes, conclusions, evaluations, ideas, concepts explodes and transforms, is brought into line with the logic of a changed life, a new system of attitudes, concepts, approaches, ideas, theories, concepts, i.e. new thinking is formed.

A new pedagogical thinking arises as a result of a contradiction: the discrepancy between the outdated, customary, and different pedagogical ideas that have taken shape in the new circumstances and requirements of life. It represents a breakthrough of creative, innovative thought through the barriers of established ossified schemes and patterns, the revolutionary process of freeing consciousness and thinking from the burden of dilapidated imperatives and dogmas that bind educational relations and pedagogical activity. At the same time, new pedagogical thinking emancipates spiritual and intellectual forces, directs them to search for scientifically

reliable, adequate assessments of changed educational circumstances, the creation of modern systems, approaches, structures, forms and methods of effective pedagogical actions. The development of pedagogical science, the emergence and justification of theoretical concepts, the discovery of new methodological systems and technological processes contributes to the constant updating of pedagogical thinking - the main condition for the improvement of educational practice.

Today, in pedagogy, there are a number of dogmas, patterns, imperatives that impede the consciousness of theorists and practitioners, restraining the progress of science itself, hampering educators' educational activities.

Let's name at least some of them:

- approval of the complete superiority of pedagogical leadership over spontaneous development of the personality, underestimation of the category of interaction;
- a superficial understanding of the essence of the comprehensive development of personality;
- the isolation of the activity approach from the process of the holistic development of the personality in activities, communication, and relationships, the hypertrophy of its importance for human development;
- a functional approach to educational work, the dismemberment of the holistic process of education into parts, contrary to the obvious truth: the person is brought up holistically in the system of life relations;
- an idea of the methods of education and training only as a means of influence and organization of educational work, the non-use of their potential as a means of interaction, relationships, turning into the skills and skills of self-education and self-study.

Therefore, pedagogical thinking, in order to provide an opportunity to reflect on educational interactions and relationships in their entirety, depth and complexity, to guide and control them, must be flexible, dialectical and comprehensive. With its help, it is necessary to comprehend the educational reality from the practical-pragmatic, figurative-emotional and theoretical positions.

This requires the use of a variety of thinking techniques and methods in pedagogical thinking. In an active dialogue with students, formal logical thinking is widely used. Understanding and evaluating complex situations requires dialectic logic: establishing the relationship of events, their inconsistency, and rejecting the old with the new. Educational relations, their dynamism and reactivity dictate the need for quick awareness of a competent response, adequate actions. The teacher needs to develop the ability to not only discursive, but also paradoxical, absurd, sporadic thinking. It is important to be able to fix, support, actualize an interesting thought that has arisen, to strike students with a paradox, to show the absurdity of one or another of their actions.

Of particular importance for successful educational interaction is intuitive thinking, manifested in heightened feelings, premonitions, unconscious, but timely actions that provide the necessary orientation in the relationship.

All kinds of mental activity form the ability of the teacher as a theoretical, strategic, and tactical, operational thinking. Interacting with students, the teacher often finds himself in a situation where he needs not only to comprehend a fact, an event, an incident and make a decision, but also to evaluate them in the genesis, movement, interconnections, contradictions, anticipate the consequences of influences, "predict how our word will respond", intuitively feel the course and possible results of the development of relations.

Scientific pedagogical thinking operates on the basis of the laws of dialectics. It examines the pedagogical facts, situations, phenomena, events from the standpoint of self-development, self-movement, due to external circumstances and spontaneous stimuli of students' life activity. No matter what he does, it is necessary to analyze his behavior and personality, not only by the very fact of a concretely good or bad deed, but on the basis of his inner world: ideals, motives, needs, interests. Such an approach makes it possible to reliably establish whether the act was an accident or a natural result of the character, the essence of an emerging personality. All this allows you to make a pedagogically competent analysis of behavior, give it a reasonable assessment and respond correctly.

In pedagogical, as well as in life interaction, a person acts not only as objects of education, but also as a creatively acting subject, reflecting, interpreting and transforming his own life in his own way. Therefore, the teacher must be prepared for any surprise, originality in children's thinking and the behavior of their students.

Pedagogical thinking is characterized by a holistic perception of facts, events, in their causal relationships of deep and organic interdependencies. The essence of the pedagogical fact is never revealed at once in its entirety. It requires a deep and comprehensive objective analysis in the genesis and concrete historical development. For this, such methods and techniques of mental work as rethinking and reassessing facts and conclusions, correcting and clarifying them, criticizing existing stereotypes and established patterns, rejecting outdated and outdated ideas, putting forth new ones are important. The practical application of pedagogical thinking is characterized by a rhythmic movement of thought from a particular pedagogical fact to a generalization and vice versa: from an abstract, general theoretical presentation to a detailed analysis with its help of a concrete real situation. The peculiarity of pedagogical thinking is that it is realized not only as an internal monologue, a solitary comprehension of events and processes by the teacher, but also as a real movement of thought in a joint dialogue with colleagues and children.

Pedagogical thinking should also be critical thinking. To understand the essence of critical thinking, it is necessary to turn to the philosophical and psychological foundations of such a fundamental concept as reflection. In this connection we turn to the works of philosophers and psychologists.

4.3. MODEL OF KEY COMPETENCES

Professional competence acts as a systematic category of the process of professional development and self-development of a specialist.

In Kazakhstan pedagogy, the term “competence has not yet been fully settled and in most cases is used to express a sufficient level of qualification and professionalism of a specialist. Studies of various aspects of the competence of specialists are conducted by scientists such as M.Kh. Baltabaev, B.T. Kenzhebekov, G.ZH. Menlibekova, S. Kurmanalin, S.I. Ferho, N. Shametov, M.S. Mukhamedzhanov, M.A. Fakhretdinov, J.R. Bashirova et al. The variety of approaches to the interpretation of the essence of professional competence can be explained by the fact that the definition of this concept is dynamic and multifaceted. Its value is transformed in accordance with the changes taking place in society, education, science and is viewed from different points of view. The content of the concept “professional competence also varies, as it depends on many factors: the development of pedagogy and related sciences, the state of culture in society, etc.

Most authors consider a certain amount of professionally necessary knowledge and skills, deep awareness in matters of upbringing and training to be an indispensable element of a teacher’s professional competence. Competence - includes a set of interrelated personality traits (knowledge, skills, abilities, ways of activity) set in relation to a certain range of subjects Competence - possession, possession of a person of appropriate competence, including his personal attitude to it and the subject of activity. The following competences fall into the structure of professional competence of a higher education teacher:

- general pedagogical - possession of basic psychological and pedagogical knowledge and skills necessary for successful solution of a wide range of educational and educational tasks in various pedagogical systems. Also, general pedagogical competence means the future teacher's compliance with certain professional and pedagogical requirements, regardless of specialization; it is the mastery of a set of universal human qualities necessary for successful professional and pedagogical activity.

Special competence - possession of specific knowledge and skills for the profession;

Technological (activity) competence - the possession of professional and pedagogical skills, which is understood as the mastered way of performing professional and pedagogical actions, provided by a set of acquired knowledge in

professional and educational activities; creativity.

Communicative competence - the establishment of the right relationship with students, which would contribute to the most effective solution of the tasks of training and education; the manifestation of a respectful, keen attitude to the values that make up the content of the child’s position, no matter how simple and uninteresting it may seem; possession of professional communication with colleagues;

Reflexive competence is the regulator of personal achievements of a teacher, the promoter of professional growth, improvement of pedagogical skills. This competence is manifested in the ability to self-knowledge (self-observation, self-analysis, critical self-esteem), self-motivation (self-criticism, self-stimulation, self-coercion, etc.), self-realization (self-organization, control and accounting of self-

education activities, etc.). Obviously, the content specification individual competencies are carried out on the basis of an appropriate specialist model, which, in turn, is based on an analysis of its professional duties.

Summarizing, we conclude that the professional competence of a higher school teacher is a characteristic of a specialist's theoretical and practical preparedness for pedagogical activity, represented by a set of general pedagogical, special, technological, communicative and reflexive competencies and the ability to independently, responsibly, effectively perform the functions of learning, education and development of future professionals.

In the structure of the teacher's professional competence, a special role is given to the communicative component as an expression of its social and humanitarian culture, as a means and condition of cognition, self-knowledge of the personality, contributing to its self-improvement and self-development. Communicative competence is characterized by the formation of perceptual skills of the teacher and the level of effectiveness of professional (pedagogical) communication.

Communicative competence is a set of knowledge, skills and abilities, including the functions of communication and features of the communicative process, type of communication and its main characteristics, means of communication (verbal, non-verbal).

Being a significant and relatively independent subsystem in the structure of professional competence, communicative competence manifests itself as the ability to interact with other people in a special way.

4.4. EDUCATIONAL ACTIVITY AS A PHENOMENON, ITS ESSENCE, STRUCTURE AND COMPONENTS

In order to understand the essence of the concept of "pedagogical activity", let us consider a more general concept - "activity". Activity is understood by us, on the one hand, as a specific form of the socio-historical being of people, and on the other, as a way of their existence and development, their purposeful transformation of their natural and social reality. In contrast to the laws of nature, social laws are discovered only through human activity, which creates new forms and properties of reality, turns some source material into a product.

Any activity carried out by its subject includes the goal, the means, the transformation process itself and its result. Speaking as a form of being and a way of human existence, activity:

- ensures the creation of the material conditions of human life,
satisfaction of natural human needs;
- becomes a factor in the development of the human spiritual world, form and condition for the realization of its cultural needs;
- is the sphere of realization by the person of his personal
potential, achievement of life goals, success;
- creates conditions for human self-realization in the system

of public relations, for the realization of his social interests;

- is the source and criterion of scientific knowledge, self-knowledge and self-development;

- provides cognition and transformation of the surrounding world.

The most important characteristics of the activity are:

- objectivity - it obeys, likens to the properties and relations of the objective world being transformed in the process of activity.

- sociality - human activity is always social in nature, encouraging people to share its products, information, to harmonize individual goals and plans, to mutual understanding.

- consciousness - in the process of organizing and carrying out activities "consciousness performs various functions:

informational, orienting, purposeful, motivational, stimulating, regulating and controlling. "

The most significant contribution to the development of the theory of activity was made by the teachings of psychologists A.N. Leontyeva and S.L. Rubinstein, who proved that the course and development of mental processes substantially depend on the content of human activity, presented in the form of the following components.

Need is a human condition created by the need for objects and actions necessary for its implementation and development, and acting as a source of his activity, organizing and directing cognitive processes, imagination and behavior.

Motive - the incentive to activities associated with the satisfaction of needs; the perceived reason for which the choice of actions and actions is determined; subject (material or ideal), encouraging the choice of actions.

The goal is a conscious image of an anticipated result, the achievement of which is the purpose of human activity. The task is the goal of the activity given in certain conditions, which must be achieved by transforming these conditions.

Action is a unit of activity, "arbitrary deliberate mediated activity aimed at achieving a perceived goal."

An operation is a method of performing an action, determined by the conditions of a given situation.

From the nature of the motivation of activities to a large extent depends on perseverance in its implementation and thereby success in achieving the goal. The motives and goals of the activity depend on the social conditions of a person's life and the level of their individual development. A leading role in the individual development of activity is played by the assimilation by the individual of social experience.

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The activity is carried out through a number of internal, interconnected actions and includes certain automated components. However, in general, each activity is conscious, focused. Conscious goal as the law determines the method and nature of human actions (K. Marx). It encourages the active overcoming of obstacles that arise on the path to obtaining the desired result.

The main activity of a person is his physical and mental labor. Physical productive labor is aimed at creating the material values necessary for the life of society and each of its members. Mental work is aimed at studying reality, at creating scientific theories, literary, artistic and other spiritual values. Human activity is a necessary condition for its development, in the course of which life experience is acquired, the surrounding reality is known, knowledge is acquired, skills are developed, and the activity itself is developed. Studies by A. Leontyev, S. Rubinstein, B. Teplov and other scientists have shown that mental processes develop, mental, emotional and volitional qualities of the personality, its abilities and character are formalized.

Development, for example, moral, aesthetic, political, labor, etc. - these are always new formations in the personal structure that were born in the process of activity, purposeful activity of the individual.

Activity is the active form of the relation of the subject to the object: in the cognitive one, the truth is comprehended, revealed, studied, in the workplace, material values are created, preserved, improved; in art - an artistic image is perceived, interpreted, created, recreated, transmitted; in public - social value ideas are declared, propagated, distributed.

Pedagogy as a science studies a special kind of activity. This activity is purposeful, because the teacher has a definite goal: to teach, for example, the ability to cultivate a particular personality trait, for example, patriotism. In a broad sense, the subject of pedagogy is such an activity, which is aimed at fulfilling an eternal social function consisting in transmitting and transmitting the experience accumulated by mankind to subsequent generations. Proceeding from this, pedagogy as a science studies a special, socially and personally determined activity in the introduction of human beings into the life of society. In this context, pedagogical activity is the

educative and educational impact of a teacher, educator on a student or pupil, aimed at his personal, intellectual and activity development, simultaneously acting as the basis of self-development and self-improvement.

Professional pedagogical activity is carried out in educational institutions specially organized by the society: preschool institutions, schools, vocational schools, secondary specialized and higher educational institutions, institutions of supplementary education, advanced training and retraining.

Educational activity has the same characteristics as any other kind of human activity, namely: objectivity, sociality, consciousness.

The essence of pedagogical activity can be revealed by analyzing its structure, which A.N. Leontiev presented as a unity of purpose, motives, actions (operations), result, and he considered the goal as a system-forming characteristic (fig. 3). On the other hand, if you understand the pedagogical process as a purposeful teaching and educational activity of a teacher in unity with self-education activities, it is possible to interpret this process as an activity system. The activity system is understood as a set of objects, the interaction of which contributes to the emergence of new integral qualities that are not characteristic of the parts and components forming this system. If we consider an area of reality as an object, which is in the field of view of researchers, then subjects of pedagogical interaction (teacher - students) in the context of this definition can act as objects of study. In this regard, the definition of the pedagogical system given by N.V. is much more preferable. V.P. Bespalko, who, by the pedagogical system, understands “a certain set of interrelated means, methods and processes necessary for creating an organized, purposeful and deliberate pedagogical influence on the formation of a personality with given qualities”.

Thus, pedagogical activity is a special type of social activity aimed at transferring the culture and experience accumulated by mankind from older generations, creating conditions for their personal development and preparing to fulfill certain social roles in society. Society sets goals and determines the content of the process of upbringing and education in the general course of socialization of the individual. The role of the teacher implementing this social order is significant. In fact, the teacher is the link between the generations, the bearer of social and historical experience. The social and cultural integrity of the people, civilization as a whole, the continuity of generations is largely due to the role of the School as a social institution and the Teacher as one of the main actors in it.

5 COMMUNICATIVE COMPETENCE OF HIGH SCHOOL TEACHER

5.1. PEDAGOGICAL COMMUNICATIVITY

The concept of communicative competence includes the following aspects:

- as communicative (relationships, mutual influence, mutual understanding);
- ideological (the formation of a system of cultural values);
- aspect of socialization (social education);
- The aspect of regulating psychological stability (creating confidence).

Communicative competence

1. Information sharing: own information exchange technologies (communications): recognition, processing, selection, transfer. Arming with skills of competent, effective speech behavior
2. Perception: to understand people and adequately evaluate them
3. Interaction: choose the way of interaction, taking into account individual features, finding contact with the audience
4. Reflection and empathy: the development of reflection and empathy, possession of technology cooperation
5. Active listening To actively listen to a partner, to convince and argue
6. Planning: plan communication and carry out the plan into action, captivate people
7. Self-management Manage Yourself
8. Conflict-Free Communication: Owning Conflict Resolution Technology.

5.2. PEDAGOGICAL COMMUNICATION, HIS ROLE, STYLES ETHICAL POTENTIAL

Pedagogical communication. Communication is the impact of people in the process of social relations on each other's consciousness through sign-expressed activities with the goal of changing and coordinating behavior. From the standpoint of socio-psychological theory, communication is associated with social relations and is "an interaction carried out by means of speech and non-speech influence and pursuing the goal of achieving changes in the cognitive, motivational-emotional and behavioral spheres of the persons participating in communication. " lkovanie communication as an activity or different ratios covers only one aspect of human social life (namely the relationship "subject - object"), no less important aspect of the human being (the relationship "subject - subject") go out of sight. Basic communication features

1) information and communication (reception and transmission information);
2) regulatory communicative (mutual adjustmentactions in the process of joint activities);
3) affective-communicative (transfer of emotional relations).

M.S. Kagan and A.M. Etkind considered communication as a special kind of interpersonal contacts and identified 4 possible “functional situations” (management, communication, service, communication) in the general structure of communication. They propose to distinguish competence in communication from communicative competence, competence in management and maintenance. Interactive is the leading part in communication, since “communication should be viewed as an interaction of people” (BF Lomov), interaction acts as a basic component in the structure of communication. In this case, communicative competence is viewed through the prism of situations of interaction, individual actions and behavior in general, which are determined by the system of personality relations: towards activity, towards oneself, towards others.

The personality, being the totality of all social relations, cannot be formed out of communication. Therefore, as a result of awareness of oneself and one's relations to the world around, to people, a person, communicating with other people, is aware of his Self. Therefore, communication is the realization of a communicative function.

Professional and pedagogical communication is a system of socio-psychological impact of interaction between a teacher and educated, the content of which is: a) information exchange, b) providing educational impact, c) organizing relationships through communication means. an expression in the ability to transmit information, to understand the state of a partner or the one being educated, i.e. in the art of understanding him, organizing relationships with participants in the process, manage the actual mental state.

The famous psychologist V. A. Kan-Kalik identified the following styles of pedagogical communication:

1. Communication on the basis of high professional attitudes of the teacher, his attitude to educational activities in general. They say about such people: “Children (students) are literally on their heels!” Moreover, in high school, interest in communication is also stimulated by common professional interests, especially in the main departments.

2. Communication based on a friendly location. It implies passion for the common cause. The teacher plays the role of a mentor, senior comrade, participant of joint educational activities. However, one should avoid familiarity. This is especially true of young teachers who do not want to get into conflict situations.

3. Communication-distance refers to the most common types of pedagogical communication. In this case, the relationship is constantly traced distance in all areas, in training, with reference to authority and professionalism, in education with reference to life experience and age. This style forms a teacher-student relationship. But this does not mean that students should perceive the teacher as a peer.

4. Communication intimidation is a negative form of communication, inhuman, revealing the pedagogical failure of the teacher resorting to it.

5. Communication-flirting, characteristic of young teachers, seeking to popularity. Such communication provides only false. cheap authority.

Most often in teaching practice there is a combination of styles in one or another proportion, when one of them dominates.

typology of professional positions of teachers, proposed by M. Talen.

Model I - Socrates. This is a teacher with the reputation of an amateur disputes and discussions, deliberately provoking them in the classroom. It is characterized by individualism, non-systematic in the educational process due to the constant confrontation; Students strengthen the protection of their own positions, learn to defend them.

Model II - “Group Discussion Leader”. The main thing in the educational process considers the achievement of agreement and the establishment of cooperation between students, taking the role of a mediator, for whom the search for democratic consent is more important than the result of the discussion.

Model III - "Master". The teacher acts as a role model, subject to unconditional copying, and above all not so much in the educational process, as in relation to life in general.

Model IV - "The General". He avoids any kind of ambiguity, is particularly demanding, rigidly strives for obedience, because he believes that he is always and in everything right, and the student, as an army recruit, must obey the orders given. According to the author of the typology, this style is more common than all put together in teaching practice.

Model V - "Manager". A style that has become widespread in radically oriented schools and is associated with an atmosphere of effective class activity, encouraging their initiative and independence. The teacher seeks to discuss with each student the meaning of the problem being solved, quality control and evaluation of the final result.

Model VI - "Trainer". The atmosphere of communication in the classroom is permeated with corporate spirit. Students in this case are similar to the players of one team, where each individually is not important as an individual, but all together they can do a lot. The teacher is assigned the role of mastermind of group efforts, for which the main thing is the final result, brilliant success, victory.

Model VII - "Guide". He is the embodied image of the walking encyclopedia. Laconic, accurate, restrained. Answers to all questions are known to him in advance, as are the questions themselves. Technically flawless and that is why it is often frankly boring.

What are the conditions for fruitful pedagogical communication on the basis of pedagogical cooperation?

1. Pedagogical cooperation is a two-way process; a teacher is a student whose success depends on the activity and personality of the teacher and the activity of the student.

2. Pedagogical interaction.

3. Pedagogical communication based on cooperation implies a creative search for teachers of optimal pedagogical solutions.

Thus, pedagogical communication based on subject-subject relations is manifested in learning.

Content and structure of pedagogical communication

The main forms of pedagogical activity take place in the conditions of communication. Whether it is a lecture, seminar, exam, credit, defense of a course project or essay, the teacher communicates with the flow, group, subgroup, personality.

The content of communication is the exchange of information. But this communication is not exhausted. The most important aspect of communication is the desire to capture oneself in a person, translate oneself into another joint activity. This is personal communication.

People discuss the events of concern to both parties. This is a personal interaction in the joint activities of teachers and students. It can not be fruitful to realize the didactic and actually educational tasks of a university teacher.

Communication conference in three aspects:

firstly, as a means of solving educational problems;

secondly, as a system of socio-psychological support of the educational process;

in the process of training and education, in the process of training the individual and creative individuality.

The stages of pedagogical communication include:

1. Prognostic stage: modeling pedagogical communication with the group, the flow in the process of preparing for educational activities.

2. The initial period of communication: the organization of direct communication with the audience group.

3. Communication management in the developing pedagogical process.

4. Analysis of the implemented communication system and communication modeling in the upcoming activities.

Consider the substantive and procedural features of the selected creative stages of communication.

First stage. In the process of communication modeling, planning of the communicative structure of future activities is carried out, respectively:

a) pedagogical goals and objectives;

b) the general pedagogical and moral-psychological situation in the audience;

c) the creative individuality of the teacher;

d) the individual characteristics of students;

e) the proposed system of teaching and education methods. All this, taken together, is a leadingstage of pedagogical communication. This stage must be thought out well.

The methodical and substantive structure of classes should influence the emergence of emotional unity, the creation of an atmosphere of communication. “Learning is not a mechanical transfer of knowledge. These are the most complex human relationships, ”- noted V. A. Sukhomlinsky.

Second phase. This is the initial period of communication, the organization of direct interaction with the audience, the beginning of contact, which largely determines the success of the further development of the substantive and socio-psychological aspect of educational activities.

The most important elements of this stage are:

a) specification of the planned communication model;

b) clarification of the conditions and structure of the upcoming communication;

c) the implementation of the initial stage of direct communication.

The information function is to transmit through communication certain information of everyday, educational and methodical, search, research and other nature.

The educational function is to introduce a growing person to the system of cultural and moral values prevailing in society, to the culture of communicating with other people.

The function of knowledge of each other by people

The function of the organization and maintenance of a particular subject activity: educational, industrial, scientific, educational, gaming and other.

Realization of the need for contact with another person (friendly contacts, meetings).

The function of familiarizing the partner with the experience and values of the initiator of communication.

The function of initiating communication to the values of the partner.

ATTENTION!

"Learning is not a mechanical transfer of knowledge. These are the most complex human relationships," - V. A. Sukhomlinsky.

The function of complicity.

Ethical potential of pedagogical communication

Tolerance of a higher education teacher

In English, tolerance means "the willingness and ability to perceive a person or thing without protest"; in French, "respect for the freedom of another, his way of thinking, behavior, political and religious views"; in Chinese, being tolerant means "allowing, allowing, showing magnanimity towards others"; in Arabic, "forgiveness, condescension, gentleness, condescension, compassion, favor, patience, disposition towards others"; in Persian - "patience, tolerance, endurance, readiness for reconciliation". As a professionally significant quality of a teacher, tolerance is manifested in tolerance, readiness to accept students for what they are, respect for their opinions and opinions. Education as a process of interaction, and not impact, is associated with tolerance — with patience and tolerance, but not all. but only that which gives food for thought and development. It is learning to engage in behaviors and responses that do not harm the other, which take into account this other.

The idea of a voluntarily, consciously chosen attitude to the behavior and actions of another, i.e. tolerance. In this case, tolerance implies the patience of the stronger, more experienced (educator, teacher, teacher, just an adult) to the weaker (pupil, student, child), which includes the ability to control their own behavior and

the pupil's training using the "image" or behavior. Tolerance is a multidimensional concept and can be viewed both from the standpoint of the personality, its attitudes, values, and in terms of education and development. Tolerance is, on the one hand, the goal and result of education, accompanied by the formation of certain social attitudes, and on the other, the value and quality of the individual, manifested in behavior and actions. Disclosing the principles, norms and rules of successful education, V.Lizinsky emphasizes the principle of tolerance, implying a tolerant, respectful attitude towards people, recognition of the right of every person to make a mistake and individual behavior within the framework of laws adopted by society.

ATTENTION!

- In English, tolerance means "the willingness and ability to perceive a person or thing without protest";
- in French, "respect for the freedom of another, his way of thinking, behavior, political and religious views";
- in Chinese, being tolerant means "allowing, allowing, showing magnanimity towards others";
- in Arabic, "forgiveness, condescension, gentleness, condescension, compassion, favor, patience, disposition towards others";
- in Persian - "patience, tolerance, endurance, readiness for reconciliation".

The culture and philosophy of tolerance is based on the recognition for every person of the right to have their own views, principles, attitudes, their national and religious beliefs, their attitude to culture and fashion, to people and the world. The task of the teacher is to study the peculiarities of the student's behavior and provide him with the necessary pedagogical support. Pedagogical tolerance requires adherence to some basic principles: all school employees and the parent in communicating with children should show kindness, patience, respect for students; teachers should treat pupils with the same respect, not elevating some due to the humiliation of others; assessments should contribute to the development of the child, stimulate the acquisition of knowledge and skills, and not act as a "carrot and stick" in the hands of the teacher; the learning process is impossible without productive, positive communication, in the course of which norms and rules of behavior are laid down, an attitude towards people and towards life is formed, including and tolerance as one of the goals of education.

Pedagogical justice. The ancients said: it is good to be strict, even better - kind, but best of all - fair. Pedagogical justice is a concept of moral consciousness, expressing the proper order of human relationships in pedagogical activity.

It characterizes the ratio of pedagogical phenomena in terms of the distribution of good and evil. Pedagogical justice is a kind of measure of objectivity of the teacher, the level of his moral education. V. A. Sukhomlinsky wrote that justice is the basis of the child's trust in the teacher. But there is no abstract justice - outside of individuality, outside of personal interests, passions, impulses. To become fair, you need to know to the subtlety the spiritual world of each child.

Pedagogical tact is a form of realization of pedagogical morality in the activity of a teacher in which thoughts and actions coincide. Tact is a manifestation of moral behavior, including the foresight of all the objective consequences of the act and its subjective perception, the requirement of high humanity, sensitivity and care for the person, the best way to establish friendly relations in all situations.

In order to always remain tactful and loyal to pedagogical ethics, the teacher must take into account a number of requirements for his behavior: the ability to assess a situation in which it is possible to violate any requirement of pedagogical ethics and, therefore, especially in need of a tactful behavior of the teacher; possession of a maximum of information about the causes of moral contradictions, and when choosing an action, taking into account the incompleteness and inaccuracy of information; the ability to take into account the subjective characteristics of the student and the objective conditions in which the contradiction occurs: who the correction of the situation depends on, whether the student is able to do it and how the teacher can help it; the ability to take into account the situation in which the act is committed; the ability to take into account the possible effect that causes pedagogical impact on the student team and individual students. Pedagogical tact is a peculiar style of behavior of the teacher, in which students remain confident in the benevolence of the teacher, his sensitivity and kindness.

ATTENTION!

The ancients said: it is good to be strict,
even better - kind, but best of all - fair.

Pedagogical tact involves respecting and demanding of the student; development of students' independence in all types of activities and firm pedagogical leadership of their work; attention to the mental state of the student; rationality and consistency of requirements for it; development of activity thinking and will of schoolchildren; thoughtful assistance to them in school work, responsiveness and care for them; perseverance of the teacher in working with students and the use of various methods of educational influence, taking into account their pedagogical effectiveness; student confidence and systematic verification of their academic work; pedagogically

justified combination of business and emotional nature of relationships with students; calm confidence, poise and expressiveness in handling. A tactful teacher cares for children, especially during their difficult, crisis periods.

Self Test Questions

Test questions for self-test:

1. What are the professionally significant qualities of a teacher?
2. The role of the new pedagogical thinking in the development of the future teacher
3. Expand the concept of pedagogical activity
4. How is pedagogical communication different from everyday communication?

CHAPTER 2 HIGHER EDUCATION DIDACTICS

6 THEORY OF LEARNING IN THE HIGHER SCHOOL (DIDACTICS)

6.1. GENERAL CONCEPT ON DIDACTICS

By its origin, the term "didactics" goes back to the Greek language, in which "didaktikos" means instructive, and "didasko" - learning. For the first time, German teacher Wolfgang Ratke (1571–1635) introduced him to science, in a course of lectures entitled “A brief report from didactics, or the art of teaching Ratichia” (“Kurzer Bericht von der Didactica, oder Lehrkunst Wolfgangi Ratichii”). In the same sense, the great Czech educator Jan Amos Komensky (1592-1670) used this concept, publishing in 1657 in Amsterdam his famous work "Great didactics, representing the universal art of teaching everyone to everything."

In the modern understanding of didactics is the most important branch of scientific knowledge, which studies and explores the problems of education and training.

Didactics is a theoretical and at the same time normative and applied science.

Didactic studies make the real learning processes their object, provide knowledge about the natural links between its various parties, reveal the essential characteristics of the structural and meaningful elements of the learning process. This is the scientific-theoretical function of didactics.

The obtained theoretical knowledge allows us to solve many problems related to learning, namely: to bring the content of education into line with changing goals, to establish teaching principles, to determine the optimal possibilities of teaching methods and tools, to design new educational technologies, etc. All these are features of a normative and applied (constructive) function of didactics.

Didactics as a pedagogical discipline operates with the general concepts of pedagogy: “Upbringing”, “pedagogical activity”, “education”, “pedagogical consciousness”, etc. But as a theory of education and training, didactics has its own specific concepts. These include training, teaching, teaching, educational content, teaching method, etc.

Consider the basic categories of didactics.

Training is purposeful, pre-planned communication, during which the student’s education, upbringing and development are carried out, certain aspects of human experience, work experience and knowledge are learned.

Learning as a process is characterized by the joint activities of the teacher and trainees, with the goal of developing the latter, forming their knowledge and skills, i.e. general indicative basis for a specific activity. The teacher performs the activity designated by the term “teaching”, the learner is included in the activity of the teaching, in which his cognitive needs are met. The process of learning is largely driven by motivation.

The content of education is a specially selected and recognized by the society (state) system of elements of the objective experience of mankind, the assimilation of which is necessary for successful activity in a certain sphere.

The content of education is the end result to which the educational institution strives, that level and those achievements that are expressed in categories of knowledge, skills, personal qualities.

It is natural to assume that didactics, in connection with intensive integration processes, operates with concepts from other branches of knowledge - “system”, “element”, “structure”, “function”, “organization”, “formalization”.

Finally, in didactic studies one can often find such concepts from psychology as “perception”, “assimilation”, “mental development”, “thinking”, “memorization”, etc. From cybernetics, the concepts of “feedback”, “ dynamic system "and others.

Concepts borrowed from other sciences reflect individual aspects of learning, give didactics material for the theoretical understanding of its own subject of study. The conceptual apparatus of didactics itself acts as an orderly system and is built around the main categories of “teaching” and “teaching”, acting in their unity.

Higher education didactics - the science of higher education and higher education - is an intensively developing branch of pedagogical knowledge.

The need for didactic research in higher education is caused by the problems that modern higher education institutions have accumulated, namely:

- didactic study of the phenomenon of higher education;
- identifying patterns of learning in higher education;
- further development of the theory of higher education;
- designing (upgrading) educational technologies;
- improvement of pedagogical tools and many others.

Unlike general didactics, which in its research is more often focused on general education, the higher school didactics is designed to put the following problems on a scientific basis:

1. Justification of the specific goals of higher education.
2. Justification of the social functions of higher education.
3. Justification of the content of education.
4. Scientific substantiation of the methods of constructing the pedagogical process in higher education and the implementation of educational activities.
5. Determination of optimal ways, choice of content, methods, forms, technologies of training.

Principles of learning are the requirements for the organization of the educational process. Many of them, for example, the principle of clarity, were advanced and justified by Ya.A. Comenius. In teaching in higher education there are also general educational principles. However, the specificity of the training is still there, so they should be applied with some amendment.

Principles of learning

- Scientific.
- Communication learning with life.
- Systematic and consistent.

- Accessibility.
- The activity, consciousness and responsibility of students.
- Visibility and imagery.
- Combinations of different teaching methods.
- Combinations of various forms of education.
- Professional orientation of training.
- Combinations of independent work of students with educational activities in the audience.
- Success.
- Dialogue.
- Creative amateur.
- Adaptability.

6.2. STRUCTURE AND COMPONENTS OF THE LEARNING PROCESS AT HIGH SCHOOL

In addition to the universal components of the pedagogical process according to Yu.K. Babansky in the process of learning allocate target, motivational-stimulating, informative, operational and activity, control and regulatory and evaluation and effective components.

Components of the learning process

The target component is the teacher’s awareness and acceptance of the goals and objectives of the training by the student.

Motivational-stimulating: measures to stimulate the need to solve problems. It gives rise to the internal process of the emergence of positive learning motives.

The course content is determined by the state standard, curriculum, work program.

Operational and activity - implemented using methods, tools and forms of organization of the educational process

Control and regulatory - monitoring the progress of solving problems by the teacher and the students' self-control, implementation of feedback.

Evaluative and effective: teacher's assessment and students' self-assessment of the results achieved in the learning process, revealing the causes of deviations and designing new tasks.

Types of training

Problem-based learning is the creation and resolution of problem situations. Methodology of problem-based learning:

• the isolation from the educational material of those issues that may be the subject of a problem situation may create a contradiction (original, unexpected, paradoxical results, facts, phenomena);

• analysis of the actual knowledge on the basis of which the problem situation should be created. It is necessary to find out that students already know on which ideas a contradiction may arise;

• preparing them to resolve contradictions.

What means to create a contradiction. Description of events, question and others. Alignment of the sequence of educational material and asked questions;

• determination of the possible assessment of the situation by students. The ability to put yourself in the student's place to predict possible answers

• determination of ways to resolve contradictions;

• methodological stage. It determines how to analyze the causes of the contradiction, to reveal the mechanism of its manifestation, to make generalizations and practical conclusions.

Block-modular training:

• the content of educational material and the organization of its study is made out in the form of relatively independent logical blocks;

• each module is a fairly independent structural unit of the course;

• module core: informational support of lectures, practical works, CDS;

• in the structure of the module should be a basic component and variable:

• basic - fundamental concepts of the discipline: phenomena, laws, a group of interrelated concepts;

• variation - depends on the change and updating of the information content, the direction of specialization;

• control system - rating.

Programmed training:

• ongoing monitoring and management of training;

• carried out according to a predetermined program;

• training material is divided into portions (doses) that make up a number of consecutive steps;

• at the end of each step, the mastering of educational material is monitored;

• with the correct answer, the student receives a new portion of the material;

• if wrong - an indication or help.

Tutorials can be compiled linear, branched and mixed schemes.

Stages of management: the formation of goals, informational basis learning, forecasting, decision making, organization execution, communication, control, evaluation of results.

5 Levels of learning

In pedagogy, a diversity of views on the levels of learning is accumulated. Historically, you can refer to I. Herbart, who proposed the theory of 4 levels of education

V.P. Bespalko proposed the following levels of learning:

A) knowledge - dating;

b) knowledge - copies, when a student can reproduce knowledge - reproductive level;

c) knowledge - skills, when a student can apply knowledge in standard situations - performing level;

d) knowledge - transformations, when a student can apply knowledge in new, non-standard situations. If knowledge-transformations are not used by a specialist for a long time, they are reduced to the level of knowledge-acquaintance. As you know,

there is the concept of "half-life competence." For engineering specialties, it is 5 years.

In foreign pedagogy, the taxonomy of 6 levels of mastering the knowledge of B. Bloom and the corresponding method of asking productive questions are most actively promoted at the present stage.

Knowledge means the memorization and reproduction of material of any complexity (facts, concepts, rules, etc.). If the student reproduces the terms, specific facts, rules, the goal is considered to be achieved.

Questions: Name ... What year …. Where did ... List ... ..

Understanding - means the assimilation of the material and the ability to transform and interpret it. In this case, the student understands the facts, rules, interprets the scheme, graphics; based on the data presumably characterizes future consequences. Explains the meaning of information.

Questions: Complete the phrase ...? What did you learn ...? Why ...? Transform the expression ... Explain the relationship ... Tell in your own words ....

Application - the ability to apply the rules, theories, methods in specific situations and new conditions. The student uses the previously studied information in standard and new situations, demonstrates their correct application. It is important to use the knowledge gained in practice.

Questions: Explain the purpose of the application ... Solve the problem in several ways ... What theory explains this phenomenon ...? Check the assumption, the hypothesis ... Check the findings ...

Analysis - the ability to identify individual elements of the structure of the material, to determine the relationship of elements and the logic of the relationship.

Questions: What is the structure of ...? Classify ... What is the effect of ...? Compare ... Analyze the reasons ...

Synthesis - the ability to combine elements into a whole. The student writes creative work, proposes a plan for the experiment, uses knowledge from different areas. The level involves the creative processing of information in such a way that a new whole is created. Connects the parts to form a new integrated whole.

Questions: Find a solution ... Suggest an algorithm ... Find an alternative ... Make up the elements ... What are the possible explanations ... Draw conclusions ... Systematize ...

Assessment - the ability to assess the quality and value of the material based on the criteria (set by the teacher or developed by the student). The student identifies the criteria and follows them, sees the diversity of the criteria, evaluates the compliance of the findings with the available data, distinguishes between facts and value judgments.

6.3. REPRODUCTIVE AND PRODUCTIVE TYPES OF TRAINING

The mastery of knowledge, ways of activity (skills) can occur in two basic ways of building the learning process: reproductive (reproducing) and productive (creative) (V.I. Zagvyazinsky).

The reproductive option (you need to specify that it includes some productive elements, we emphasize some) includes the perception of facts, phenomena, their subsequent understanding (establishing links, highlighting the main thing, etc.), which leads to an understanding. The student has to keep the main point of understanding (initial positions, leading thesis, argumentation, proof, main conclusions) in memory, which requires a special (mnemonic) activity. Memorizing a thing leads to learning. Part of the material is quite enough to bring to the level of mastering, which requires another stage - application, use it either at the reproductive, algorithmic, or search (creative) level. The last stage in the university education is clearly underestimated, which makes the process of mastering knowledge incomplete (scheme 3.1).

Productive version of the educational process contains a number of new elements. This option consists of indicative, performing and control and systematizing stages. Getting, the application of knowledge here is a search, creative. Self-analysis, self-regulation, initiative are stimulated.

Based on this, you can determine the logical links of the educational process.

The educational process in this context is presented as a chain of learning situations, the cognitive core of which is learning and cognitive tasks, and the content is the joint activity of the teacher and trainees in solving the problem involving various means of cognition and teaching methods. Of course, the task is understood not in a narrow methodological, but in a broad psychological and pedagogical sense - as a goal set in a particular situation, or as a requirement expressing the need to transform the situation to obtain the desired results.

7 DRIVING FORCES AND PRINCIPLES OF EDUCATION IN HIGH SCHOOL

7.1. REGULARITIES AND PRINCIPLES TRAINING IN HIGHER SCHOOL

The bridge that connects theoretical ideas with pedagogical practice is the principles of instruction.

Principles of learning always reflect the relationship between the objective laws of the educational process and the goals that are in the training. In other words, this is a methodical expression of known laws and laws, knowledge of the goals, essence, content, structure of education, expressed in a form that allows them to be used as regulatory norms of pedagogical practice.

Learning patterns:

1. Training depends on the needs of the society, its requirements and the real possibilities of the students.

2. The processes of training, education, scientific activities are naturally interconnected in a holistic educational process of the university.

3. Teaching and teaching processes are naturally interconnected in a holistic learning process.

4. The content of training naturally depends on its goals and objectives, as well as the actual capabilities of the students.

5. Activation of educational activities naturally depends on the students' cognitive motives, on the methods of teaching stimulation used by the teacher.

6. Methods and means of organizing educational and cognitive activity, control and self-control depends on the tasks, the content of training and the actual capabilities of the students.

7. Forms of organization of training depend on the tasks, content and methods of training.

8. The effectiveness of educational and cognitive activity depends on the conditions in which it takes place.

9. Only a systematic, holistic application of external and internal links of the educational process is the maximum possible in this situation provides strong results in the allotted time.

In modern didactics, the principles of instruction are considered as recommendations guiding the pedagogical activity and the educational process as a whole, as ways to achieve pedagogical goals with due account for the regularities of the educational process.

Each scholar in the field of didactics of higher education considers it necessary to set forth his own system of teaching principles. At the same time, some of them transfer the principles of general, or school, didactics to university conditions, somewhat refining and expanding the wording (Table 3.1).

So, SI. Zinoviev, the author of one of the first monographs devoted to the educational process in higher education, considered the principles of higher education didactics: science; the connection of theory with practice, practical experience with science; consistency and consistency in the training of specialists; consciousness, activity and independence of students in their studies; connection of individual knowledge search with academic work in a team; a combination of abstract thinking and visualization in teaching; availability of scientific knowledge; the strength of learning.

It is easy to establish that all of them are a transformation of the principles formulated by the didactics for high school. It would seem that there is nothing wrong with that. After all, higher education didactics, like secondary school didactics, is designed to help the teacher find the optimal answers to the questions: what to teach, how to teach, what to teach?

However, when highlighting the system of principles of teaching in higher education, it is necessary to take into account the peculiarities of the educational process of this group of educational institutions (for example: higher education does not study the fundamentals of science, but the science itself in development; bringing together students' independent work and research work of teachers; academic beginnings in the activities of a higher education teacher, in contrast to a secondary

school teacher, the ideas of professionalization in the teaching of almost all sciences are expressed much brighter, stronger than in the middle school).

On the basis of these features, the principles of instruction were formulated and defended, reflecting the specific features of the educational process in higher education: ensuring unity in the scientific and educational activities of students (I. I. Kobylyatsky); professional orientation (A.V. Drummers); professional mobility (Yu. V. Kiselev, V. A. Lisitsyn, etc.); problematic (T. V. Kudryavtsev); emotionality and majority of the whole learning process (R. A. Nizamov, F. I. Naumenko).

Recently, ideas have been expressed about the selection of a group of principles of teaching in higher education, which would synthesize all the existing principles:

• orientation of higher education on the development of the personality of the future specialist;

• the compliance of the content of higher education with the current and projected trends in the development of science (technology) and production (technology);

• the optimal combination of general, group and individual forms of organization of the educational process at the university;

• rational use of modern methods and means of education at various stages of training specialists;

• compliance of the results of the training of specialists with the requirements that are imposed by a specific area of their professional activity, ensuring their competitiveness.

The type of training is a common way of organizing the educational process. The type of training chosen depends on the following components: 1) the nature of the teacher's activities;

2) features of student learning;

3) the specifics of the application of knowledge in practice. There are several types of training: dogmatic; explanatory and illustrative; problem; programmed; computer

Dogmatic training that has existed in Europe for many centuries involves the study of facts, phenomena of reality, and relations between them as certain unchanging positions of dogmas. The teacher expounded to the students a certain amount of knowledge in finished form, without explanation. The students had to memorize this material and literally reproduce it. They did not need the ability to apply this knowledge in practice. This type of training is most conducive to the development of mechanical memory, but does not create conditions for the intellectual development of the individual.

Explanatory illustrative training. This training is also called traditional. The main methods of this training are explanation combined with visualization; The students' leading activities are listening and memorizing; The main requirement is an unmistakable reproduction of the studied. Explanatory - illustrative learning has a number of important advantages: it saves time, saves the strength of teachers and students, facilitates the latter's understanding of complex knowledge, provides

effective process management. But along with these advantages, there are also major flaws in it - the presentation of “ready-made” knowledge frees pupils from the need to think independently and productively while mastering them. Explanatory illustrative learning has limited opportunities for individualization and differentiation of the educational process.

Problem-based learning, Organization of training through the independent acquisition of knowledge by students in the process of their own solving their learning problems. At the same time, the indicators of creative thinking and cognitive activity of students increase significantly. The technology of problem-based learning includes the implementation of a number of mandatory steps. An important stage is the creation of a problem situation. The problem situation is characterized by intellectual tension and the need to resolve the contradiction that has arisen. This contradiction is due to the impossibility of explaining the question with the help of the child’s stock of knowledge. It is necessary to obtain new knowledge to resolve the contradiction. The learning problem, which is introduced in a problem situation, should be quite difficult, but feasible for students. ITS introduction and awareness ends the first stage. At the second stage, the student searches, analyzes the knowledge at his disposal on this issue, finds out that they are not enough to get an answer, and is actively involved in the acquisition and acquisition of missing knowledge. The following are the stages of solving the problem, verifying the results obtained, comparing them with the initial hypothesis, systematizing and generalizing the knowledge and skills obtained.

Problem questions, tasks need to be put so that they:

- contained what was possible for the students and the mental difficulty available to them;
- took into account the stock of knowledge and skills available to schoolchildren, as well as their intellectual abilities;
- astonished the children when comparing the known with the unknown, the desire to overcome this difficulty;
- pushed children to put forward various hypotheses on how to resolve the difficulty.

ATTENTION!

The advantages of **Problem-based learning** are well known:

- independent acquisition of knowledge through their own creative activities, high interest in academic work,
- development of productive thinking, strong and effective learning outcomes.

The disadvantages include poor controllability of students' cognitive

activity, a large investment of time to achieve the projected goals.

Programmed learning

The main goal is to improve the management of the educational process. The software directs its efforts to create such a technology of the educational process, which allows you to control every step of a student's progress along the path of knowledge and thereby provide him with timely assistance. If this can be done, the students get rid of many difficulties, loss of interest and other negative consequences that accompany a poorly managed process.

Features of programmed learning:

- educational material is divided into separate portions;
- the educational process consists of successive steps, containing a portion of knowledge and mental actions for their assimilation;
- each step is completed control;
- if the control tasks are performed correctly, the student receives a new batch of material and takes the next step in training;
- if the student answers incorrectly, he receives help and additional explanations;
- each student works independently and masters educational material at a pace that is feasible for him;
- the results of all the control tasks are recorded, they become known both to the students themselves and to the teacher;
- the teacher acts as an organizer of learning and an assistant in case of difficulties, carries out an individual approach;
- in the educational process, specific software tools (programmed teaching aids, simulators, monitoring devices, training machines) are widely used.

Programmed training is carried out by machine and machine-free ways. Computers working on specially designed training programs, quickly establish the level of learning and the opportunities of schoolchildren working with them, and can "adapt" to them. Such programs are called adaptive. In the machine-less version of the software, the function of managing the student's cognitive activity is carried out by a programmed textbook or specially compiled programmed materials, manuals.

Computer training

Computers equipped with special training programs can be effectively adapted for solving almost all didactic tasks - presenting information, managing the course of training, monitoring and correcting results, performing training exercises, accumulating data on the development of the educational process, etc.

The two most important efficient use of the computer

In training:

1) an increase in performance in individual academic subjects;

2) the development of general and special abilities - to solve tasks, to think independently. In addition, computers are widely used for testing, evaluation and

management, which allows freeing up teacher time and thereby increasing the efficiency of the pedagogical process.

There is also a form of differentiated learning

All types of training, especially programmed, make it possible to effectively use differentiated learning - an approach that maximizes the capabilities and needs of each student or individual groups. The purpose of Difl at school is to protect students from possible gaps in knowledge, to “level out” their training, to arouse interest in learning. Differentiation in a lesson is carried out by changing the content, regulating the difficulty and duration of the performance of individual tasks, means and methodological support of students in accordance with their capabilities and preparedness for learning. In carrying out differentiation, the teacher will:

1) have a clear idea of why, in what lessons and how specifically he will use it;

2) to study and know the general readiness of children for learning activities, the perception of specific educational material;

3) to anticipate the difficulties that may arise in children in the assimilation of new material and the performance of differentiated tasks;

4) use individual and group tasks in the lesson system;

5) constantly analyze the effectiveness of individual and differentiated learning;

6) have a clear idea of how the work will be continued in the following lessons;

7) use differentiated training in the system, practice it throughout the training.

In this way, differential learning allows you to effectively address the issues of quality education for all students.

Learning systems

Individual learning system

With individual training, each student performs his or her task, and even if the teacher is involved with a group, work with each student is carried out separately. Individual education originated very long, and was especially prevalent in medieval schools. Despite a number of positive aspects (direct contact between the teacher and students, the ability to provide timely assistance to the student), this system has significant drawbacks: the teacher spends his time and energy on only one student, there is no student group in such classes, which reduces their educational value .

A class-based learning system

the most popular organization of the learning process, in which students of the same age for conducting classes are grouped into small groups (classes) that retain their membership for a fixed period of time (usually the school year), and all students work on mastering the same material. In this case, the main form of education is a lesson. The advantages of the class-lesson system of training lie in its efficiency, in that it provides accessibility, consistency, strength of education and creates conditions for the formation of a group of students. Under the class-lesson system, the role of the teacher, who is the organizer and leader of the educational process, its main figure, is great.

Lecture and seminar learning system

In a lecture-seminar system, the main forms of education are lectures and seminars. Also characteristic is the division of the educational process into separate links and the presence of specialized forms of the educational process at each link (lectures, seminars, workshops, colloquiums). With this training system, various training groups are created: streams, groups, subgroups. In addition, individual students can be taught according to an individual plan.

Lecture and seminar system has its own advantages and disadvantages. The disadvantage is a certain distance of the teacher from the students. At the same time, the depth, scientific character of the training, the best technical equipment, and economy are ensured. This system of education is typical for universities and partly for high school.

Lecture and seminar system has the following forms of organization of educational work: lectures, workshops, seminars, consultations, electives.

A lecture is a systematic exposition of the essence of a particular problem of scientific, socio-political, moral or ideological-aesthetic content, which is developed and organized in an accessible form. Seminars are used as a form of creative discussion of the subject or individual questions on humanitarian disciplines (literature, history, social science). Their goal is to expand the students' independent work. For the workshop, students (2-3 people) prepare reports using additional literature. These reports are discussed at the seminar, so all students are prepared for it, and even co-rapporteurs, opponents are singled out, who must supplement, evaluate the reports, refute or support certain provisions.

7. 2. DIDACTIC LEARNING THEORIES

Behavioral theory has become widespread in teaching practice with the United States and in many European countries. She identified the life of man and animal, reducing all the complex vital activity to the formula "stimulus-response". From this point of view, the learning process is the art of controlling stimuli in order to trigger and prevent certain reactions. Thus, the conscious activity of a person in the learning process is explained not by mental, but by physiological processes. Conscious activity is replaced by purely reflex. Behaviorists see the difference between man and highly organized animals in the fact that man, besides the motor one, also has a verbal reaction, and that verbal stimuli can act on him.

Pragmatists reduce training only to expanding the student's personal experience so that he can adapt to the existing social system as best he can. The founder of pragmatism, George Dewey, wrote that the environment brings up, and life teaches. Pragmatists deny the need for the formation of systematic knowledge and skills, and, therefore, deny the scientific rationale of curricula and programs, they diminish the role of the teacher, giving him the role of a consultant. The main mechanism and method of obtaining knowledge and skills is “learning through doing”.

Existentialists reduce learning to the processes occurring in the student's soul. Obtaining knowledge and skills is not explained in any way, except through

intuition, insight, discretion. They diminish the role of learning, subordinate intellectual development to the education of feelings.

Gestalt psychology was based on the concept of gestalt, a holistic structure, and the emergence of the structure "is a spontaneous, instantaneous self-organization of the material" in the process of perception or recall of the material in accordance with the existing principles of similarity, closeness and independence of man. The main task in teaching is learning to understand, to embrace the whole, the general ratio of all parts of the whole, and this understanding comes as a result of a sudden decision or insight - insight. Even learning by imitation does not take place by the method of blind, meaningless copying, and in humans it is primarily “the understanding of the pattern that precedes the imitative action”. Psychologists in this area believed that even such skills as speech and writing can be learned through imitation.

The materialist theory of knowledge

Knowledge begins with sensations, with sensual acquaintance with the material. This provision was justified by F. Bacon (1561-1626), an English materialist, the ancestor of the experimental sciences of the new time. He argued that all knowledge should begin with sensory perception and end with rational generalization. The materialistic theory of knowledge shows that what is displayed does not depend on our consciousness and is determined by the ascent from living contemplation to abstract thinking and from it to practice.

7.3. MODERN DIDACTIC CONCEPTS

The theory of personal developmental learning and pedagogy of cooperation

Personally oriented learning is understood as learning that reveals the characteristics of a student - subject, recognizing the originality and self-worth of a person’s subject experience, building pedagogical influences on the basis of the learner’s subject experience. [7, p. 220].

Higher professional education is a qualitatively defined level of the system of continuing education, occupying a significant place in meeting the educational needs of the individual and society. The modern stage of development of higher education is characterized by the intellectualization and humanization of the educational process, the expansion of the profile of training and the increase in the professional mobility of specialists.

The leading ideas of personality-oriented learning (according to I. S. Yakimanskaya) are:

• goals of student-centered learning: the development of cognitive abilities of students, the maximum disclosure of human individuality;

• learning, as a given standard of knowledge, is re-accounted for learning, as a process;

• teaching is understood as a purely individual activity of an individual student, aimed at transforming socially significant learning patterns given in training;

• the student's subjectivity is not considered as a “derivative” of teaching influences, but is intrinsic to him;

• in the design and implementation of the educational process, work should be carried out to identify the subject experience of each student and his socialization ("cultivation");

• the assimilation of knowledge from the goal turns into a means of development of the student, taking into account his capabilities and individually significant values

Each teacher has a task - to organize the process.

learning so that it possesses a system of functions that are adequate to the structure of the personality, and at the same time with the assimilation of knowledge and skills formed the personality.

We list a number of positions that seem important for student-centered learning:

• student-centered learning ensures the development and self-development of the student's personality, based on the identification of its individual characteristics as a subject of knowledge and objective activity;

• the educational process of student-centered learning is for each student, relying on his abilities, inclinations, value orientations and subject experience, the ability to realize themselves in cognition, learning activities, behavior;

Learning and education are not identical in nature and results. Learning through the mastery of knowledge, skills and abilities provides social and professional adaptation in society.

Education forms the individual perception of the world, the wide use of subject experience in the interpretation and assessment of facts, phenomena of the surrounding world on the basis of personally significant values and internal attitudes;

• in this context, traditional learning cannot lead. Significant become those components that develop the individuality of the student, create all the conditions for his self-development, self-expression;

• student-centered learning is based on the principle of variability, that is, recognition of the diversity of content and forms of the educational process, the choice of which is made by the teacher, taking into account the development goals of each student.

Personality-oriented learning assumes that the student himself is at the center of learning - his motives, goals, his unique psychological store, that is, the student as a person.

The pedagogy of cooperation is so conditionally called the totality of ideas proposed by educators and innovators of 70-80 years of the twentieth century in the USSR, who modernized the learning process based on humane-personal values and advanced didactic ideas

The main ideas of pedagogical cooperation:

1. Equal Relations with Students
2. Teaching without coercion
3. The idea of a difficult goal
4. The idea of support
5.Evaluation of work

6. The idea of free choice
7. The idea of advancing
8. The idea of large blocks.
9. The idea of the appropriate form
10. Intellectual class background
11. Collective creative education
12. Creative productive work
13. Creative self-government
14. Cooperation with parents
15. Personality approach
16. Teacher collaboration.

Self Test Questions

1. Expand the specifics of such foreign concepts of education as behaviorism, pragmatism, neopragmatism
2. What are the main ideas of the pedagogy of cooperation?
3. What is the peculiarity of personal developmental training.
4. Expand the stages and logic of the educational process according to Bloom's taxonomy.

8 CONTENT OF HIGHER EDUCATION

8.1. THE ESSENCE OF THE CONCEPT OF EDUCATION

The content of education can be presented as a set of the following requirements:

It should be focused on ensuring self-determination of the individual, creating conditions for its self-realization; community development;

- on the integration of the individual in the national and world culture;
- formation of a person and a citizen adapted to the conditions of modern society and aimed at improving this society;
- aimed at young people in the profession and relevant qualifications.
- promotes mutual understanding and cooperation between people, between nations regardless of their racial, national, ethnic, religious and social affiliation, take into account the diversity of ideological approaches, promote the realization of the right of students to free choice of opinions and judgments.

The content of vocational education as a system of knowledge and skills that provide preparation for a professional activity includes:

• the sum of concepts, provisions, algorithms and modern theories explaining the phenomena that occur in nature, society, culture and technology;

• the sum of knowledge about objects, tools and mechanisms used in the labor process;

• training in activities that guarantee the formation of professional skills.

The content of the training of any specialist is the main part of the pedagogical system. Learning content performs various functions:

• Informative;

• Methodological;

• educational;

• Developmental;

• Educational.

The content of the professional training of specialists is reflected in the following program documents:

• State educational standard of higher professional education;

• educational standard of the national-regional (university) component;

• curricula for specific specialties;

• training programs of individual disciplines.

Standard (from the Latin. Standart - the norm, the sample) - in the broad sense of the sample, the standard, the model, taken as the original when compared to them other similar objects. The need for vocational education standards is linked to the need to streamline basic requirements for the content and quality of vocational training in various types of educational institutions. The standard of vocational education allows you to:

• establish a basic level of qualification, below which there can be no certification, and establish a basic level of specialist training at various levels of training;

• improve the quality of vocational training by expanding the profile, universalizing the content of education, the applied pedagogical technologies, means and methods of teaching;

• ensure the convertibility of vocational education within the state and beyond;

• streamline the rights of students and increase the responsibility of various types of educational institutions in vocational training and vocational education;

• establish the place of each level of vocational education in the system of continuous education.

The standard of vocational education can be: international, state and regional.

The state educational standard is designed to ensure the preservation of the unity of the educational space, the possibility of continuing education, academic mobility, and rational expenditure of financial and material resources. Standards must meet the requirements of the individual, the fatherland and the state, the possibilities of their implementation and have an instrumental-technological organization based on fairly strictly defined standards.

The main theories of educational content

Many of today's concepts of educational content are a development or continuation of three main theories: didactic formalism, materialism and pragmatism (utilitarianism).

Didactic formalism (Heraclitus, Cicero, Locke, Pestalozzi, Kant, Herbart) is based on the philosophy of rationalism, which states that the source of knowledge is reason, therefore it is necessary first of all to develop the human mind and abilities. It is believed that mastering actual knowledge is not so important for the development of the mind. On the contrary, classical liberal arts and especially ancient languages are the best means of developing the mind. Didactic materialism (Ya.A. Komensky, G. Spencer) considers the main goal of the school to transfer students as much knowledge from various fields of science as possible. Ya.A. Komensky spent many years working on a textbook in which he wanted to put all the knowledge necessary for students. Such an encyclopedic learning model was popular among 19th century teachers. And it has survived until now along with one of its problems - the overload of trainees with unnecessary information.

At the turn of the XIX and XX centuries, the theory of didactic pragmatism appears. In the USA, its foundations were laid by the famous pedagogue J. Dewey; in Europe, the German teacher G. Kerschensteiner expressed similar views.

Proponents of this theory believed that the source of educational content is not in separate subjects, but in the student's public and individual activities. The content of education should be presented in the form of interdisciplinary knowledge systems, the development of which requires students to collective efforts and practical actions to solve the tasks. A variety of game forms of training, practical exercises, individual independent work stimulate the thinking and activities of students.

The theory of didactic pragmatism has had a significant impact on the content and methods of academic work in the American school. Based on this theory, the students were given maximum freedom with regard to the choice of subjects, the educational work adapted to the students' subjective needs, their interests. The practical implementation of this theory led to a significant decrease in the level of education in the United States, for which it was sharply criticized already in the first half of the twentieth century. Despite the fact that the theories of didactic materialism, didactic formalism, didactic utilitarianism did not stand the test of time, they had a significant impact on modern approaches to the formation of educational content.

The well-known Polish scientist V. Okon developed a theory of educational content called functional materialism. He believes that a theory is needed that would ensure both the acquisition of knowledge by students and the acquisition of the ability to use this knowledge in their activities, i.e. there must be an integral link between knowledge and activity. V. Okon believes that the content of individual subjects should reflect their leading idea (in biology - the idea of evolution, in mathematics - the idea of functional dependencies, in history - historical conditionality, etc.). That is, when selecting the content of education, it is necessary to be guided by the ideological approach.

In the learning process, conditions should be created so that students can use acquired knowledge to solve practical problems aimed at accessible transformations of natural, technical, cultural and social reality.

In the 50s. The twentieth century developed a theory of operational structuring of educational content. The emergence of this theory is associated with the introduction of programmed learning in the educational process. This theory is not so much trying to answer the question of what the content of education should be, but how much - how to convey it to students, how to structure it correctly, divide it into related meaningful and logical parts. The considered theories allow to conclude that the content of education must have cognitive, developmental and educational value.

8.2. MODERN APPROACHES AND REQUIREMENTS TO THE CONTENT OF EDUCATION

The listed didactic approaches determine the differences in the domestic concepts of the content of education:

1. The content of education - pedagogically adapted fundamentals of science. This concept focuses on the introduction of students to science and production. The leading principles of selection and construction of the content of education are the general methods and principles of the construction of knowledge, which are characteristic, first of all, of the natural and exact sciences. This concept is characterized as technocratic, partly continuing the theory of didactic materialism.

2. The content of education is a system of knowledge and skills (skills), which must be learned by students, as well as the experience of creative activity and the emotional-volitional attitude towards the world. Knowledge, skills and abilities related to the fundamentals of science and relevant academic subjects are necessary for the transfer of students, so that they know how to live and act in society.

3. The content of education is a pedagogically adapted social experience of mankind, identical in structure to the human culture. In this case, the content of education consists of four structural elements:

- experience of cognitive activity, fixed in the form of its results - knowledge;
- experience of reproductive activity - in the form of ways of its implementation (skills);
- experience of creative activity - in the form of problem situations, cognitive tasks, etc .;
- Experience in the implementation of emotional-value relationships (I.Ya. Lerner, M.N. Skatkin, V.V. Kraevsky).

4. The content of education - the content and result of the process of progressive changes in the properties and qualities of the individual. The set of general education courses is determined by the structure of the studied area of reality (animate and inanimate nature, man, society, systems and structures, technology and technology, etc.) and the structure of the activity reflected in the invariant aspects of the culture of the individual –cognitive, communicative, aesthetic, moral, labor, physical (V.S. Lednev).

5. The content of education is an educational environment capable of causing a student's personal educational movement and its internal increment. The content of education is divided into the external environment and internal - created by the student when interacting with external educational environment. External and internal content of education do not match. Diagnosis and evaluation is not subject to the completeness of the student's mastery of external content, but the increment of its internal educational content for a certain educational period (A.V. Khutorskaya).

The most important condition for the development of educational content should be a scientific substantiation of learning objectives, transformation and adaptation of educational content, taking into account both the amount of reflected sociocultural experience and the patterns of creation and presentation of educational texts, as well as ways of mastering certain educational content (learning technologies) in accordance with the developing character educational process.

Content presentation levels

In external manifestation, the content of education has several levels of education. representation:

The first level is the content of education in general.

The second level is the content of education according to the steps of education: basic general education, vocational education, secondary special education, higher education, and scientific education. The second level also includes the content of cross-cutting branches of education (general, polytechnic, special, etc.).

The third level of organization of educational content is the cycles of courses. The cycles of subjects intersect and therefore do not characterize the content of education holistically.

The fourth level of organization of the content of education on the descending line is the training courses in mathematics, physics, chemistry, language, etc. In their totality, they cover all the required theoretical training in an educational institution.

Fifth level is individual academic disciplines within the courses. Thus, the educational course "Pedagogy" is divided into general pedagogy, school pedagogy, ethnopedagogy, higher school pedagogy.

Principles of selection of educational content determine the basic principles of its design:

Analysis of the existing didactic approaches allows us to identify the following general principles of formation of the content of education:

The principle of taking into account social conditions and needs of society

For example, the strengthening of the role of man in modern society is expressed by an increase in the humanitarian aspect of the content of education. In accordance with this principle, depending on the needs of society, other principles may have a different impact on the selection of educational content: humanitarian, personal orientation, science, etc.

Legislative reflection of this principle is state educational standards.

The of the principle of compliance educational content with the goals of the selected educational model

Each model or concept of education sets requirements for the features of the structure and content of education. For example, in one concept, the content can be the subject of learning, in the other - the medium for growing the personal content of education. The didactic principles and laws of the chosen education model are reflected at all levels of the construction of its content: curriculum, programs, textbooks, lessons.

The principle of structural unity of the content of education at various levels of community and at the interdisciplinary level

Structural unity is required in all hierarchically interrelated elements of the content of education: from the level of the general theory and the school subject to the level of the learning process and the personality of the student. Relationships between various objects are also established on a common basis: interdisciplinary, meta subject, etc.

The principle of unity of the content and procedural activity of the training, involving the inclusion in the educational content of activity components - goal-setting, planning, educational technologies, transforming the beginning of the subjects of training

This principle is expressed in the need to include in the curriculum not only of the material being studied, but also of the activities of students — research, discussion, design, etc.

The principle of accessibility and nature conformance of the content of education is manifested in the structure and volume of curricula, programs, textbooks, in the optimal amount of material studied. This principle implies that the content of education is consistent with the age and individual characteristics of students, as well as the school and regional conditions of study.

The content of higher education is formed on the basis of three major principles:

the principle of conformity of the content of education to the needs of social development - from it, in particular, the need arises to include in the content of education not only knowledge, but also fragments ensuring reflection of the experience of the creative activity of humanity and the experience of personal attitudes to the system of values developed by mankind.

The principle of unity of the substantive and procedural aspects of learning; the principle of structural unity of the content of education at its various levels

Taking into account these principles, the content of university education is designed: the curriculum for the courses, thematic and work plans for the lecture and seminar classes, the content of the training tasks are determined, and methodological developments “connecting” this or that are written.

Regulatory documents defining the content of education

The content of education is regulated by curricula, curricula for subjects, recorded in textbooks, manuals and electronic storage devices (video disks, video tapes, computer programs). A curriculum is a normative document that defines the composition of subjects; the order (sequence) of their study by year of study; weekly

and annual number of training hours devoted to the study of each subject, the structure and duration of the school year.

8.3. BASIC COMPONENTS OF EDUCATION CONTENT, PRINCIPLES AND CRITERIA FOR ITS SELECTION

The educational content includes the following components:

1) Knowledge of nature, society, technology, thinking and ways of human activity; knowledge of professional activity, goals, process, methods, means, conditions of professional activity. This knowledge should be presented in a system, the assimilation of which can ensure the formation of a scientific picture of the world. These include:

• facts, phenomena, concepts, terms from the phenomena of everyday environmental reality;

• basic laws of science;

• basic scientific theories;

• knowledge of the methods of scientific knowledge;

• laws of existence of human society;

• knowledge of professional activities, knowledge of technology professional activity.

2) Experience in the implementation of known methods of social and professional activity (practical and professional experience), which is embodied in the knowledge, skills and habits of the person who has mastered this experience. Practical experience should be learned at the level of skills. For students, these skills and abilities are divided into general intellectual, general professional, special.

3) Experience of creative, search activity in solving new problems facing the society and in the process of professional activity. Assimilation of it is necessary to ensure the readiness of the individual to solve new problems that arise, to transform the surrounding reality. This experience is designed to ensure the readiness of the individual:

• transfer existing knowledge and skills to a new situation;

• form new ways of working in new situations based on already known methods;

• combine known ways of doing business and new ways;

• be able to see possible solutions to problems that arise.

4) The experience of the value system, to the objects and means of professional activity of a person, in relation to the surrounding world, to other people. This component of the content of education allows the student to form a system of values, beliefs and ideals, his world view, spiritual sphere of personality.

In didactics, there are several levels of representation of the content of education. Three of them are regulated and documented.

I. Level of general theoretical representation - SES, curriculum.

2. Level of academic subject. The subject of study is a system of scientific knowledge and practical skills that allow students to master the basic principles of

science with a certain depth. It determines what and in what sequence it is necessary to study within a separate discipline. The curriculum is a normative document that reveals the content of education in a school subject. It shows the logic of studying the basic ideological ideas with an indication of the sequence of topics, questions, the total dosage of time.

Training programs - typical, working, copyright

3. The level of educational material. The training material is the real content of the elements of the educational content. These are the specific knowledge and skills that constitute the content of textbooks, textbooks, manuals and other materials.

8.4. STATE EDUCATION STANDARD

Educational program - a program of training in the specialty, defining the requirements for a specialist and the list of disciplines education. In Kazakhstan, higher professional education is carried out in accordance with State compulsory education standards. The standard of education is a system of basic parameters that are taken as the state norm of education, reflecting the social ideal. The state obligatory standard of higher education of the RK of the last generation is developed according to the credit system of education. It defines educational goals and competency requirements. The state obligatory standard of higher education provides for the study of the cycle of obligatory disciplines, the cycle of basic disciplines and the cycle of major disciplines, as well as the passage of professional practice.

Each cycle consists of compulsory disciplines, as well as an optional component. Elective disciplines are set by universities. Universities create a catalog of elective disciplines. Students each semester choose subjects. Thus, an individual learning path for students is formed.

The state compulsory standard of graduate education provides for theoretical training, a cycle of basic disciplines and a cycle of specialized disciplines, practical training and writing a research paper (dissertation). Also, each cycle has a block of mandatory disciplines and a component of choice.

8.5. REGULATORY DOCUMENTS REFLECTING THE CONTENT OF EDUCATION

In the practice of modern universities, several types of curricula are used: the standard curriculum and the university curriculum proper.

The model curriculum is the main state regulatory document, which is an integral part of the State Educational Standard.

The model curriculum defines:

- the total duration of training (in school years) and for each level;
- The maximum amount of academic load of students, the composition of educational areas and subjects;

- study time allocated on the basis of educational content for courses, educational areas and subjects of study;

- weekly study load for training courses at each stage of education, for compulsory classes and for choice.

The model curriculum serves as the basis for the development of the curriculum of the university and the source document for financing an educational institution.

In the structure of the curriculum is allocated:

- the invariant part, which ensures the inclusion of students to the general cultural and nationally significant values, the formation of personal qualities that correspond to social ideals;

- the variable part, providing the individual character of the development of schoolchildren and taking into account their personal characteristics, interests and inclinations. A means of implementing educational standards in practice are educational programs, which are called curricula.

ATTENTION!

Educational programs determine the content of education of a certain level and orientation.

In Kazakhstan, educational programs are implemented, divided into general educational (basic and additional) and professional (basic and additional).

General educational programs are aimed at solving the problems of forming the general culture of the individual, adapting the individual to life in society, and creating the basis for conscious choice and mastering professional educational programs.

General education includes programs of pre-school education, primary general education, basic general education, secondary (full) general education.

Professional educational programs are aimed at solving the tasks of consistently raising the professional and general educational levels, training specialists with appropriate qualifications.

The vocational programs include primary vocational education, secondary vocational education, higher vocational education, and postgraduate vocational education.

The mandatory minimum of the content of each basic general educational program or basic professional educational program (for a particular profession, specialty) is set by the relevant state educational standard, and it also determines the normative terms of their development in state and municipal educational institutions.

The curriculum is a normative document, outlining the range of basic knowledge and skills that must be learned in each individual academic subject.

Curricula can be typical, working and copyright. Typical curricula are developed on the basis of the State educational standard for a particular discipline. They are advisory in nature.

Working training programs are created on the basis of model ones, are approved at the meeting of the department. They reflect the requirements of the state standard and the possibility of a particular educational institution.

Author's curricula take into account the requirements of the educational standard, but may have a different logic of presentation of educational material, author's views on the phenomena and processes under study.

They are discussed (protected) at the meeting of the department and can be included in the educational process as special courses. Then the programs are approved for use in the educational process. Author programs are most often developed for elective courses and electives.

Structural curricula consist of three main components. The first component is an explanatory note, which defines the target areas for studying this particular academic subject in the system of academic disciplines of the university, the main objectives of the academic subject, its educational opportunities, leading scientific ideas underlying the construction of the academic subject. The second component is the actual content of education: a thematic plan, a list of sections and topics for the course, basic concepts, skills, possible types of classes. The third component is some guidelines on how to implement the program.

The working curriculum is compiled by the teacher who reads the course. Includes an explanatory note with targets, a thematic lesson plan - lectures and seminars, guidelines. The working curriculum is approved by the university. According to the credit system of training, syllabus is included in the working curriculum.

The structural components of the syllabus are: information about the teacher; name and code of discipline, the number of credits; prerequisites of discipline (preliminary compulsory courses); the system of assessment of students' knowledge, the content of the discipline - the distribution of hours by type of classes, tasks; educational and methodological support of the discipline, the policy of the academic discipline. The specific content of educational material is disclosed in textbooks and manuals of various types: reference books, problem books, additional literature books, workshops, reading books, textbooks, dictionaries, maps, atlases, teaching aids, teaching materials, etc. The content of educational material is also recorded on electronic drives (video disks, video tapes, computer programs).

Primary importance in the disclosure of the content of the material belongs to the textbook. A textbook is a book that sets out the basics of scientific knowledge on a particular academic subject.

The textbook has two main functions: it is a source of educational information that reveals the content provided by the educational standard in an accessible form for students; acts as a learning tool through which the organization of the educational process, including self-education.

The structure of the textbook includes text (as the main component) and extra-text (auxiliary) components. The explanatory text includes subject introductions to the textbook, sections, chapters; notes, explanations; dictionaries; determinants; explanations for maps, charts, diagrams; pointers.

In addition to the educational text, the textbooks contain the so-called extra-text components. Extratext components include the organization of the material assimilation; illustrative material; device orientation. The device for organizing the assimilation of the material includes: questions, assignments, memos, guidance materials, tables, pin allocation, captions to illustrative material, exercises. Illustrative material includes subject and subject materials, documents, technical maps, diagrams, diagrams, plans, drawings, instructions, techniques, graphs, reference books, illustrations.

Apparatus orientation includes a preface, table of contents, notes, applications, pointers, signals, symbols.

Additions to the textbook are textbooks that exacerbate and expand its content. Certain requirements are imposed on educational literature, especially textbooks. The textbook should in unity reflect the logic of science, the logic of the curriculum and the logic of the school subject. It must contain highly scientific material and at the same time be accessible to students, take into account the peculiarities of their interests, perception, thinking, and memory. The wording of the main provisions, conclusions should be very clear and precise. The language of presentation of the material should be figurative, fascinating with elements of a problematic presentation. A good textbook is informative, encyclopedic, encourages self-education and creativity.

Textbook - educational and theoretical publication, containing a systematic presentation of the academic discipline or its part, section, corresponding to the standard curriculum and officially approved as this type of publication.

The manual is a theoretical educational edition, partially replacing or supplementing a textbook and officially approved as this type of publication. Available in addition to the textbook. It corresponds to the program of the training course as a whole or to its section and contains mostly new material on the course, expanding the fundamental knowledge included in the textbook.

Textbook functions: informational; management of educational and cognitive activity (strengthened with the introduction of the credit system of education); stimulating and motivating learning; diagnostics and self-control of knowledge and skills; coordination with other books, means of educational and methodological support; rationalization - optimal regulation of labor costs of students and teachers; educational function.

The educational-methodical complex for the discipline is developed in accordance with the state standards and the standard and working curriculum. As a rule, it includes a work program (syllabus), a brief summary of lectures, teaching materials, materials for independent work of students, monitoring and measuring tools, and recommended literature.

8.6. COMPETENCE APPROACH IN DETERMINING A SPECIALIST MODEL

Achievement of learning objectives is provided by the selection of educational material and didactic processes that contribute to translating it into knowledge, skills, abilities and personal qualities of a specialist. The content of educational material and the form of its transformation into knowledge and skills are recorded in the appropriate educational and program documentation, the basis of which educational standards, characteristics and professiogram specialty.

The formulation of the objectives of training and the optimization of obtaining training for specialists of a given qualification and profile is preceded by the development of a model for the professional activity of a specialist - a professiogram.

Professiogram - a document regulating the technology of building the requirements that the profession imposes on personal qualities, psychological abilities, psychological and physical abilities of a person.

This document should provide the formulation of a practical task and the organization of its solution in order to optimize and increase the efficiency of the professional activity of a specialist of a specific profile. The professioniogram reflects such aspects of professional activity as social, socio-economic, historical, technical, technological, legal, hygienic, psychological, physiological and socio-psychological The scope, depth and activity of their study depends on the social order.

In fact, the educational process is carried out on the basis of educational qualification characteristics, educational and professional programs, curriculum and programs

The issue of didactic planning (methodology for the development of qualification characteristics, educational and professional programs, curricula and programs, systematization of the material, taking into account interdisciplinary and intra-subject relations) is covered in detail in the pedagogical literature. with this, it is necessary to clarify the functions of educational qualification characteristics, educational professional The curriculum, curriculum and curriculum are documents that actually predict the content of future specialists' training. The achievement of learning objectives is ensured by the selection of educational material and didactic processes that contribute to translating it into knowledge, skills, and personal qualities of a specialist. transformation into knowledge and skills is fixed in the corresponding educational and program documentation, the basis of which is educational standards, qualification characteristics Stick and professiogram specialty.

8.7. MAJOR TRENDS IN THE REORGANIZATION OF THE CONTENT OF EDUCATION

The main trends in the modernization of the content of education associated with participation in the Bologna process

Dublin descriptors

- this is a description of what the learner should know, understand and be able to do at the end of the educational program.

- (Bachelor - Master - PhD). The descriptors are based on learning outcomes, competencies generated and aligned with the European Qualifications Framework.

Dublin formulations are based on 5 main learning outcomes:

 knowledge and understanding

 practical use of knowledge and understanding,

 the ability to make judgments, evaluate ideas and formulate conclusions,

 communication skills,

 learning skills

The first cycle descriptors (for undergraduate) suggest that holders of the appropriate degree / diploma are capable of:

 demonstrate knowledge and understanding in the area of study, including elements of the most advanced knowledge in this area, and can apply this knowledge and understanding at the professional level;

 formulate arguments and solve problems in the studied area;

 to collect and interpret information to form judgments taking into account social, ethical and scientific considerations;

 communicate information, ideas, problems and solutions, both to specialists and non-specialists.

 The second-cycle descriptors (for the magistracy) suggest that holders of the appropriate degree / diploma are capable of:

 demonstrate knowledge and understanding based on and going beyond and / or developing knowledge and understanding obtained at the bachelor's level, which are the basis or opportunity for the original development or application of ideas, often in the context of scientific research;

 apply knowledge, understanding and ability to solve problems in new or unfamiliar situations and contexts within broader (or interdisciplinary) areas related to the studied area;

 integrate knowledge, cope with difficulties and make judgments based on incomplete or limited information, taking into account ethical and social responsibility for the application of these judgments and knowledge;

 clearly and clearly communicate their findings and knowledge and their justification to specialists and non-specialists;

 continue learning by yourself.

The third cycle Dublin descriptors (for PhD doctoral studies) assume that degree holders are capable of:

• demonstrate a systematic understanding of the field of study, skills in terms of skills and research methods used in this field;

• plan, develop, implement and adjust an integrated research process;

• contribute with original research of your own to expanding the scope of a scientific field that may be worthy of publication at the national or international level;

• critically analyze, evaluate and synthesize new and complex ideas;

• communicate their knowledge and achievements to colleagues, the scientific community and the general public;

• promote the development of a knowledge-based society.

Self Test Questions

1. What are the trends in the reorganization of the content of higher education?
2. What define Dublin handles?
3. What is the competence approach to the design of the content of education in the university?
4. Name the constituent parts of the curriculum.

9 ORGANIZATION OF THE PROCESS OF TRAINING ON THE BASIS OF THE CREDIT SYSTEM OF TRAINING AT HIGHER SCHOOL

9.1. THE ESSENCE OF THE CREDIT TRAINING SYSTEM, ITS GOALS AND OBJECTIVES OF USE IN HIGH SCHOOL

World educational practice has developed an effective system of education, which has received the name of credit technology of education.

Credit technology of education is a complex system that requires for the successful functioning of many agreed factors, including certain conditions, including teaching and material support (using a basic textbook that meets the requirements of the European standard for organizing students independent work - language laboratories, computer classes, video halls). In the case of the credit system of education, it is very important that the university provide the educational process in full with all the necessary information sources: educational and methodological manuals, electronic textbooks, access to online educational resources, active handouts, etc.

In accordance with the State Program for the Development of Education in the Republic of Kazakhstan for 2005-2010, approved by Decree of the President of the Republic of Kazakhstan on October 11, 2004 No. 1459, the system of higher and postgraduate education will create conditions for Kazakhstan’s accession to the Bologna process and instead of the traditional organization system of the educational process a credit system of education is introduced, which stimulates the active independent work of students, ensures the selectivity of the individual educational trajectory, mobile ness, a large degree of academic freedom of bachelors, undergraduates and doctoral students, contributes to the recognition of documents on

education in the global educational space. The accession of Kazakhstan to the Bologna process will ensure:

1) an expansion of relations of Kazakhstan with foreign countries in the field of higher education;

2) elimination of the threat of isolation in the global educational space;

3) expanding the prospects for the exchange of students, teachers, researchers and researchers with universities in European countries;

4)to increase in the possibilities of providing educational services to foreign students (export of higher education from Kazakhstan);

5) the development of new educational technologies and rational forms of organization of the educational process.

Paragraph 18 of the Rules for the organization of the educational process on credit technology of education, which was approved by Order No. 152 of the Minister of Education and Science of the Republic of Kazakhstan of April 20, 2011, defines: "The main tasks of organizing the educational process using credit technology are: 1) unification of knowledge; 2) creation of conditions for maximum individualization of training; 3) strengthening the role and effectiveness of independent work of students; 4) identification of real educational achievements of students on the basis of an effective procedure for their control. 19. The credit technology of training includes: 1) the introduction of a credit system for estimating the labor costs of students and teachers in each discipline; 2) the freedom of the students to choose the disciplines included in the complex of elective disciplines, ensuring their direct participation in the formation of the individual curriculum; 3) the freedom to choose a teacher; 4) involvement in the educational process of advisers who assist students in choosing an educational trajectory; 5) use of interactive teaching methods; 6) activization of independent work of students in the development of the educational program; 7) academic freedom of the faculty (department) and departments in the organization of the educational process, the formation of educational programs; 8) provision of the educational process with all necessary educational and methodological materials on paper and electronic media; 9) effective methods of monitoring the educational achievements of students; 10) the use of a point-rating system for evaluating students' academic achievements in each academic discipline.

One loan, which is an academic hour of 50 minutes, takes place in interactive forms and is accompanied during the week by independent student work (independent work of students) and work under the guidance of a teacher (independent work of students), during which the given topic is dealt. By the end of the week, each teacher brings the results of classes, and students get acquainted with their weekly rating. Thus, one can see the dynamics of one's own success: he prepared himself weakly, another one got less points, which means that the weighted average achievement level score (GPI) will be less than that of others. And before it was: the student did not go to lectures, seminars, and before the exam, he learned all the material or accidentally pulled out a good ticket - and, as they say, swam out.

A friend and "compass" of a student in the ocean of knowledge - an adviser - helps to choose teachers, to determine the learning trajectory (mainly it concerns the

choice of additional disciplines for studying). Freshmen are still looking around, they are afraid not to calculate forces, therefore, more than two or three additional ones are not taken. It is possible that someone will not want to overload himself further - well, you will choose two subjects and that's enough, but when the employer accepts a young specialist, he will take an interest, and did the person try to master new knowledge, is there a workaholic in him? Someone will say: why does a financier need cultural studies, logic or religious studies? It is necessary to be a man of erudition. Loans are never superfluous. And if you're not lazy, for four years, you can simultaneously master an adjacent specialty. This, in fact, is the flexibility and mobility of a student who, if he wishes, can graduate from a university in two years. The summer semesters are organized to meet the needs of accelerated, additional training and eliminate the difference in curricula.

By age psychology it is established that the student age has differences from the school age. For student age, the following are characteristic: the minimum value of the latent period of reaction to any kind of signals, including verbal (verbal) signals; the highest activity of operational memory and the speed of switching attention; the highest speed of solving verbal-logical tasks; optimum sensitivity of environmental analyzers. It is in the student age that the professionalization of interests takes place, previously undoubted truths are critically rethought, the creation of creativity becomes fully balanced.

9.2. FEATURES OF THE ORGANIZATION OF THE EDUCATIONAL PROCESS UNDER CREDIT TRAINING TECHNOLOGY

Transitioning to the credit system of education requires a qualitative restructuring of the teacher’s work with students, changes in teaching methods and techniques.

In terms of the credit system when teaching students the main tasks are:

- the unification of knowledge;
- the creation of conditions for maximum individualization of training;
- strengthening the role and effectiveness of independent work of students.

Characteristics of credit technology:

1) the introduction of a credit system for estimating the labor costs of students and teachers in each discipline;

2) freedom of choice by students of disciplines from among the disciplines of choice included in the working curriculum when forming an individual curriculum;

3) direct participation in the formation of their individual curriculum;

4) involvement in the educational process of advisers who assist students in the choice of educational trajectory;

5) the use of a point-rating system for evaluating educational achievements in each academic discipline;

6) provision of the educational process with all necessary educational and methodological materials ;

7) freedom of choice by the teacher of students, provided that there is a sufficient number of the teaching staff at the university or in the given locality.

ATTENTION!

Advantages of the credit system of education:

- expansion of academic freedom of faculties, departments and teachers;
- the achievement of the intensification of the educational process through the introduction of modern information technologies, advanced training of the teaching staff and teaching quality.

Differences of the credit system of education from the traditional:

- the personal participation of each student in the formation of their individual curriculum, i.e. determination of the educational trajectory for the entire period of study;
- freedom for the student to choose a part of the disciplines given in the curriculum;
- the introduction of the post of adviser and tutor (consultant) to select disciplines;
- The use of a point system for assessing current and mid-term performance.

The positive aspects of the introduction of the credit technology of education in higher educational institutions of Kazakhstan are:

- unification of knowledge in general educational and basic disciplines;
- providing the student with the opportunity to independently form their educational trajectory;
- elimination of subjectivity in the assessment of students' knowledge;
- creation of a competitive environment for teachers, allowing them to strengthen their work in the direction of the constant growth of the scientific and pedagogical level;
- the need for continuous improvement of the quality of educational services based on the development and strengthening of the material and technical base of the university, the introduction of innovative learning technologies;
- allocation of more time for individual classes, which allows developing a creative approach to the study of disciplines and research skills in students.

Issues for universities are the following:

- a large workload of the faculty, as well as structural units serving the learning process, since the training is carried out in parallel: according to the traditional system and according to the credit technology;

- significant additional costs associated with the introduction of innovative learning technologies and their further improvement;

- an increase in the teaching and methodological and temporary workload of the teaching staff, which is connected with the need for each teacher to prepare handouts, syllabuses and guidelines for independent work of students, which entails an increase in each academic hour by 10 minutes;

- the difficulty of adaptation of some teachers to the new requirements and new methods of teaching;

- difficulties associated with the uncertainty of the calculation of the teaching load of the faculty, insufficient readiness of first-year students for independent work and personal responsibility for their academic achievements (note that it is especially noticeable at the initial stage, ie, at the beginning of the semester).

The primary task of the university is to teach the student to study and be able to navigate in the diversity of scientific material. The focus of innovative technologies on the development of independent work skills among students will increase the level of their creative activity and stimulation in mastering knowledge. The effectiveness of such work will be ensured by regular communication between student and teacher within the framework of students' independent work under the guidance of a teacher.

The introduction of credit technology training implies a change in the philosophy of education, i.e. the transformation of accounting performance from controlling to self-control-stimulating.

Thus, the introduction of credit technology of education allows not only to enter the world educational space, but also to significantly intensify the process of teaching students in higher education.

Credit technology training involves competitiveness - the students themselves choose the teacher who will be engaged. Some painfully perceived the fact that they were not chosen. But first-year students still do not know who is who. Such costs can happen: high-class, but a hard teacher also risks being left without students. But in three or four years everything will fall into place - they will go to those who demand, but also prepare better.

Under the conditions of the formation in Kazakhstan of a competitive system of generation, dissemination and use of knowledge, the introduction of a credit system of education will allow solving the necessary task - to turn a university education into a process not only educational, but also educational. Its component is the training of students (“thinking workforce” in the future) not only scientific knowledge as such, but also methodologies for obtaining and applying them, in order to enhance their ability for continuous self-education and professional growth in the context of a systematic transformation of society. Only by following this, it will be possible to talk about the self-sufficiency of education as a social institution and its quality.

The task of the higher school is to orient students to the future, activate their thinking, cognitive activity, form the mental characteristics of a person, the spiritual and moral replenishment of education, form and cultivate new cultural values among students.

For this you need:

- to conduct the educational and educational process in higher schools in parallel, along with the training and education of the young man as a specialist, to pay great attention to his formation and development as a full-fledged personality;

- cognitive and practical activities; complement each other; they must be in contact, mutually enriching; The knowledge gained must meet the specific requirements of modern society;

- raise the social status of a scientist and teacher to the proper level;

- to provide access to the cultural values of mankind, not to lose touch with the public consciousness of previous generations through the further development of such discipline as the history of Kazakhstan.

Only when the higher school will actually become the center of the cultural values of humanity, the links of the ascending line “student-student-specialist” will appear as links in the process of the formation and development of personality. It is necessary to form the creative activity of the student, the desire to create something, which we will achieve thanks to the introduction of the credit technology of education as opposed to the traditional system that still exists today and slows down the activation of the educational and cognitive activity of the students.

The Higher School of Kazakhstan as the flagship of the country's continuing education system and its integrator entered the XXI century. in a situation of rapid change, in the conditions of the information revolution and the globalization of the spheres of living space. Therefore, the main function of the higher educational institution at the present stage should be the preparation of creative, extraordinary thinking, capable of innovation and initiative of students in the conditions of the credit technology of education.

9.3. EXPANSION OF FREEDOM OF CHOICE OF A STUDENT WITH A CREDIT TRAINING TECHNOLOGY

In a credit system, a student has the right to choose: elective disciplines, a teacher, a specialization of the educational program, and while ensuring mobility, he can choose a university where he wants to continue his education.

In 1999, the European Commission formed a working curriculum to study the possibility of transition from the "transfer - transfer" of ECTS loans to the system of "accumulation" of credits - European Credit Accumulation.

The first steps to expand the ECTS system and turn it into a European ECS system, which will include the transfer and accumulation of loans.

The basis of such an expanded system should be based on the following principles:

• respect for the autonomy of countries and universities in the field of educational policy;

• Improving the international “transparency” of existing national educational systems and qualifications;

• compatibility with any national / regional educational system in which a credit system may or may not operate;

• applicability to all types of programs and forms of education in higher education (day, evening, open / distance), as well as lifelong learning;

• Compatibility with the European "Diploma Supplement" (Diploma Supplement), which explains and makes transparent academic and professional qualifications of higher education.

ECTS in higher education is designed to solve three problems:

• structuring the curricula of higher educational institutions of various

• States to ensure their compatibility;

• improving the quality of student mobility;

• academic recognition.

ECTS includes 3 main elements:

• Information package for each student, including a catalog of courses with the conditions of admission, education, accommodation, etc .;

• The contract for training between the student and universities (receiving and sending);

• Use of the ECTS system (Knowledge Assessment System and evidence of academic recognition).

Information package includes the following materials:

• syllabus;

• curriculum courses included in the curriculum;

• crediting of each course, i.e. indication of the number of credits for each course;

• knowledge assessment system;

• rating scale;

• additional general information.

• Contract (Agreement).

• The student fills out a standard application for listening to a course (courses) in a foreign university, which must be part of ECTS, as well as the university where the student is studying, and sends it to the ECTS coordinator at his university.

• application and application, reflecting the number and volume of previously attended courses, as well as the results of their assessment are sent to a foreign university.

Self Test Questions

1. What is the essence of the credit system of education? How does it differ from technology?

2. How to build an individual student learning path

3. What is the strengthening of independent work in the framework of credit technology?

10 TRADITIONAL AND INNOVATIVE (ACTIVE) METHODS AND FORMS OF TRAINING ORGANIZATION

10.1. CONCEPT "METHOD OF TRAINING"

Teaching method

• translated from Greek - the path to something

• is an orderly activity of the teacher and the student, aimed at achieving the goals, solving the problems of education

• is appropriate to talk about teaching and learning methods.

There are objective and subjective parts in the method. The latter is determined by the identity of the teacher, the characteristics of the students, the specific conditions

Reception is part of the method

Method consists of receptionsthe same time, the method may curl up to receive and become part of another method. For example, a conversation in a lecture can be a technique for enhancing students' attention;

• is part of technology.

Classification of methods by purpose (M.A. Danilov, B.P. Esipov)

• knowledge acquisition

• the formation of skills

• application of knowledge

•creative activity

• fastening

• examination of knowledge and skills

Classification of methods according to the type (nature) of cognitive activity (Lerner I.Y., M.N. Skatkina)

• explanatory and illustrative (information-receptive)

• reproductive

• problem statement

• partial search (heuristic)

• research

The traditional classification of methods (And, P. Podlasy).

Methods of organization and implementation of educational and cognitive activity (according to Babansky Yu.K.)

10.2. ORGANIZATIONAL FORMS OF TRAINING

Forms of education are an external expression of the coordinated activity of a teacher and students, carried out in a certain order and mode.

• by place: school and extracurricular (classroom and extracurricular)

• by the number of duration: a classic lesson, paired shortened -70 minutes; paired - 90-100 minutes; no call for a break

Systems (forms) of training organization

• peer learning

• differentiated learning
• brigade uniform
Basic forms of education
• lecture (contact hour)
•practical lesson:
• seminar lesson
•laboratory work
• independent work of students
• practice
Lecture
At the place of the educational process lectures are:
• introductory
• informational
• generalizing
• overview
Video lectures:
• video of a natural lecture
• “live head”
• studio lecture (with active video series)
• lecture – talk with an opponent (commenting on the video lecture of a representative of another school)
• electronic (computerized) lecture
The manner of presentation distinguish lectures:
• problem
• binary (together)
• visualization
• press conference
• with pre-planned errors
• consultation
• with students' theses
• with incomplete theses among students
• including student lectures
• reverse (reversed) - contact hour.
Workshop - for the formation of training skills and skills of working with equipment. There are types
• seminar in game design (non-standard seminar: KVN, Talk show, discussion, business game)
• special seminar
laboratory works. There are such varieties:
• classic lab work
• laboratory work grab training curriculum organization
• laboratory workshop
• virtual lab work
• laboratory work with remote access complexes

Auxiliary training forms:

- excursion
- consultation
- circle
- home independent work
- expedition

10.3. METHODS OF CONTROL AND ASSESSMENT OF KNOWLEDGE

Different understanding of the concept of quality

Quality is attributed to various, often contradictory, meanings:

parents, for example, can relate the quality of education to the development of the individuality of their children,

- quality for teachers can mean having a quality curriculum provided with teaching materials.

- for students, the quality of education is undoubtedly associated with the intraschool climate,

- for business and industry, the quality of education correlates with the life position, skills and abilities, knowledge of graduates,

- for society, quality is associated with those value orientations and more broadly - values of students, which will find expression, for example, in a civil position, in a technocratic or humanistic orientation of their professional activity.

Quality as a relative concept has two aspects:

- the first is compliance with standards or specifications,
- the second - compliance with customer needs.

It often happens that excellent and useful products or services are not perceived by consumers as having quality. This problem is particularly acute in the field of education. The refusal of a unified state system of education, of many long-established traditions and the introduction of new ones (testing for admission to universities instead of traditional exams, lengthening the time of schooling, intensive development of the system of non-state education, etc.) brings the problem of the quality of education to a number of state priorities. and social issues.

Education Quality Monitoring

The following elements are part of the system for monitoring the quality of education:

- standard setting and operationalization: definition of standards;
- operationalization of standards in indicators (measured values);
- the establishment of a criterion by which it is possible to judge the achievement of standards,
- data collection and evaluation: data collection; evaluation of results
- actions: taking appropriate measures, evaluating the results of measures taken in accordance with the standards.

In most countries, the transition from one class to another today is based on a system of constant control exercised by class teachers or teachers of a particular discipline. Classical exams at the end of the school year practically no longer exist, they are considered as certain additions to the ongoing monitoring of students' activities. In many cases, ongoing monitoring is also complemented by such forms as tests, tests, organized outside the school regularly and throughout the school year.

The results of the assessment should have three qualities:

• they must be “valid” (clearly correspond to the teaching programs),

• rigidly objective and stable (ie, not subject to change, independent of time or the nature of the examiner),

• "accessible" (ie, time, scientific forces and funds for their development and implementation should be available to this state).

Differences between grade, grade and score

Assessment includes the qualification of the degree of development of a particular property of the person being assessed, as well as the quantitative and qualitative assessment of his actions or results of activities. Evaluation is a process, activity (or action) of evaluation carried out by a person. Assessment - one of the most effective means at the disposal of the teacher, stimulating learning, positive motivation, influence on the person. It is under the influence of objective assessment that schoolchildren create an adequate self-esteem, a critical attitude towards their success.

Mark (score) is the result of the assessment process, the activities or actions of the assessment, their semi-formal reflection. School grades characterize absolute and relative student success in points: absolute in the sense that the mark itself indicates the quality of knowledge or behavior of the student, and relative because, using the marks, you can compare them with different children.

Identifying the grade and mark from a psychological point of view would be tantamount to identifying the process of solving a problem with its result. Based on the assessment, a mark may appear as its formal-logical result. But, in addition, the mark is a pedagogical stimulus that combines the properties of encouragement and punishment: a good mark is a encouragement, and a bad mark is a punishment.

The reasons for the bias of educational evaluation

One of the reasons is the insufficient development of evaluation criteria. Therefore, teachers are looking for ways to increase the incentive role of traditional scales. In Kazakhstan, as is known, is used

The most important principles of controlling the learning (performance) of students - as one of the main components of the quality of education - are:

• objectivity,

• systematic,

• visibility (publicity).

Objectivity lies in the scientifically based content of control tasks, questions, equal, friendly attitude of the teacher to all students, accurate, adequate to the established criteria for evaluating knowledge and skills.

The principle of systematicity requires an integrated approach to diagnosis, in which the various forms, methods and means of control, testing, evaluation are used in close connection and unity, subject to the same goal.

The principle of clarity (publicity) is primarily in the conduct of open trials of all trainees on the same criteria. The principle of publicity also requires the announcement and motivation of assessments.

Types of knowledge control

Control is an integral part of learning. Depending on the functions that the control performs in the educational process, there are three main types of it:

- preliminary,
- current,
- final,

considered as a means of controlling the level (quality) of assimilation.

The purpose of the preliminary control is to establish the initial level of different aspects of the student's personality and, above all, the initial state of cognitive activity, first of all, the individual level of each student.

The current control is necessary for diagnosing the course of the didactic process, identifying the dynamics of the latter, comparing the results actually achieved at certain stages with those projected.

The most important function of the current control is the feedback function. Feedback allows the teacher to obtain information about the course of the learning process from each student.

The final control is carried out during the final repetition at the end of each quarter and the school year, as well as during the examinations (tests). It is at this stage of the didactic process that the training material is systematized and summarized.

Knowledge control functions

- controlling
- training (educational)
- diagnostic
- prognostic
- developing
- orienting
- educative

Types of control

External (carried out by the teacher on the activities of the student, the ministry on the activities of the university, etc.)

Mutual (carried out by students over the activities of a friend)

Self-control (carried out by the student on his own activities)

Testing is an effective form of educational process control.

The test is a set of specially prepared and selected tasks, which allows to identify the required characteristics of the object.

Advantages of test control

- the objectivity of the assessment, since in the test control the influence of subjective factors (for example, such as the teacher's awareness of the student's current performance, taking into account his behavior in the classroom, etc.) is excluded;

- accuracy of information about the volume of the material learned and about the level of its assimilation;

- efficiency - it is possible to simultaneously test a large number of students, and the verification of the results is performed much easier and faster than with traditional monitoring;

- reliability - test score is unambiguous and reproducible;

- differentiating ability - since the tests contain tasks of various levels;

- the implementation of an individual approach to learning - individual testing and self-examination of students' knowledge is possible;

- Comparability of test results for different students curriculum, students trained in different programs, textbooks, using different methods and organizational forms of education.

Varieties of tests.

Basic tests - tests that allow you to check the assimilation of basic concepts at the reproductive and algorithmic levels;

holding time - 10-15 minutes;

diagnostic tests - tests that make it possible to identify not only the gaps in knowledge on the topic, but also the level of its assimilation, the student's learning abilities;

holding time - 20-30 minutes;

thematic tests - tests to conduct at the end of the study topics, allowing to fix the volume and level of its assimilation;

holding time - 45 minutes;

final tests - tests to be carried out at the end of six months, a year, for a course in order to identify the volume and level of learning.

Assignment Levels:

• Reproductive
• Algorithmic
• Heuristic
• Creative

Creating a test as a testing tool

1. The time job assignments
2. Experimental testing of test items
3. Creation of basic, diagnostic, thematic and final tests
4. Experimental testing of tests
5. Computer statistical processing of experimental test results.

10.4. CONCEPTUAL BASES OF USE ACTIVE AND INTERACTIVE TEACHING METHODS

Innovative teaching methods are teaching methods that carry in themselves new ways of interaction "teacher - student", a certain innovation in practical activities in the process of mastering educational material.

Why do we hold the position of the need to apply innovative teaching methods in the educational process?

Every day we are faced with a new product and product, new knowledge, new ideas. This should correspond to the learning process and teaching methods.

Secondly, training for innovative teaching methods, their constant use, allows the students themselves to be open to innovations, to learn to work ahead of the schedule, since these qualities are features of innovative training.

Thirdly, innovative teaching methods are active methods.

learning, and pedagogical experimental data Kh.E. Meichner confirm their advantage in the educational process. Trainees keep in memory:

10% of what they read

20% of what they hear

30% of what they see

50% of what they hear and see;

at the same time, with the active perception of information, they keep in memory 80% of what they said themselves, 90% of what they did themselves.

Innovative teaching methods allow you to shape the experience of creative and innovative activities of students, which ultimately affects the competence of the future specialist.

The peculiarities of innovative education are: - work in advance, anticipation of development;

- openness to the future;
- focus on the individual, its development;
- Mandatory presence of elements of creativity;
- partnership type of relationship: cooperation, co-creation,

mutual aid, etc.

Active learning methods (ALM) are essentially interactive (from the English. Interaction - dynamic interaction), because of the methods of influence they develop into methods of interaction between the teacher and the student. Activating a student allows you to form your own active position, incl. in relation to the knowledge and process of knowledge. And this is the path to the development and realization of the individual.

Our vision, ALM, is: orderly interaction of subjects; designing future-oriented opportunities.

- with which the trainees will face in reality;
- specially organized way to achieve the ultimate goal;
- activity in consciousness, understanding, action;
- motivation, creativity, achievement of goals ...

The use of active learning methods in the educational process, designed in a specific temporal and spatial framework, determines the active forms of learning (AFL).

The features of active learning are:

• forced activation of thinking when a student
• forced to be active regardless of his desire;
• the activity of the trainees coincides with the activity of the teacher;
• increased degree of motivation, emotionality, creativity;
• constant interaction of the teacher and trainees
• through direct and reverse links;
• focus on the primary development of professional,
• intellectual, behavioral skills in a short time.

ATTENTION!

The concept of "interaction" arose for the first time in sociology and social psychology.

In psychology, interaction is “the ability to interact or be in a mode of conversation, dialogue with something (for example, with a computer) or someone.

Social interaction is a process in which individuals, in the course of communication, influence other people with their behavior, causing responses.

Interactive learning as a way of learning, carried out in the forms of joint activities of the teacher and students: everyone interacts with each other, exchange information, jointly solve problems, model situations, evaluate the actions of fellow students and their own behavior, immersed in the real atmosphere of business cooperation to solve problems.

Signs of interactive learning:

 interpersonal, dialogical interaction in the systems "teacher - student" and "student - student";

 cooperation in small groups;

active role-playing (game) and training organization of training

Forms and methods of interactive learning

Based on the signs of interactive learning, the forms and methods of interactive learning can be divided into:

1. discussion: interactive lecture, dialogue, discussion, analysis of situations from practice, debate, etc.

2. game: business, role-playing, organizational and activity, etc.

3. training forms of conducting classes (communication, personal growth, professional).

Quite often, the term "online learning" is mentioned in connection with information technology, distance education, using Internet resources, as well as electronic textbooks and reference books, online work.

The qualities and skills of a teacher who successfully works online:

 developed communication skills that allow finding an approach to each student, interested and attentively listen to it, tolerance;

 the ability to organize a learning space that is conducive to dialogue, conduct dialogue, analyze and adjust the course of discussion in the curriculum;

Be a facilitator, use "supporting" communication techniques;

 while maintaining their scientific authority, to help learners not to fall under its dependence, which hampers their mental activity, and to show independence in their intellectual behavior;

the ability to create special situations that encourage students to integrate efforts to solve the problem.

10. 5. NON-IMITATIONAL AND IMITATION TEACHING METHODS

Methods of active learning (non-imitative methods)

— problem lecture
— round table
— lecture conference
— field work with thematic discussion
— heuristic conversation
— practical exercises and individual exercises

Simulation methods (non-game)

— situational decisions
— solving individual problems
— discussion of the developed options
— competition of practical work with discussion
— case method
— modeling of production processes
— design
— methods for working out creative tasks
— hardship application
— Simulation methods (play)
— brain attack
— business games
— roleplaying
— developing cooperation method
— game design
— round table

— discussions

"Brainstorm"

The method, called "Brainstorming" - brainstorming (brainstorming), is the most free form of discussion, a good way to quickly include all members of the curriculum curriculum in the work on the basis of free expression of their thoughts on the subject. It is used for collective problem solving in the development of specific projects, where generation of diverse ideas, their selection and critical evaluation are assumed. The idea of the method is based on the fact that criticism and fear inhibit thinking, constrain creative processes.

The success of brainstorming depends on adhering to two main principles.

The first of them lies in the field of the theory of synergetics (from the Greek. Synergeia - cooperation, commonwealth). When working together, ideas of higher quality are born than in the individual activities of the same people. This is due to the interactive effect. The idea, which in itself can be rejected due to insufficient substantiation or impracticality, is being finalized by joint efforts, thought out by others and thereby improving, becoming more and more constructive and usable.

The second principle is that if the rigorous curriculum is in a state of generating ideas, then the process of creative thinking prevailing at this moment cannot be slowed down by a premature subjective evaluation of these ideas.

“Brainstorming” includes three stages: the preparatory stage, the generation of ideas, the stage of analysis and evaluation of ideas. The duration of the "brainstorming", as a rule, not less than 1.5-2 hours.

Business *games* can be classified

a) by scope;

b) byrole functions;

c) on the scale of the process imitated in the game;

d) by control functions.

There are four main forms of business games (BG): thematic BGs associated with a specific curriculum theme; cross-sectional BGs covering several training course topics on a single production material.

Non-game simulation methods

Techniques for working out creative tasks

Delphi method (choose the best option from the alternative series);

The diaries method (during the week ideas are recorded that are collectively discussed);

Method 6-6 (6 people formulate ideas for solving the problem within 6 minutes. The task is to select the most important ones).

Self Test Questions

1. What classifications of teaching methods do you know, describe their reasons.

2. Didactic tests as a learning method.

3. What are the conceptual foundations of the use of active learning methods.

11 NEW EDUCATIONAL TECHNOLOGIES IN HIGH SCHOOL

11.1. ESSENCE AND CLASSIFICATION PEDAGOGICAL TECHNOLOGIES

The priority of modern education, which guarantees its high quality, can and certainly should be on self-development and self-realization of the student's personality.

Modern educational technologies:

firstly, they allow students to organize independent activities in mastering the content of education;

secondly, include students in various activities (priority is given to research, creative and project activities);

thirdly, these are technologies for working with various sources of information, since information is used today as a means of organizing activities, and not as a learning goal (information technologies, including distance learning technology, problem-based learning technology);

fourthly, these are technologies of the organization, a rigorous curriculum of interaction, since partnerships and cooperation permeate the modern educational process aimed at developing tolerance and corporatism.

Fifthly, these are technologies of students' meta-cognitive activity, since the subject position of the student becomes the determining factor of the educational process, and his personal development acts as one of the main educational goals.

Technology (from the Greek "Techno" - skill, art, "logos" is the concept, teaching). In a broad aspect, technology is understood as a set of knowledge about the ways and means of carrying out processes during which a qualitative change of an object occurs.

Pedagogical technology is a complex integrative system that includes an ordered set of operations and actions that provide pedagogical goal setting substantive, informational and subject aspects and procedural aspects aimed at mastering systematized knowledge, acquiring skills and shaping the personal qualities of trainees, given learning objectives (Bespalko V.P.).

Foreign approaches to the definition of educational technology

M. Clark believes that the meaning of pedagogical technology lies in the application in the field of education of inventions, industrial products and processes that are part of the technology of our time.

F. Percival and G. Ellington indicate that the term “technology in education” includes any possible means of presenting information. This equipment used in

education, such as television, various means of image projection, etc. In other words, technology in education is audiovisual.

The modern glossary of UNESCO terms offers two semantic levels of this concept. And in the original sense, pedagogical technology means the use for educational purposes of the means generated by the revolution in communications, such as audiovisual media, television, computers and others.

Russian scientists propose the following approaches to the definition of pedagogical technologies:

V.P. Bespalko believes that "... pedagogical technology is a substantial technique for the implementation of the educational process." This definition is focused on the use of educational technology only in the learning process, which leads to a sharp narrowing of this concept as a pedagogical definition and the possibilities of its use in practical pedagogical activity.

M.V. Clarin considers pedagogical technology as a systemic set and order of functioning of all personal, instrumental and methodological tools used to achieve pedagogical goals. This definition is more capacious, since we are already talking about general pedagogical goals.

Learning technology -

- method of implementation of the content of training provided by the curriculum, representing a system of methods and a means of learning, providing the most effective achievement of goals (V.P. Bespalko)

- lawful pedagogical activity that implements a scientifically based project of the didactic process and has a higher degree efficiency, reliability of guaranteed results, than is the case with traditional techniques.

Technological approach to learning means:

1. The formulation and formulation of diagnosable learning objectives focused on achieving the planned learning outcome.

2. Organization of the entire course of study in accordance with the educational objectives.

3. Evaluation of current results and their correction.

4. Final assessment of results

Signs of educational technology:

1. goals (for the sake of which it is necessary for the teacher to use it);

2. availability of diagnostic tools;

3. patterns of structuring the interaction of the teacher and students, allowing to design (program) the pedagogical process;

4. a system of means and conditions that guarantee the achievement of pedagogical goals; tools for analyzing the process and results of the teacher and students.

In this regard, the integral properties of educational technology are its integrity, optimality, effectiveness, applicability in real conditions.

Characteristic manufacturability

• performance;

• cost-effectiveness (a large amount of educational material is effectively assimilated per unit of time);

• ergonometric (learning takes place in a collaborative environment, with a positive emotional microclimate, without overload and overwork);

• creating a high motivation to study the subject

Principles of technology creation

• the principle of focus;

• humanization, humanitarization;

• polytechnic principle; multilevel principle;

• integrative approach;

• principle of creative orientation;

• the principle of computerization;

• scientific, systematic and consistent;

• consciousness and activity;

• availability and durability;

• upbringing and developmental education.

Criteria for evaluation

- the goal (diagnosable and guaranteed) is expressed in specific knowledge (concepts,

facts, laws, skills, and performance;

- educational information is used as a means of organizing cognitive activity, and not as a learning goal;

- the learner acts as a subject of activity along with the teacher;

- the teacher acts as a teacher-manager and director of training, ready

offer students a minimum set of tools, and not only conveys educational information;

- the main focus is on the organization of types and forms of cognitive activity

trainees.

Classification of modern pedagogical technologies (according to G.K. Selevko):

Pedagogical technologies based on the personal orientation of the pedagogical process

• Pedagogy of cooperation

• Humane-personal technology (Sh.A. Amonashvili)

Pedagogical technologies based on the intensification and intensification of student activity

• Gaming technology

• Problem learning

• Technology of communicative learning to foreign culture (E.I. Passov)

• Technology of intensification of education based on schematic and sign models of educational material (V.F. Shatalov)

Alternative technologies

• Waldorf Pedagogy (R. Steiner)

• Free labor technology (S.Frene)

• Probabilistic education technology (A.M. Lobok)

Nature-related technologies

• Natural literacy education (A.M. Kushnir)

• Technology of self-development (M. Montessori)

Developmental education technologies

• System of developmental education L.V. Zankova

• Technology developmental education D. B. Elkonin - V.V. Davydov

• Systems of developmental education with a focus on the development of creative personality qualities (I.P. Volkov, GS. Altshuller, I.P. Ivanov)

• Personally oriented developmental education (I. S. Yakimanskaya)

• Technology of self-learning (G.K. Selevko)

11.2. PROBLEM-ORIENTED, PERSONAL-ORIENTED TRAINING TECHNOLOGIES, DESIGN-ORGANIZED TRAINING TECHNOLOGY

Concepts of problem-based learning

Problem learning is a teacher-organized way of active interaction of a subject with problem-represented learning content, during which he joins objective contradictions of scientific knowledge and ways to solve them, learns to think, creatively assimilate knowledge (AM Matyushkin).

Problem-based learning is a combination of such actions as organizing problem situations, formulating problems, providing pupils with the necessary assistance in solving problems, verifying these solutions and, finally, guiding the process of systematization and consolidation of acquired knowledge (V.Okon).

Problem learning is a type of developmental education, the content of which is represented by a system of problem tasks of various levels of complexity, in the process of solving which students acquire new knowledge and ways of acting, and through this the formation of creative abilities occurs: productive thinking, imagination, cognitive motivation, intellectual emotions (M .I. Makhmutov).

Problem-based learning is such an organization of studies, which involves creating, under the guidance of a teacher, problem situations and active independent activities of students to resolve them, which results in creative mastery of professional knowledge, skills and abilities and the development of mental abilities (G.K. Selevko) .

Conceptual aspects of problem-based learning

• Leading idea, concepts:

• engaging students in creative activities by posing problem-posed questions and tasks;

• activation of their cognitive interest and, ultimately, all cognitive activity.

• The basis for the implementation of the concept is the modeling of a real creative process by creating a problem situation and managing the search for a solution to a problem.

Problem Learning Methods

According to the method of solving problem tasks, there are four methods:

 problem presentation (the teacher sets the problem on his own and solves it on his own);

 joint training (the teacher independently poses the problem, and the solution is reached together with the students);

 research (the teacher poses the problem, and the solution is achieved by the students themselves);

Creative learning (students both formulate the problem and find its solution).

According to the method of presenting problem situations and the degree of student activity, six methods are distinguished (M.I. Makhmutov):

 reasoning method;

 dialogic method;

 heuristic method;

 research method;

 method of programmed actions.

Heuristic method

- the educational material is divided into separate elements, in which the teacher additionally sets certain cognitive tasks that are solved directly by the students;

-the teacher puts the problems to be solved, states the correctness of those or other methods that in the future serve as a basis only for the independent activity of students;

- Imitation of independent research by students is carried out, but within the limits of the guidance and help of the teacher.

Research method

1. the structure and sequence of the material as in the heuristic method;

2. questions are asked not at the beginning of one or another element of studying the problem, but as a result of its independent consideration by students;

3. the activity of the teacher is not guiding, but appraisal, ascertaining;

4. the activity of students acquires an independent character, they are additionally trained not only to solve a problem, but also become able to isolate, realize, formulate it.

Programmed action method

1. the teacher develops a whole system of programmed tasks, in which each task consists of individual elements (or “frames”);

2. “frames” contain a part of the material being studied or of a certain orientation, within the framework of which students will have to independently set and solve relevant sub-problems and resolve problem situations;

3. after studying a single element, the student, having independently drawn the appropriate conclusions, proceeds to the next, and the accessibility of the next stage is determined by the correctness of the conclusions made at the previous one.

Ways to create problem situations

1. The motivation of students to a theoretical explanation of phenomena, facts, external discrepancies between them.

2. The use of situations that arise when students perform learning tasks, as well as in the process of their normal life activity, that is, those problem situations that arise in practice.

3. The search for new ways of practical application by students of whether another phenomenon, fact, element of knowledge, skill or skill is being studied.

4. The motivation of students to analyze the facts and phenomena of reality, generating contradictions between everyday (everyday) ideas and scientific concepts about them.

Personality-oriented education

Components of student-centered learning are

• creating a positive emotional state to work all students during the lesson;

• use of problematic creative tasks;

• encouraging students to choose and self-use of different ways to perform tasks;

• application of tasks that allow the student choose the type, type and shape of the material (verbal, graphic, symbolically conditional);

• reflection.

Personality-oriented education includes the following approaches:

• multi-level

• Differentiated

• Individual

• Subjectively personal

Features of the student-centered approach are as follows.

1. In the center is the student, his goals, motives, interests, inclinations, level of training, ability.

2. Everything is aimed at the development of creative abilities, cognitive forces

3. Special attention is paid to the ways of learning and thinking processes.

For this purpose: individual training programs are being developed that simulate research (search) thinking; organizing study programs based on dialogue and role-playing games; educational material is designed to implement the method of research projects carried out by the students themselves.

Principles of student-centered learning

 Principle of nature conformity

 The principle of cultural conformity

 The principle of an individual and personal approach

Personality-oriented learning contributes to the development of: figurative perception, creative thinking, emotional and personal attitude to learning

11. 3. BUSINESS GAME, TRAININGS, PRESS CONFERENCES AS FORMS OF IMITATION TRAINING

The technology of gaming activity (gaming technology) is a specific sequence of actions, specialist operations (teacher, psychologist, igrotechnika, etc.) for selecting material, developing and preparing the game, including children in

playing activity, implementing the game itself, summing up its results and meaningful results

Business game as a learning method

The use of business games in the educational process offers, in the opinion of many authors, many advantages. We will cite several opinions: “Ultimately, the period of adaptation of a young specialist in production is significantly shortened, his confidence in his strength and success in the team is strengthened, and the development of real and most rational management decisions is ensured.” Such results are viewed as a natural consequence of the fact that in the business game “the objective and social content of the future labor is successfully modeled, its context is set ...”, and each game participant “learns abstract, sign-based knowledge in real processes of preparing and making decisions, and learning activities, ”notes A.A. Verbitsky.

The target-oriented business game turns out to be two planned activities contributing to the achievement of two kinds of goals, game and pedagogical (educational). In playing methods, participants accept certain roles and behave in accordance with them. The game removes the internal barriers to the generation of meanings, contributes to the formulation of new questions, introduces new points of view on the subject, mobilizes the experience of behavior in other situations.

We give a "characteristic of the business game" by A.P. Panfilova. The business game synthesizes the signs and basic characteristics of the methods of analyzing situations and role-playing games. Characteristics of a business game:

- modeling of the labor process (activities) of managers, economists, lawyers, specialists in the development of management decisions;
- distribution of roles between the participants of the game;
- the difference of role objectives in the development of decisions;
- the interaction of participants performing certain roles;
- having a common goal for the entire gaming team;
- collective decision making by game participants;
- implementation of the "decision chain" in the process of the game, phased;
- the presence of controlled emotional stress (conflict
roles and goals, competition, the polarity of interests of participants and
etc.)
- the presence of an extensive system of individual or advanced curriculum evaluating the activities of the game participants (encouraging and punishing, evaluating decisions made, evaluating the actions of participants in business games).

Business games may have a different target orientation:

• production games are aimed at making decisions on production or business problems, assisting an enterprise in transitioning to a new economic mechanism, developing strategies for surviving in a crisis or competitive environment, etc .;

• research games are associated with the development of new concepts, analysis of problems and solutions of a hypothetical nature, prediction of the consequences and potential problems in the introduction of innovations;

• educational games pursue the goal of effective mastering of knowledge, development, or consolidation of professional skills;

• organizational and activity games are used to form a team, create a team of like-minded people capable of self-government, independent thinking, intensive self-development, and active improvement of the ways of their professional activities; for the withdrawal of enterprises, and firms fthe rom impasse.

The preparation phase includes the following components: -development of the scenario - the plan of the business game - a general description of the game - the contents of the briefing - the preparation of material support.

Putting into the game - setting a problematic goal - conditions, instruction - rules of procedure - distribution of roles - formation of a rigorous training program - consultations.

- Stage carrying out. Work on the task - work with the source - training - brainstorming - work with the game technician - discussion - speeches of members of groups - protection of the result - rules of discussion - the work of experts.

- The stage of analysis and synthesis - conclusion from the game - analysis, reflection - assessment and self-assessment - conclusions and generalizations - recommendations.

Debate.

Objective: to form a logical and critical thinking, skills of organizing their thoughts, self-confidence, ability to work in a team, empathy, tolerance.

Stages:

-preparation for the game (theme, thesis, which provoke interest, affect significant problems).

-work with information on the topic (activation of knowledge, information search, drafting of cases).

- speeches (the task to persuade the judges and the audience to their point of view).

Methods: Speaker Speech, Cross-cutting Issues, Time Out, Free Debates, Symposium, Debates, etc.

Game design method

 This method as a type of occupation is used in the form of a simulation game. At the same time, unlike a business game, where the process of a simulated or conditional object is reproduced or simulated, in game design, the process of creating an object is mainly performed.

 The technology of conducting such classes is diverse, but their basis is based on three elements: the project development algorithm, the expert evaluation mechanism or the game test of the project, the mechanism for determining role interests.

Training technology

Training technologies are a system of activity of trainees working out certain solutions.

Training is a form of specially organized communication, during which issues of personality development, the formation of communication skills, the provision of psychological assistance and support are addressed.

 Principles of construction:

 dialog

 constant feedback;

 self-test;

 voluntary participation;

 confidentiality.

 The training is based on exercises that presuppose their organization: a clear goal setting, control over the correctness of performance, a detailed analysis of the situation, an opportunity to express one's point of view, share his feelings and experiences, and control over the emotional state.

Types of trainings: psychological; training; intellectual development; management tasks; solving the situation; communication; creativity.

11.4. INNOVATIVE METHODS AND FORMS OF TRAINING

Innovation processes include everything related to advanced pedagogical experience, numerous organizational changes in the field of education, the achievements of scientific thought and their introduction into practice. The educational process itself can be regarded as innovative, since its goal is to transfer students new knowledge, the formation of new personality traits. Innovation is the same as a new formation, a new phenomenon of reality. Currently, a new area of scientific knowledge is intensively developing - pedagogical innovation. However, mostly innovative processes develop spontaneously. Mastering effective methods of studying and evaluating innovation processes would allow them to regulate, enhance practical benefits and improve focus.

The causes, types and basic principles of the innovation process, which are available in various pedagogical sources.

Innovative learning

Its main difference from the normative one is that it develops the whole potential, the abilities of the individual, and that innovative and normative education treats the future differently. Regulatory training is aimed at mastering the rules of activity in repetitive situations, while innovative means developing the ability to work together in completely new unprecedented situations.

The reasons for the emergence of innovative learning are:

1. The discrepancy between the pace of development of higher education and the pace of social development

2. Humanity entered with the social and scientific-technical revolution in the era of "rapid development"

Types of innovation process

1. Occurs spontaneously, most often on an empirical level.

2. A fundamental change in the education and training system as an alternative to normative education.

Basic principles

1. Anticipation (constant striving for revaluation of values and preservation of those that have lasting significance) and prediction (anticipation of others)

2. The inclusion of reproductive components of creativity in learning

3. The possibility of the emergence of a new social type of relationship between teacher and students:

a) cooperation; b) mutual assistance;

c) co-creation

4. Creating conditions for personal development (student-centered learning instead of teaching and educating).

Innovative pedagogical activity is associated with the rejection of well-known clichés, stereotypes in the student's education, upbringing and development, greater reliance on the teacher's and student's creative abilities, integration of various scientific branches of knowledge, goes beyond the current standards, creates new standards for the personality, creative, individual activities of the teacher, new pedagogical technologies that implement this activity. In it, the innovator realizes himself more deeply as a carrier of social innovation.

Naturally, innovative education can be realized only when the sensitivity of teachers and students to innovations in education is formed. Innovative education will not be such, if its main carriers - teachers do not become innovators, able not only to perceive innovations, but also to make them the main mechanism in the educational process. Innovative learning in practice can be realized through innovative learning technologies, through the structure of education, all of them should be developed on a deep scientific, systematic basis. Non-classical and post-non-classical types of scientific rationality, including the cognitive and acting subject, are included and begin to dominate, and scientific knowledge is viewed in the context of the social conditions of its existence and the social consequences of its activities.

The requirements for innovative training can be considered as interdisciplinary organization of the content of training; integrated mastery of the laws of nature, society, man and technology from the perspective of man and his transformative activity. Formed a culture of systems thinking; worldview aimed at harmonizing relations "man - society - nature.

The content and teaching methods are focused on mastering the methodology of creative activity, the formation of a person's innovative ability - the ability to create something that even a teacher may not know about. Formation and development of morality, spirituality, social responsibility as factors of professionalism, especially during educational project works

Innovative training assumes the presence of specific management at all levels: the governing body – the university, the university administration - the professor; teacher - student. Innovative training is possible only when it will need from the super-system - the social, economic spheres of society.

The structure of the goals of innovative education

The main goal of innovative education, an invisible thread permeating almost all elements, is the preservation and development of a person's creative potential. Hence is the first principle of innovative learning. Education XXI century can not do without the organic inclusion of creativity in its essence. The transition from device design to design activity is the second most important principle of innovative learning. The third principle of innovative education is that it is aimed at shaping a worldview based on multi-criteria decisions, tolerance for dissent, and moral responsibility for one's actions. The fourth principle is the development of interdisciplinary relations, the formation of a system of generalized concepts.

The fifth principle is the principle of harmonious, systematic intellectual activity. Innovative learning cannot be only a certain "addition" to the existing system, it should permeate both its entire internal organism and the social super-system.

Novelty is a rather complex property, for the study of which the theory of abstract properties is useful, considering multidimensional properties with characteristics as coordinate measurements of their scales.

There are several levels of novelty, the highest level of which should be considered completely new, if nowhere else has it ever happened. A locally absolute novelty is possible, if in a given area such has not previously occurred (but in another area this could already be).

With conditional novelty, the object was once known (maybe even used), but now it has already been forgotten. There is a difference between use in a given area and another, therefore an internally conditional and externally conditional novelty arises. Known regulatory novelty (or originality): the object is considered new (or original)

Active learning methods

 teaching methods in which the activity of the student is productive, creative, search character;

 methods that stimulate the student's cognitive activity and build on dialogues that imply a free exchange of views on ways to resolve this or that

other problems (Mirezhikov VA).

 Interactive

ATTENTION!

* **teaching methods**–is a special form of organizing cognitive activity aimed at interactive learning, during which interaction takes place.

* Interactive –is able to act or be in the mode of dialogue, conversation.

Adaptive learning technology

 The purpose of the technology is to teach methods of independent work, self-control, methods of research, to develop and improve the skills to independently acquire knowledge. On this basis, the formation of the pupil's intellect takes place in the maximum adaptation of the educational process to the individual characteristics of students.

 The main essence of technology lies in the simultaneous work of a teacher on:

 management of independent work of students;

 work with individual students individually;

 implementation of accounting and implementation of individual characteristics and capabilities.

The project method (from the Greek “research”) is a learning system in which learners acquire knowledge in the process of planning and executing gradually complicating practical tasks — projects.

A project is the intention to reorganize a particular area of reality according to certain rules.

Project thinking, project activity is a process of generalized and mediated cognition of reality, during which a person uses technological, technical, economic, and other knowledge to carry out projects to create cultural values.

The result of the project activities are creative projects.

Educational creative project is an independently developed and made product (material or intellectual) from idea to its realization, possessing subjective or objective novelty, executed under control and at consultation of the teacher.

The technology of project training is considered as a flexible model of organization of the educational process, focused on the creative self-realization of the student’s personality through the development of his intellectual and physical capabilities, volitional qualities and creative abilities in the process of creating new goods and services.

Training problem, that is, a clash of personal knowledge and ignorance for an individual or a curriculum of people.

Research activities are characterized by the SCIENTIFIC PROBLEM - the collision of universal knowledge with universal ignorance.

In the project activities made their own small discovery.

At the same time, for the educational process, another thing is important - the activation of independent research activities.

There is a development of the most important competencies for modern life:

 ability to take responsibility;

Participation in joint decision making (communication)

 conflict management in a non-violent way;

 possession of oral and written communication;

 use of acquired knowledge for

 solving educational and practical tasks;

 the ability to learn all life as the basis for continuous training in professional and social activities, as well as in personal life.

Components of project activity

1.the problem.

2 design (planning).

3. search information.

4. product.

5. presentation.

6. portfolio - a folder in which all working materials of the project are collected. among them are drafts, day plans, reports.

By the number of participants in the project: individual, paired, working curriculum

By the nature of the contacts Depending on the coverage within

one academic curriculum: one stream, one faculty, university of the city, region, country, etc.

By project duration:

Short-term (2 ... 6 hours);

Medium-term (16 ... 18);

Long-term (per semester)

Stages of work on the project

1. Preparatory and organizational stage (problem, development of the project task)

2. Planning (planning and organization of activities)

3. Research (implementation of activities)

4. Conclusions

5. Presentation (presentation and evaluation of results)

Case technology

Objective: to teach students to analyze information, identify key problems, choose alternative solutions, evaluate them and make the best decision, form a program of action.

Stages:

- study of the text with a description of the situation, the essence of the problem is independently clarified, and its own position is determined by the situation assessment;

- work in small educational programs, exchange of opinions on a range of problems;

- discussion under the guidance of a teacher;

A feature of the discussion is that the teacher does not provide a qualitative assessment of the answers. Any statement is perceived as valid.

Collective mutual learning technology

Pair work is used in three types:

A static pair that unites at the request of two students changing roles (“teacher” - “student”); this way two weak students can practice, two strong, strong and weak subject to mutual arrangement;

 dynamic pair: four students prepare one task, but having four parts: after preparing their part of the task and self-control, the student discusses the task three

times (with each partner), and each time he needs to change the logic of presentation, accents, tempo, etc., those. include a mechanism to adapt to the individual characteristics of a friend;

 a variation pair, in which each member of the working curriculum receives its assignment, performs it. analyzes together with the teacher, conducts mutual training according to the scheme with the other three comrades, as a result, each learns four portions of educational content.

ATTENTION!

The technology allows to develop thinking skills, improve logical thinking and understanding, contributes to a more solid learning of knowledge through active cognitive activity.

Technology "educational portfolio"

Technology educational portfolio in Italian means "folder with documents", "specialist folder."

Objective: to identify and fix the didactic effect on:

 end results;

 materialized educational and cognitive activity products;

 applied effort.

 Depending on the purpose of creating a portfolio, there are different types:

 first - the folder of achievements (letter, letters of thanks, report card, etc.)

 the second - a reflective portfolio (student's creative work: drawings, crafts, video tapes)

 the third - problem research (reports, speeches, messages);

 fourth - thematic (creation of materials in the process of studying any major topic).

Portfolio can be presented both in paper and in electronic form. This technology is an excellent tool for the development of intellectual abilities, the deepening and formation of cognitive interests, the formation of achievement motivation

Collaboration technology

 The purpose of learning technology in cooperation (learning in small educational programs) is to create conditions for active joint learning activities of students in different learning situations.

 The idea of learning in collaboration:

 learn together, not just do something together.

 Studying together is not only easier and more interesting, but also much more effective.

 In the organization of training in cooperation, the following conditions must be met:

 the formation of the working curriculum occurs before the beginning of the teacher's classes, taking into account psychological compatibility;

 The team of study programs receives one task, but when it is carried out, the roles are distributed among the participants;

 not the work of one student, but the entire working curriculum;

The teacher himself chooses a student who reports for the task.

Collective thinking technology

The main goal of the teacher is student learning activities in collective work.

It consists of a system of problem situations, each of which is divided into four main steps: entering into a problem situation, working on a creative micro-curriculum curriculum, taking the problem under discussion onto a stream, and getting to a new problem.

 Discussion technologies:

Round table, meeting, conducted and resolved by means of verbal communication. It consists in a collective discussion of the issue, problems and comparison of information, ideas, opinions, suggestions.

- Discussions:

• Dispute; the conference; discussions in print, on radio, on television; progressive discussion.

• Methods used: question, answer; test questions method; discussion in a short voice; the labyrinth technique; relay technique; free floating discussion; "aquarium".

Pedagogical workshops

- specially developed teacher development space, which allows students in a collective search to come to build a new knowledge.

Stages:

- socialization - work with material, information;

-processing information in the form of a collective creative product;

-the presentation of their discoveries, projects;

- reflection - the general analysis of the experienced, open in itself.

Technology organization of active lecture forms:

• Lecture –Visualization (the content is presented in the image: drawing, graphics, diagram.

• Lecture together-problem occurs at the expense of form and content.

• Lecture –press conference.

• Lecture - consultation.

• Lecture –provocation.

• Lecture - dialogue.

• Lecture using didactic methods: "brainstorming", "method of specific situations".

11.5. INFORMATION COMPUTER TECHNOLOGIES AS ELEMENTS OF THE TRAINING PROCESS

Under the information computer technology refers to a process that uses a set of tools and methods for collecting, processing and transmitting data (primary information) to obtain new quality information about the state of an object, process or phenomenon (information product).

Using information technology computer offers the following list of benefits.

Access to various sources of information through the Internet;

 the possibility of mediated counseling and education;

 accuracy and speed of processing of the diagnostic material;

 great interest of students in modern information technologies (this can be used to increase academic motivation);

 availability of computer developmental simulators;

High quality and visibility of the stimulus material

Proper use of the capabilities of modern information technologies in the university contributes to:

• enhancing cognitive activity, improving the quality of students' progress

• achievement of learning objectives with the help of modern e-learning materials intended for use in the classroom;

• development of self-education and self-control skills; increase the level of learning comfort;

• reduction of didactic difficulties for students;

• increase the activity and initiative of students, the development of information thinking, the formation of information and communication competence;

• acquisition of computer skills in compliance with safety regulations/

Self Test Questions

1. What is the essence of problem-based learning?
2. What is the relationship of problem-based learning and research?
3. What are the principles of organizing and conducting business games?

CHAPTER 3 EDUCATION OF STUDENTS AND PEDAGOGICAL MANAGEMENT IN HIGH SCHOOL

12 ORGANIZATION OF INDEPENDENT WORK OF STUDENTS IN THE CONDITIONS OF CREDIT TECHNOLOGY

12.1. INDEPENDENT WORK OF STUDENTS AS A BASIC FORM OF TRAINING IN THE CONDITIONS OF CREDIT TECHNOLOGY

Independent work is the planned work of students, performed on the instructions and with the methodological guidance of the teacher, but without his direct participation. In connection with the actualization of the self-educational function of the learning process, we will consider the independent work of students as one of the types of training and one of the forms of its organization, aimed at developing the skills and habits of self-mastering, updating and creative application of systematized supporting knowledge with the aim of increasing the quality ETS training. Independent work of students is a complex concept, which is difficult to give an unambiguous definition, since the basis of its organization is the direct and indirect interaction of the teacher and the student. The degree of independence of the latter in this case may be different depending on many factors.

Among the many definitions of independent work of students, independent work of students), we will adhere to the following - this is the main type of student's educational activity, carried out under the guidance of, but without the direct participation of the teacher, characterized by a large activity of the cognitive processes that can be performed extracurricular time and serves as a means of improving the effectiveness of the learning process and the quality of training future professionals.

ATTENTION!

Independent work of studentsis intended not only to master subject knowledge, but also to develop skills for independent work in general, in educational, scientific, professional activities, the ability to take responsibility, solve the problem on their own, find constructive solutions, exit from a crisis situation

No knowledge that is not supported by independent work, can not become the true property of man. In addition, independent work has educational value. It forms independence not only as a set of skills and abilities, but also as a character trait, which plays an essential role in the personality structure of a modern highly qualified specialist. Therefore, in each university, each course carefully selected material for independent work of students under the guidance of teachers.

At universities, schedules of independent work are prepared for the semester with the addition of semester curricula and study programs. Charts - stimulate, organize, make rational use of time. Work must be systematically monitored by teachers.

In the process of independent work, learning skills are used that allow the teacher to trace: the degree of students' creative approach to mastering their future professional activities; their ability to use educational, special and other literature; ability to analyze the studied; the ability to generalize, formulate the idea and express their opinions; the ability to navigate in contradictory views, to have and be able to defend an independent judgment; the desire for self-realization in the chosen profession.

Increasing the requirements for the quality of student assignments, the teacher gets an opportunity to more thoroughly analyze the development of students' intelligence, the development of their professional competence and qualifications.

That is why it becomes the main reserve for improving the quality of training.

Consciousness of the performance of the independent work of students provide the following characteristics:

• Methodological meaningfulness of the material selected for independent work;

• The complexity of knowledge corresponding to the “zone of proximal development” (after L.S. Vygotsky) of students, i.e. feasibility of performance;

• The sequence of presentation of the material, taking into account the logic of the subject and the psychology of learning;

• Dosage of material for independent work, corresponding to the educational opportunities of students;

• Activity orientation of independent work.

Creativity derives from reproducing activity and is the development of the latter and at the same time contains reproducing processes as one of its consequences.

Independent work and the general basis for the systematization of their species within each academic subject

This is the procedural side of the classification.

According to this provision, the experience of creative activity is manifested in the form of the following processes:

• Recognition and recognition of concepts based on speech and visual communication, as well as memorization and demonstration of images of the performance of various activities.

• Reconstruction, actualization and transfer of knowledge, skills and abilities and variation of the system of methods of activity for solving KM.

• Generalization of signs and concepts, invariant transformations in order to obtain new information.

• Identification of new tasks in a given situation and the development of fundamentally new programs and solutions.

However, when students perform these actions, the process of its movement is removed and there is no specificity of the mental subjective regulation of actions.

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Results in the second didactic position underlying the classification of independent work of students: the procedural side of a student's activity as a principle in identifying types of independent work of students, which must always act in unity with the logical content side and externally manifest through it. Accordingly, the following types of independent work of students can be distinguished:

• reproducing CP according to the sample;
• reconstructive variable;
• partial-search or heuristic;
• research.

The independent work of the student is the work on a specific list of topics set aside for independent study, provided with educational and methodical literature and recommendations, controlled in the form of tests, examinations, colloquiums, essays, essays and reports; depending on the category of students, it is divided into independent work of students - independent work of a graduate student and independent work of a doctoral student;

Self-study of the student under the guidance of a teacher (Office Hours) - extracurricular work of the student under the guidance of a teacher indicated in the schedule; depending on the category of students, it is divided into: independent work of students — independent work of a student under the guidance of a teacher — independent work of a graduate student under the guidance of a teacher;

Independent work of students is a diverse type of individual and collective activity of students, carried out under the guidance of, but without the direct participation of the teacher in the classroom or extracurricular time specially reserved for this.

The state educational standard of higher professional education provides, as a rule, 50% of the hours of the total labor-intensiveness of the discipline for the independent work of students. In this regard, training in the university includes two, almost identical in volume and interaction of parts - the learning process and the process of self-study. The maximum amount of study load of a full-time student, including all types of classroom and extracurricular studies, should not exceed 54 hours per week. The volume of general classroom instruction of a student should not exceed 27 hours per week for a year of theoretical training. Obligatory classroom studies are regulated by the curriculum, programs, class schedule, determining the content, number of hours, time and place of their conduct. The remaining weekly load on the student assumes his independent work, regulated and regulated by the teachers of the university.

ATTENTION!

The leading goal of the organization and implementation of independent work of students should coincide with the purpose of teaching the student - the preparation of a specialist and bachelor with higher education.

The goal of students' independent work directly is the mastery of fundamental knowledge, professional skills and practical experience in the field of study, as well as creative, research activity by students. Independent work of students should

contribute to the development of independence, responsibility and organization, a creative approach to solving educational and professional level problems. The methodological basis of independent work of students is an activity approach, when the goals of learning are focused on the formation of skills to solve typical and atypical tasks, that is, on real situations where students need to show knowledge of a particular discipline.

In the educational process of a higher vocational educational institution there are two types of independent work: classroom and extracurricular.

Auditorium independent work on the discipline is performed in the classroom under the direct supervision of the teacher and on his instructions. Independent work of students in the classroom time is very diverse and may include:

1. Performing independent work;
2. Performance of control and laboratory works, drawing up diagrams, diagrams;
3. Problem solving;
4. Work with reference, methodical and scientific literature;
5. Protection of work performed;
6. Interview, colloquiums; business games, discussions, conferences;
7. Testing;
8. Examinations, etc.

The students 'out-of-class independent work (hereinafter referred to as the students' independent work) is the planned educational, research work of students, performed during extra-curricular time on the instructions and with the methodological guidance of the teacher, but without his direct participation.

Forms of independent work of students are determined by the content of the academic discipline, the degree of preparedness of students. They can be closely associated with theoretical courses and have a training, teaching and research, research character. The form of independent work of students is determined by the departments and teachers in the development of work programs of academic disciplines.

The content of extracurricular independent work is determined in accordance with the following recommended types of it:

• to master the knowledge: reading the text (textbook, primary source, additional literature); drawing up a text plan; graphic image of the structure of the text; note-taking text; extracts from the text; work with dictionaries and reference books: familiarization with regulatory documents; educational research work; use of computer equipment and the Internet, etc .;

• to consolidate and systematize knowledge: work with lecture notes; work on educational material (textbook, primary source, additional literature); drawing up a plan and response theses; tabulation for systematization of educational material; the study of regulatory materials; answers to test questions; analytical text processing (annotation, reviewing, reviewing, etc.); preparation of theses of messages for presentation at a seminar, conference; preparation of essays, reports: compilation of bibliography, thematic crossword puzzles, etc .;

• to form skills: solving tasks and exercises on the model; solution of varied tasks and exercises; execution of drawings, diagrams; settlement and graphic works; solving situational production (professional) tasks; preparation for business games; design and modeling of different types and components of professional activity; preparation of term papers and dissertations (projects); experimental design work; experimental work; exercise on the simulator; exercises of a sports and fitness character, etc.

Formation of the content of independent work includes:

• determination and justification of the necessary minimum of sections, topics of questions, tasks submitted for students' classroom and extracurricular independent work;

• determination of the content and scope of theoretical educational information and practical tasks for each topic that are submitted for independent work;

• selection and proposal of methods and forms of independent work of students in accordance with modern learning technologies;

• determination of forms and methods of control over the implementation of independent tasks by students;

• development of criteria for evaluating the results of extracurricular work of independent work, taking into account the requirements for the level of students' training, defined by the State educational standard of higher professional education.

12.2. TECHNOLOGY OF ORGANIZATION INDEPENDENT WORK OF STUDENTS.

A bad teacher teaches the truth. A good teacher teaches students to find it.
A. Disteverg

The method of organizing independent work of students depends on the structure, nature and characteristics of the studied discipline, the amount of hours spent studying it, the type of tasks for independent work of students, the individual qualities of students and the conditions of learning activities.

The process of organizing independent work of students includes the following steps:

Preparatory (definition of goals, forms, guidelines, methods and principles of control over the independent work of students, preparation of necessary equipment, list of literature);

Main (organization of independent work of students, their use of information retrieval techniques, assimilation, processing, application of knowledge, fixation of results, self-organization of the work process);

Final (assessment of the significance and analysis of the results of independent work, their systematization, evaluation of the effectiveness of independent work, conclusions about the directions of its optimization).

The organization of independent work of students includes:

• determination of the organizational forms of independent work of students in accordance with the content of the academic discipline, schedule of the educational process, curriculum, with the characteristics of the student audience, the individual characteristics of students;

• providing students with information, lists of special literature and other sources;

• ensuring the schedule of independent work,

• providing a schedule of consultations,

• providing methodological developments for self-study,

• provision of information and methodological materials (work program discipline, guidelines, tasks for self-control, etc.);

• providing access to the laboratories, facilitate time allocation in computer labs;

• provision of criteria for assessing the quality of one or another form of independent work. The management of students' independent work is carried out by: the Office of the educational and methodological support of educational programs, departments and teachers themselves.

The functions of the Office of educational and methodological support of educational programs include:

• development of general recommendations for the organization of independent work of students;

• coordination of departments, library, information resources of the university.

• monitoring compliance with standards when planning students' independent work. The functions of the departments include:

• preparation of a package necessary for the organization of independent work of materials for all courses provided by the department;

• development of forms and materials of control in the disciplines of the department;

• tracking the provision of textbooks and teaching aids of all courses taught in the department;

• monitoring compliance with standards in the planning of independent work by each teacher of the department;

• preparation and publication of training course programs, guidelines for independent work of students, textbooks and teaching aids.

The organizational role in the independent study of students belongs to the teachers. A teacher who reads a course and leads a lesson should know the amount of hours allocated for independent work in their discipline (according to the state standard and curriculum in the specialty (direction).

The teacher forms the content, plans, organizes, directs, controls the independent work of students. For each discipline, it determines the goal, the content of students' independent work, in accordance with the curriculum, establishes the subject, laboriousness, formulates tasks for independent work, determines the forms

of student self-control and control by the teacher, prepares teaching materials for independent work.

Methodological materials on the independent work of students contain the target setting and motivational characteristics of the topics studied, lists of basic and additional literature for studying all the topics of the discipline, theoretical questions and questions for self-study, having learned that the student can perform target activities (offered at practical, seminar, laboratory tasks), algorithms 3. The technology of compiling teaching materials

The educational-methodical complex of the discipline is the standard name for a set of educational-methodical documentation, means of training and control developed in the higher school of the Republic of Kazakhstan for each discipline. The educational-methodical complex must include complete information sufficient to complete the discipline. The educational-methodical complexs are designed to ensure the openness of the educational process and should be available to anyone.

The guidelines provide basic requirements for the development and design of the curriculum of the discipline, are examples of the curriculum for the student and teacher. The structure is shown, the order of filling in the program sections is described.

Guidelines are a practical guide to work program writers.

Methodical maintenance of the discipline should include:

- The working curriculum of the discipline of two types: one for a student or a graduate student and the second for a teacher;
- materials for classroom work on each discipline: texts of lectures, plans for seminars, workshops, laboratory classes, multimedia accompaniment of classroom studies (audio-video materials, information on electronic media);
- materials for independent work of students: homework texts, guidelines for the implementation of reports, essays, tests, coursework, other educational materials;
- materials for monitoring students' knowledge: questions of written assignments, questions for interviews, questions for the exam, test questions;
- Methodical recommendations on the passage and filling of the reporting documentation of educational, industrial, pre-diploma practice.

Planning academic work on the subject

Drafting syllabus

The curriculum of the discipline is a document that defines the goals, objectives, content and technology of training the discipline (mandatory component) in accordance with the SES specialty of higher or postgraduate vocational education.

The curriculum of the discipline is developed by the Teaching Staff in the absence of a special curriculum in the Republican Educational Methodical Council (ROMS), which is an integral part of the SES specialty.

The curriculum discipline is reviewed and discussed at the meetings of the department, the Methodological Council and the Faculty Council, approved by the Methodological

Council of the University.

The duration of the study program is 3 years.

KINDS OF INDEPENDENT WORK OF STUDENTS

1. Preparation for a seminar, practical, laboratory and practical lesson.

2. Implementation of practical work (solving problems, written work, etc.) stipulated by the work program of the discipline.

3. Implementation of settlement and graphic work on the course blocks.

Preparation of reports, essays on topics previously identified in the discipline's work program.

Abstract - a summary of the content of one or more sources, revealing a specific topic.

• Content components:

- plan;

- introduction (problem statement, explanation of the choice of topic, its meaning, relevance, definition of the purpose and tasks of the abstract, brief description of the literature used);

- the main part (each problem or parts of one problem are considered in separate sections of the abstract and are a logical continuation of each other);

- conclusion;

- bibliography.

• According to the materials of the essay the student prepares a report. Individual or public defense of the abstract can be organized.

The report is a public message on a specific topic, in the preparation process of which the student uses certain research skills.

Independent reading of textbooks, scientific (scientifically-methodical, methodical) articles, scientific (scientific-methodical, methodical) editions

Read-view when a book is quickly turned over, occasionally lingering on some pages. The purpose of such viewing is the first acquaintance with the book, getting a general idea of its content.

Reading selective (incomplete), when they read thoroughly and with concentration, but not the entire text, but only the fragments necessary for a specific purpose.

Reading is complete (continuous) when they carefully read the entire text, but do not conduct any special work with it, do not make solid records, limited to only brief notes or conditional notes in the text itself (in its own book).

Reading with the study of the material, that is, the study of the contents of the book, suggesting a serious recess in the text and the compilation of various kinds of records read.

The structure of practical classes is basically the same: teacher introduction, student work according to teacher's assignments, which requires additional explanations, the practical part itself, including case studies, solving situational problems, training exercises, observations, experiments, etc. The structure of the practical lesson should include: the topic of the lesson, the purpose of the lesson, the lesson plan, materials for controlling the initial and final levels of learning, the learning task (action algorithm, pedagogical demonstration).

In the structure of practical classes, the following stages are traditionally distinguished: the organizational stage, the control of the initial level of knowledge (discussion of issues that have arisen during the preparation for the lesson; initial control (tests, survey, checking written homework, etc.), correction of students' knowledge) , a teaching stage (pedagogical story, presentation of an algorithm for solving tasks, instructions for completing tasks, performing methods, etc.), independent work of students in class, monitoring the final level of learning, will conclude flax stage.

Self Test Questions

1. Specify the basic requirements for the organization of independent activity of students.
2. What is the role of independent work in terms of credit technology?
3. What are the specifics of the main forms of organization of the independent work of the students?
4. Indicate the main components of the development of educational-methodical complex.

13. THEORY OF SCIENTIFIC ACTIVITY HIGH SCHOOL

13.1. EDUCATIONAL CONCEPTS OF RESEARCH, INTELLECTUAL AND INNOVATIVE UNIVERSITY.

The concept of a research university of innovative type implies, on the one hand, adherence to classical liberal university education, for which characteristic trends are humanization and fundamentalization of university education, service to truth and freedom of scientific creativity and, on the other hand, the need to adapt graduates to the characteristics of the modern world. This circumstance predetermined the synthesis of utilitarian and liberal approaches to the conceptualization of a technical university. In our opinion, the humanization and humanitarianization of education become especially significant. The humanization of education is understood primarily as a turn of education towards the interests and needs of the student, taking into account their individual abilities and capabilities. The traditional teaching method in Russia was based on the “average” student in terms of mass education. Humanization also implies maximum individualization of education. humanitarianization is aimed at expanding the problem field of research of specialists in natural science and technical specialties. This can be done not only by increasing the number of humanitarian and socio-economic disciplines, but also by expanding the internal orientations of education, by expanding the cultural outlook of students through the development of social interaction skills using such techniques as training and discussion. Within the framework of this tendency, it is supposed to create favorable opportunities for self-realization of an individual, both a teacher and a student, the formation of tolerance for a different opinion, responsibility towards society. In the new model of the university

An innovative type of research university is actively creating innovations and using innovations in its activities. It is focused on the development of innovative education with the use of interdisciplinary, problem-oriented learning technologies, the implementation of advanced training of elite specialists based on the integration of academic education and research in the most promising areas of knowledge, stimulating the development of basic research and innovation activities, the formation of innovative corporate culture and internal competitive environment. The term "innovation" (lat. innovation, update) means process leading to the emergence of any innovation. The effectiveness of the innovation process depends not only on the effectiveness of each stage, but also on the sequence of stages of scientific research, as well as on the speed of transition from any previous stage to the next. Shortening the intervals between the stages of research and combining them as much as possible in the overall process has become an important area of research and experiments

13. 2. SCIENTIFIC ACTIVITY IN HIGH SCHOOL. REGULARITIES AND PRINCIPLES OF SCIENTIFIC ACTIVITY OF HIGHER SCHOOL

The main feature of research work in universities of the country is the organic combination of the educational process and research activities of the university staff. The pedagogical and scientific structures of universities, as well as students take part in this work. Experience shows that the widespread involvement of students in research work contributes significantly to the emergence of problem-based learning at the university. Under the leadership of experienced scientific leaders, a large amount of scientific research is being carried out in various sectors of the country's economy.

Research work in universities has three main objectives:

1. Using the creative potential of universities to solve important national economic problems, accelerating scientific and technical progress. 2. Improving the qualifications of the teaching staff.

3. Improving the quality of training of graduates by improving the organization of the educational process, their active participation in scientific activities.

Research work in higher education institutions is carried out in fundamental and applied areas in accordance with the profile of specialist training, in connection with which it differs from the work of academic institutions by its multidisciplinary nature, a large number of developed areas - especially in polytechnic institutes.

The organization of research works in universities includes prospective and current planning, their material and technical support, current management, summing up and implementation of research results. The main tasks of the organization of scientific research are to provide the conditions for the timely and high-quality execution of these works.

ATTENTION!

Research work of students is one of the most important forms of the educational process.

Scientific laboratories and circles, student scientific societies and conferences - all this allows the student to begin a full-fledged scientific work, to find like-minded people on it, with whom you can consult and share the results of their research. Anyway, all university students are engaged in research work. Writing essays, term papers, dissertations is impossible without some, albeit very simple research.

On the part of the teacher, attention and support are needed, without which the student, especially in junior courses, will not want (and simply cannot) do the boring science, which almost any discipline in the initial stages of its development seems to be.

General principles of scientific work with students. The main way of presenting educational material was and remains informing. The teacher, through lectures, interviews and other common ways, conveys the knowledge he has gained to the students, and the students memorize them. Such a method would be ideal even at the beginning of the century, but today, when science develops very quickly, the knowledge acquired in this way is of little value, since they quickly lose their relevance.

But the problem is that many students for a variety of reasons (from simple laziness to mental disorders) cannot creatively approach the learning process. And it may happen that a few students will study additional literature, work with documents and sources, and the majority will continue to learn in the old way. If you focus on the bulk, the most active students can gradually stop their research, join the majority. This difficult problem can be easily resolved by organizing a scientific circle on the chosen subject.

13.3. TYPES OF EDUCATIONAL RESEARCH AND SCIENTIFIC RESEARCH WORK OF STUDENTS

There are two main types of research work of students.

1. Educational research work of students, provided the current curriculum. This type includes term papers performed during the entire period of study at the university, as well as the thesis work carried out in the fifth year. During the coursework the student takes the first steps towards independent scientific creativity. He learns to work with the scientific literature (if necessary, then with a foreign one), acquires the skills of critical selection and analysis of the necessary information. If in the first year the requirements for coursework are minimal and writing it is not a big deal for students, then next year the requirements are noticeably increased, and writing the work turns into a truly creative process. So, increasing with each year the requirements for course work, the university contributes to the development of the student as a researcher, making it almost imperceptible and unobtrusive for him.

The fulfillment of the thesis is aimed at the further development of the student’s creative and cognitive abilities, and as the final stage of the student’s studies at the university, is aimed at consolidating and expanding theoretical knowledge and in-depth study of the chosen topic. In the senior courses, many students already work in their specialty and, when choosing a topic for a term paper, this is most often taken into account. In this case, besides the analysis of literature, the thesis may include its own practical experience on this issue, which only increases the scientific value of the work. The research work of students provided for in the current curriculum can also include writing essays on practical classes. It should be said that most often the abstract is either a rewritten article or, even worse, an outline of the head of a textbook. Call this scientific work can be with great doubt.

But some essays written on the basis of several dozen articles and sources can be called scientific works, and their inclusion in the list of types of students' research work is fully justified.

2. Research work beyond the requirements of curricula. As already mentioned, this form of research work of students is the most effective for the development of research and scientific abilities of students. It is easy to explain: if a student is ready to deal with issues of any discipline at the expense of free time, then one of the main problems of the teacher is removed, namely, the student's motivation for classes. The student is already so developed that you can work with him not as with a student, but as with a younger colleague.

He monitors the novelties of literature, tries to keep abreast of the changes taking place in his chosen science, and most importantly - the process of understanding science does not stop outside the university and preparing for practical exercises and exams. Even while resting in the depths of consciousness, the process of self-improvement does not stop. The well-known Leninist quotation is realized: "in the first place, to learn, secondly, to learn and thirdly, to learn and then check that science does not remain a dead letter or a fashionable phrase ... that science really belongs to the flesh and blood turned into an integral part of life completely and in a real way

The main forms of RW performed during extra-curricular time are:

- subject circles;
- problem circles;
- problem student laboratories;
- participation in scientific and practical conferences;

Participation in university and republican competitions.

The research work of students is an important factor in the preparation of a young specialist and a scientist. Everybody wins: the student himself acquires skills that will be useful to him throughout his life, in whatever branches of the farm he works: independence of judgment, ability to concentrate; constantly enrich their own stock of knowledge, have a multilateral view of the problems that arise, just be able to work purposefully and thoughtfully. The society receives a worthy member who, possessing the above qualities, can effectively solve the tasks set for him.

Each teacher of a higher education institution must pay less attention to NIRS than to classroom studies, despite the fact that it takes a lot of time and effort. After all, the biggest reward for him is a really educated, comprehensively developed and appreciative person who will always remember the lessons learned in his youth.

Self Test Questions

1. Describe the role of scientific activity in the training of a specialist.
2. Types of student research
3. What gives students the participation in the competition of research works.
4. What areas of joint activities of teachers and students do you see?

14 HIGH SCHOOL AS A SOCIAL INSTITUTE OF EDUCATION AND FORMATION OF THE PERSONALITY OF THE SPECIALIST.

14.1. MODERN SOCIETY, HUMAN REQUIREMENTS

The formation and development of a person's personality occurs as a result of the influence of numerous factors, objective and subjective, natural and social, internal and external, independent and dependent on the will and consciousness of people acting spontaneously or according to certain goals. At the same time, man himself is not thought of as a passive being. He acts as a subject of his own formation and development.

The youth enters the university, having passed a significant path of formation, the formation of various qualities, the development of abilities, and socialization. Undoubtedly, the period of study at the university is the most important period of human socialization.

ATTENTION!

Socialization :

- is the process of personality formation in certain social conditions,
- the process of assimilation by a person of social experience, during which a person transforms him into his own values and orientations, selectively introduces into his system of behavior those norms and patterns that are adopted in a given curriculum and society.

The process of socialization includes the development of the culture of human relations and social experience, social norms, social roles, new activities and forms of communication.

The result of socialization is socialization, as a complex of formed features defined by the status and required by society in modern conditions.

The following personality characteristics that ensure successful socialization are distinguished: the ability to change value orientations, the ability to find a balance between their values and the requirements of a role in the selective attitude to social roles; orientation is not on specific requirements, but on understanding universal moral human values.

In the process and as a result of socialization, a person masters a set of role expectations and ideas in various spheres of life (family, professional, social, etc.)

and develops as an individual, acquiring and developing a number of social attitudes and value orientations, satisfying and developing their needs and interests.

If we consider the period of study at a higher education institution as a process and result of social maturity and individual growth of a person, then the core of this process can be considered education, understood primarily as socialization, then a specially organized system of influences on the student, and further - as self-education, ensuring continuity and the sustainability of civilization and culture.

The higher school as a unique social and educational institution has a powerful potential of the spiritual and moral formation of young people, their preparation for independent living and professional activities. The growing social expectations and demands of society to young professionals dictate the need to address the problems of educating students as a potential intellectual and spiritual elite of the country. Universities are called upon to play a special role in this. They are called upon to raise the training of professional specialists as carriers of the highest standards of education, education, spirituality and culture to a new qualitative level. The projected characteristics of an ideal person with a university education include:

- ability to reunite various cultures (scientific, fundamental, humanitarian, universal, national, etc.)
- to act as a keeper of traditions and a catalyst for progressive changes in the industrial, scientific, and social spheres.
- the ability to self-actualization and self-realization in the context of social and cultural competence;
- the presence of a level of social maturity that allows to resist asocial anti-cultural phenomena and trends in society.

14.2. CONTENT PERSONALITY CHARACTERISTICS SPECIALIST WITH HIGHER EDUCATION

The measure of education of any society is determined by the level of its culture and civilization, and not by a set of knowledge. Accordingly, the higher school should define strategic guidelines for creating a unified educational environment, as the basis for the formation of a specialist culture that contributes to the development of social and professional competence of a personality of a specialist with a higher education, to develop him as a citizen and professional.

By culture, we understand the integrative quality of an individual specialist, who has methodologically flexible, project-oriented thinking, with a high level of general culture, a positive type of communication ability, and a clearly expressed attitude to civic responsibility.

The components of such a culture:

- spiritual and ideological orientation of a specialist: the needs, interests, motives of activity, value orientations, forming his installation on highly professional creative work;

- patriotism and dedication to the interests of their country as a national trait, orienting a specialist to economic prosperity and the priority position of Kazakhstan in the world community based on its own potential;

- mastering the values of spiritual, moral and material cultures: cognitive culture in the field of basic sciences, economic culture, civil, political, legal culture, physical, environmental and main areas of art

In this regard, the tasks of higher education are: improving the socio-pedagogical status of education and the professional level of managing the process of education at the university, strengthening the educational functions of higher education, coordinating the educational effects of all structural units of the university, reviving university traditions and ensuring the use of the latest achievements in the educational process; full assistance to the formation of significant professional and personal qualities of a specialist with higher education;
the development of the principles of the organization of education and the mechanism for the development of a single specialist culture; the promotion of self-activity and self-realization of students, the formation of a respectful attitude towards student rights.

One of the main tasks of moral education is to foster a culture of interpersonal relations. Tolerance and respect for the individual - the main components of human relationships. In our daily life, feelings, thoughts and actions are woven together, but feelings arise before thoughts and actions. A person feels, then acts, then either speaks or performs some actions.

Feelings do not require special study, until a “failure” occurs, either in the perception of the surroundings, or in relationships, or in solving some problem. Usually in such a situation a person begins to think - to look for the causes of what happened, possible ways out of the situation. This should be facilitated by the correct methodological support of the educational process, the creation of creative curriculum, groups and clubs of interest. In order to form a healthy public opinion, it is necessary to organize evenings, conversations, lectures, quizzes on ethical topics.

In order to preserve inter-ethnic harmony, to create a system of ethnocultural education, conditions are necessary for learning and real knowledge of two, three or more languages.

In the context of a multinational country, which is Kazakhstan, the problem of bringing up a multicultural personality is one of the most important areas of upbringing at a university. In higher education, ensuring the growth and enrichment of the creative potential of a student’s personality should be based on the revival of a national spiritual culture in conjunction with the history and culture of other nations. life activities are an effective means of educating and developing the personality of the student.

A specialist with a higher education should also have a sufficiently vivid artistic consciousness, developed imagination, refined feelings, a burden to the beautiful, an ability to understand the works of art.

Entry into a civilized market requires orientation of educational work, humanitarian education on fundamental training of personnel with market thinking.

At the same time, it is important to preserve morality, not to allow a nihilistic attitude to culture and knowledge.

Students should be given a fundamentally new content of the concept of labor education, an idea of the real prospects of labor in the conditions of market relations, possible unemployment, and on this basis build their professional training. Students should know the basics of world and national culture, possess the skills of ethics and psychology of interpersonal communication, methods of organizing a group of people.

The culturological view on the process of education solves many of the problems facing teachers. Choosing a culturological position in the view of education means analyzing the course of pedagogical events through the prism of existing cultural norms and the highest values discovered by culture. It means reading the progressive tendencies of world culture and nurturing a growing young man as a citizen of the world who is able to live in the context of world culture, accepting human values and harmoniously combining them in their lives with national, domestic ones. Such an approach corresponds to the explicit desire of a person for a single world community, and education, in this case, plays the role of a real factor in the development of unity between people on earth.

The culturological approach to education provides each individual young person with the best psychological conditions for living in world society, equipping him with the ability to live at this level of cultural achievements and preventing the personality from being thrown out of the real culture. For pedagogical solutions, the cultural approach opens forms of work with students. The opportunity opens up to gain the goal of education and, therefore, to give education its essential purposeful nature.

Other areas of education should not be denied, on the contrary, they should multiply and come close to our life realities. Below we propose a model that is a holistic, continuous, pragmatic system of the educational process at the university.

14.3. DEVELOPMENT OF EDUCATIONAL ACTIVITIES CAPACITY

Spiritual and moral. The spiritual and moral culture of a specialist can be characterized as an expression of the maturity and development of the entire system of socially significant personal qualities, productively realized in individual activities. Universities should focus their efforts in this direction on the organization of purposeful and systematic work on the formation and development of spiritual culture, the moral character of the future specialist and his ideological training.

Socio-political and legal. Socio-political and legal culture of a specialist implies that he has an active life position, mature ideological and political views and beliefs, knowledge of the basic laws and legislative acts of the Republic of Kazakhstan. To this end, it is necessary to organize lectures, conversations and other forms of work with students aimed at helping them in understanding the state and dynamics of public life, global problems of today, to foster political maturity,

democracy, political culture, to develop the ability to take an active part in transformative processes in Kazakhstan.

Patriotic and inter-ethnic. In terms of the development of inter-ethnic integration and the formation of a national identity of the citizens of the Republic of Kazakhstan, an important place is occupied by the formation of Kazakhstani patriotism among the youth, integrated with the patriotism of other peoples of Kazakhstan. Strengthening the sense of patriotism and civic duty among young people, love for their homeland, pride in their country, based on the desire to preserve peace and interethnic harmony, contribute to the unity of the peoples of Kazakhstan and the unification of all ethnic curriculum living in the country. Particular attention should be paid to the study of the state language and the development of new effective methods for its study. Along with the study of Kazakh and Russian, it is important to study other European and Oriental languages.

Cultural, aesthetic and ethnocultural. It is necessary to focus on the development and material support of the cultural infrastructure in universities - the media (print, educational television and TSO), with the involvement of leading scientists, philosophers, cultural studies and others. Further development of libraries that contribute to the development of students' independence; the release of textbooks, artistic and methodical literature in this area. It is necessary in everything: learning, leisure, professional activity to form the ideals of goodness, beauty and respect for folk traditions.

Professional. The most important regularity of work in this area is the unity of the ultimate goals and objectives of administrative, pedagogical, scientific, family and social influence on the student’s personality as a future specialist. Coordinating the actions of teachers in the course of the educational process and extracurricular activities is very important for the manifestation of this pattern. In the process of communication, the use of new educational technologies, emphasizing the autonomy and activity of young people, attracting practice-oriented educational material, enhancing the role of all types of industrial practice, becomes crucial.

Extracurricular activities should include the possibility of demonstrating the ideological values of accomplished professionals in various spheres of society, as well as the use of acquired professional knowledge. To develop this area of educational work, the potential of a scientific school functioning with extensive participation of students, as well as job opportunities and further employment in a chosen sphere. It also provides for competitions for the best professional, organization of projects for the use of future specialists 'professional knowledge in faculty activities and the mutual provision of professional services (for example, sociological surveys, psychological and pedagogical mutual assistance, organization of tourist routes by students), active activities of graduates' associations, creative meetings with veterans and well-known experts, etc.

Intellectual. The content of intellectual education includes the development of the intellect through the development of all the cognitive functions of a person: mental processes of sensation, perception, memory, thinking, imagination, speech; formation of the mechanism of self-organization of mental activity; development of

individual intellectual abilities and cognitive abilities of pupils; development of consciousness and self-consciousness of students, their creative potential; the formation of professional thinking.

14.4. PEDAGOGY OF COOPERATION

Student age can be identified as the central stage in the development of a person's character and intellect. It is recognized that young people are experiencing a period of biochemical, psychological, and social flourishing for the active development of moral, aesthetic feelings, physical, intellectual, scientific, artistic, special abilities, and conscious desire to master the full range of social roles of an adult: labor, economic, i.e. inclusion in an independent, productive activities, the beginning of the work biography and creating your own family. It is also taken into account that students enrolled in institutions of higher education have passed a rigorous selection process and, in general, meet the increased requirements imposed on them in the process of studying at the university.

Knowing the nature and psychological structure of a quality, it is possible to more successfully use the educational opportunities of various subjects and conditions of the university as a whole. The beginning of the formation of quality is the understanding of fact, phenomenon, event. Next come the assimilation and development of a positive attitude to the learned, confidence in its truth. Then there is a synthesis of intellectual, emotional, volitional and motivational processes, turning into sustainable education - quality.

ATTENTION!

It should be noted that it is wrong to reduce the formation of a particular quality only to the mastery of knowledge, skills and abilities.

Mobilization of motives, influence on attitudes towards reality, creation of necessary mental states, taking into account contradictions in the development of a student's personality are also needed.

For example, one can not but reckon with the fact that a freshman has a heightened sense of self-esteem, maximalism, categorical and unambiguous moral demands, evaluations, facts, events, and his behavior. This age is characterized by rationalism, unwillingness to take everything on faith, which causes excessive distrust of elders, including university professors. Unambiguous assessments, sometimes ill-considered nihilism as a peculiar form of affirmation require flexibility in the approach to educating young people, the ability to use and develop the best

aspects of their psyche, direct their behavior in the right direction, the ability to help preserve their youthful burning, striving for high moral ideals and actions.

The end result of the education of students is achieved by solving private, everyday, constantly changing and acquiring the most diverse expression of the educational tasks confronting teachers. And it is always important to determine the immediate and more distant tasks in the development of each student of his professionally important qualities.

Another fundamental requirement for the organization of the process of education is the invariably respectful attitude towards the person being brought up as a full-fledged and equal partner of any joint activity. The idea of equality, partnership and mutual respect for each other lies at the basis of the so-called pedagogy of cooperation, the principles of which should be leading in the university education.

The main principle of the pedagogy of cooperation - the adoption of a person as he is, without direct assessments and instructions, is the only condition for the fruitful interaction of both participants in the educational process.

Another important task of upbringing is to help the educated in the development of an individual lifestyle, an individual style of activity and communication. To solve this problem, the teacher must possess some skills and techniques.

Psychodiagnostics. Knowledge of the psychological and psycho-physiological characteristics of students, determined by their social status, age and character, is of paramount importance.

The teacher should take into account that the study loads are especially large during the period of monitoring and evaluation. But it is precisely here that one of the gravest pedagogical errors is often made: the teacher transfers the negative assessment of the results of mastering the curriculum to the personality of the student as a whole, giving the student that he is unintelligent, lazy, irresponsible, etc .; forcing the student to experience negative emotions, the teacher has a direct impact on the physical condition and health of the student [71].

14. 5. CULTURE IN HIGH SCHOOL

An important role in the education of young people in higher education is played by the curator. The word “curator” (from the Latin. Curator) is the trustee. The curator is a teacher appointed by the dean's office to resolve issues of student life activity: education, leisure, labor, social character. The curator appeared simultaneously with students and actually accompanies the entire history of higher education , with which his duties, status, content of activity, nature of relations with students were changed. In the process of work, the curator relies on the asset of the academic group, the student ntov, their initiative. The curator should rarely resort to the methods of authoritarian management, only if absolutely necessary.

The curator’s competence includes drawing up a plan of educational work for the year in conjunction with the student group’s assets. The work plan should take

into account the interests and inclinations of students, inquiries, marital status, financial condition, living conditions. specific setting.

The curator in academic groups deals with the issues of social and psychological adaptation of students to a new role, university, city. The activity of the curator is connected with the acquaintance of students with the normative documents regulating their vital activity, with the decisions taken at the meetings of the academic councils of the faculty and the university, at the meetings of the dean's office and administration. This information is quite important for students, as it helps them to be aware of the main events of university life, forms an attachment to their school.

Periodically, the curator analyzes the performance of students and their attendance. If necessary, organizational issues are considered at student group meetings. Knowledge of the structure of informal relationships, of what they are based on, facilitates understanding of the atmosphere within the group and allows you to find the most rational ways to influence the effectiveness of the group of work.

In this regard, special methods of research are of great importance, allowing to identify the structure of interpersonal relationships in the group, to allocate its leaders. The involvement of students in research activities is also entrusted to the curator. This direction helps to reveal the scientific potential of students, their narrower scientific orientations and interests, and later to recommend the most distinguished students for further study in the magistracy and doctoral studies.

The curator has great potential to form students' interest in their chosen profession by organizing meetings and stable business contacts with experienced, creatively working teachers, to attract students to work in schools, country recreation centers for children, in student groups. The effectiveness of the curator is largely predetermined by the relationship that develops purposefully and spontaneously with the students.

If the relationship is based on attention, trust, respect, if the curator relies on the methods of interaction, cooperation with students, it is easier for him to achieve the solution of the tasks set

ATTENTION!

A student group can develop from the type of "association" to the level of "collective" or change to the type of "corporation".

An association is a group in which relationships are mediated only by personally significant goals (a group of friends, buddies). A cooperation is a group that differs in its actual organizational structure, interpersonal relationships are business-like, subject to the achievement of the desired result in performing a specific task in a particular activity.

A corporation is a group united only by internal goals, notbeyond its scope, seeking to achieve its group goals at any cost, including at the expense of other groups. Sometimes the corporate spirit can take place in labor or study groups when a group acquires the features of group egoism.

A collective is a stable in time organizational group of interacting people with specific governing bodies united by the goals of joint socially useful activities and the complex dynamics of formal (business) and informal relationships between members of a group.

The educational team has a dual structure: first, it is the object and result of the conscious and purposeful influences of teachers, curators, who determine many of its features (types and nature of activities, number of members, organizational structure, etc.); secondly, the educational team is a relatively independent and developing phenomenon, which is subject to special socio-psychological patterns. The educational team, figuratively speaking, is a socio-psychological organism that requires an individual approach. The fact that it “works” in relation to one study group turns out to be completely unacceptable to another.

Experienced teachers are well aware of this "mysterious phenomenon": two or more parallel training groups gradually become individualized, as it were, acquire their own face, and as a result, a rather sharp difference appears between them. As a reason for these differences, educators point out that certain students, who are hardly the official leaders of educational self-government, make “weather” in the study group. It is very important for the leader, teacher, and curator to clearly see the structure of interpersonal relationships in a team in order to be able to find an individual approach to team members and influence the formation and development of a cohesive team.

This cohesive team does not occur immediately, but is formed gradually, passing through a series of stages. At the first organizational stage, a group of university students does not represent a collective in the full sense of the word, since it is created from students entering a university with different life experiences; views, different attitudes towards collective life.

The organizer of the life and activity of the educational group at this stage is the teacher, he makes demands on the behavior and mode of activity of the students. For the teacher, it is important to clearly identify 2-3 most significant and fundamental requirements for the activities and discipline of students, not allowing the nomination of an abundance of secondary requirements, indications, prohibitions. At this organizational stage, the leader should carefully study each member of the group, his character, personality traits, making an individual psychological map of the student’s personality on the basis of observation and psychological testing, gradually highlighting those who are more sensitive to the interests of the team, is an asset In general, the first stage is characterized by socio-psychological adaptation, i.e. active adaptation to the educational process and joining the new team, learning the requirements, norms and traditions of the life of the educational institution.

The second stage in the development of a collective begins when the organizers of collective activity, who enjoy authority among the majority of the members of the

collective, are revealed. Now the requirements for the team puts not only the teacher, but also an asset to the team. Head onthe second stage of the development of the team should objectively study, analyze interpersonal relationships of team members using methods of sociometry, referentry, take timely measures of influence to correct the position of group members with high and low sociometric status. Raising a group's asset is the most important task of a manager, aimed at developing the organizational skills of an asset and eliminating negative phenomena: conceit, vanity, "commanding tone" in the behavior of an asset.

The position of the teacher, the curator in the student group is specific: on the one hand, he spends a lot of time with the guys and is like a member of their team, their leader, but, on the other hand, the student group largely exists and develops independently of the teacher, putting forward its leaders and the "wound up". The pedagogue is prevented from becoming a full member of the student team age difference, social status, life experience, and finally, the teacher cannot be completely equal to the student. But maybe this should not be strived for, students are sensitive to the falsity of statements about “full equality”. This position of the teacher makes it difficult to assess the situation within the group, so the curator is not easy to be an expert in matters of the relationship of students in his group

In activities to provide conditions for self-education and self-development of students a large role belongs to the educational work in student dormitories. It is necessary to more rationally organize the life and leisure of students, covering the broadest issues, with the involvement of a variety of faculties and departments; analyze and improve political, educational, cultural and mass work in the dormitories; pay special attention to measures for the protection of the rule of law.

The ultimate goal of all the events held is for the students to understand the need for self-management of the processes of their life in the dormitory and master the methods of organizing such self-government.

The challenge in modern conditions is the development of student government. With all the diversity of its activities, the curator is always in the spotlight should keep the issues of education of students. Based on the study of the practice of the curators, you can offer a number of pedagogical rules-conditions that contribute to improving the effectiveness of their activities: to plan work together with the group's assets, while proceeding from real conditions; study members of your academic group in all respects in order to be able to exert appropriate influence on them; learn how to productively build their relationships with students, depending on the pedagogical situation, be flexible and firm; to form a full-fledged student team; help students prepare for a variety of social roles; provide students with the necessary assistance in the implementation of conscious, purposeful work on themselves; support and develop student self-government, initiative, public activity.

Self Test Questions

1. What are the requirements of modern society to a person?
2. What does intelligence mean to you?
3. What are the directions of education in high school most in demand.

15 MANAGEMENT IN HIGHER EDUCATION. EDUCATIONAL TEAM, ITS BASIC FUNCTIONS

15. 1. Concept, functions and principles of management in education

Currently, most scientists adhere to the point of view that management is the theory and practice of management in social organizations. There is another view on management. From a functional point of view, it is a process of planning, motivation and control necessary for the formation and achievement of a goal. Therefore, management is considered an integral part of the concept of "management", since it implies a targeted impact on the team employees or individual performers to perform tasks and achieve a specific goal.

The result of the work of the manager of the educational process is a measure of learning, development of the object (the second subject) of management - students.

Management is a management based on a man-centric approach, involving not a straightforward impact, but the creation of conditions for comfortable cooperation between the leader and the subordinate in effectively achieving the goals of joint activities.

In science, management is considered both in the sense of “type of activity” and in the meaning of “field of knowledge”. The well-known American management theorist P. Drukker believed that modern management is not just a management activity, but a special type of management activity aimed at people who are participants in a managed process.

Modern management is a specific type of management activity that revolves around a person in order to make people capable of joint action, make their efforts effective and smooth out their inherent weaknesses, because the human ability to contribute to society is as dependent on the efficiency of enterprise management as it is on own efforts and returns of people.

Management in the field of education is a set of methods, principles and methods of management, which is responsible for the high efficiency of the educational process. Thus, the teacher can be represented in the role of the manager of the educational and cognitive process, and the head of the educational institution - the manager of the whole educational process. The main distinctive features of management in education are: the ability to move to build relationships from a vertical system to a horizontal system of professional cooperation, which provides a corporate management style. This style takes into account the personal qualities of employees and a deeper approach to educational activities aimed at achieving the most effective results, ensuring a comfortable psychological and pedagogical climate in the team (among teachers and students).

Pedagogical management is a specific type of managerial activity of a teacher in a group, aimed at organizing the educational process, managing educational information, organizing teaching and educational work, and ensuring communication with the goal of developing educational and cognitive activity of students, ensuring the achievement of a student's personality development, ready for life in new social conditions.

In management theory, the following main functions are distinguished: planning, organization, motivation, control. These four primary functions are integrated in communication and decision-making processes. Such a process approach to determining the functional composition of management is adopted among specialists in all fields of activity. With regard to the school, management functions have specific features and sub-functions of P.I. Tretyakov in the book "School Management by Results" identifies the following management functions:

- informational and analytical;
- motivational - targeted;
- planning - prognostic;
- organizational - performing;
- control - diagnostic;
- regulatory - correctional functions.

The management process for all self-governing systems is reduced to the fact that functional management units are considered as relatively independent activities. Meanwhile, they are all interconnected and consistently, gradually replacing each other, forming a single management cycle.

Information - analytical function

The renewal of the management of the comprehensive school is associated primarily with the formation of a system of information and analytical activities as the main management tool.

For each of the subsystems — control and controlled — there are three levels of information.

Thus, one of the most important functions in the management of an educational institution is information-analytical, the main essence of which is the systematic work with managerial and pedagogical personnel.

Motivational - objective function

Choosing a goal is the starting position, the first stage of management, its creative part. According to the source and method of education, goals can be internal, formed by a person or a social system independently, or external if they are set from the outside. This is typical of pedagogical systems for which goals are set by society.

The main task of the motivational and purposeful function is to ensure that all members of the teaching staff clearly perform work in accordance with the delegated responsibilities and plan, as well as in line with the needs to achieve their own and collective goals. Providing ways, means for all participants of the pedagogical process, to satisfy these needs is the most important task of school managers.

Prognostic function

Forecasting and planning can be defined as an activity aimed at the optimal choice of ideal and real goals and the development of programs to achieve them. As one of the main management processes, planning should at all levels meet a number of fundamental requirements.

Organizational - executive function

In order to accomplish what is planned, it is necessary to determine, name people who will fulfill what was intended, that is, subjects of management, to formulate what each subject should perform, in other words, to determine his functional duties.

The main areas for increasing the efficiency of this function include:

• implementation of a personality-oriented approach to the organization of activities;

• scientifically and practically justified distribution of functional responsibilities within the management staff of school leaders and members of the teaching staff;

• rational organization of labor;

• formation of relatively autonomous systems of intraschool management.

Control - diagnostic function

Intra-school control represents the activity of managers together with representatives of public organizations to establish compliance with the functioning and development of the entire system of educational work of the school on a diagnostic basis with national requirements (standards).

In conditions of great autonomy, when delegating many rights and powers to the school itself, and hence increasing its responsibility, the control and diagnostic function of intraschool management should, more than ever, take a special place in order to stimulate the activity of the teacher and the student.

In the practice of management, there are three main stages in the diagnosis of certain phenomena and processes in school management.

The first stage is a preliminary, presumptive diagnosis.

The second stage is a clarifying diagnosis, which is based on more verified, objective data formed on the basis of the integrated use of various observation methods (interviews, surveys, questionnaires, etc.)

The third stage is the process of diagnosis; it ends with a final diagnosis. It consists not only in the generalization of the data obtained as a result of a preliminary and clarifying diagnosis, but also in their comparison, comparison.

Thus, we can conclude that the school as a developing and developing system can exercise constant intra-school control (self-control) at its level, but at the same time to ensure a unified state basic level of knowledge, skills, skills and level of education of schoolchildren. examination on a diagnostic basis.

Regulatory - correction function

This function can be defined as an activity of making adjustments using operational methods, means and influences in the process of managing the pedagogical system to maintain it at the programmed level.

Specific forms and types of regulation are diverse and are determined primarily by the specificity of the controlled object.

Thus, all management functions can be represented as types of managerial work associated with the impact on the managed object. Each of these functions is vital for any organization; at the same time, planning (forecasting and programming) as a management function provides the basis for other functions and is considered essential, while others are focused on the implementation of the organization's tactical and strategic plans.

Management principles of pedagogical management.

The traditional system of principles, reflecting the organizational and production side of management in education, was substantially supplemented when introducing ideas of pedagogical management into the practice of educational institutions.

From the standpoint of pedagogical management, Yu.A. Konarzhevsky highlighted the following management principles:

the principle of respect and trust in a person;
the principle of a holistic view of a person;
principle of cooperation;
social justice principle;
the principle of an individual approach to management;
the principle of enriching the work of the teacher;
the principle of personal incentives;
consensus principle;
principle of collective decision making;
principle of target harmonization;
the principle of horizontal communication;
principle of autonomy management;
principle of constant updating.

The presented principles are systemic - for the implementation of effective management, each of them "works" only under the condition that the others, interconnected with it, are also executed.

15. 2. Levels and structure of education management

The structure of a developing university should be viable, flexible and dynamic. In this regard, the development of a scientifically based structure of the management of the educational process, a structure that functions effectively in an open information and educational space, provides easy access to the information under study, stimulates the generation of new knowledge and ensures the competitiveness of graduates in the labor market.

Consider the most common organizational structures, initially focusing on the accepted typology. In the economic literature are the classic schemes of organizational structures:

1) hierarchical (bureaucratic),

2) linear,
3) line staff,
4) divisional (divisional),
5) organic (adaptive),
6) brigade (cross-functional),
7) design,
8) matrix (program - target).

The structure of university management is largely determined by what the decision-making mechanism is, who accepts them and what they are oriented towards. The evolution of the external environment, the changing demands of external and internal agents in relation to a university, force it to transform its goals; the hierarchical (bureaucratic) types of structures are also adapted with this. The traditional university organization inherited from the Soviet period, inherited from the Soviet period, can be characterized as hierarchical departmentalization. [4] The university's educational subsystem, which implements the main task of a higher education institution, can be described as disciplinary departmentalization, since the grouping of people and resources is carried out around academic disciplines. It should be noted that disciplinary departmentalization leads to deep specialization of activity, and generates inter-faculty and inter-departmental organizational barriers, which characterizes the university exclusively as a "hierarchical bureaucracy", meaning ignoring the substantive component of its activities, identifying it with production organizations or government structures.

Foreign experience testifies: the majority of US state colleges and universities are not governed by a single board, but by a part of the matrix system: a group of state universities, in which each has its own mission, academic and other programs, internal policies and methods, and manages a single board through the system director. Other universities with their own presidents or nominal heads and academic council, etc., approve their own faculty, enroll students, develop (in accordance with the system policy) their own programs, standards, curricula, increase their funds through donations and research contracts, allocate these funds (along with state funds and tuition fees) among various competing branches and direct them to various needs.

The matrix structure of the university is optimal when the environment is very changeable and the goals of the organization reflect double requirements, when links with specific departments and functional goals are equally important.

15.3. Management of training quality: criteria and indicators

Quality management in education

Modern reality makes it necessary to replace the formula "education for life" with the formula "education through life". In this regard, for heads of educational institutions and organizers of education, the problem of managing the quality of education is of particular importance.

With a certain degree of simplification, we can say that quality is compliance with certain specified standards, and quality management is the process of bringing the system to a standard.

To manage the quality of education means to carry out all the functions of management to achieve the specified indicators, to have a guaranteed result.

ATTENTION!

Quality management in education is understood as a systematic impact at all stages on the factors and conditions that will ensure the formation of future high-quality professionals who fully use their knowledge, skills and abilities.

The quality management system in education, being implemented and operating, will allow the educational institution to reach a qualitatively new level. Currently, in connection with the modernization of the education system, education quality management and education quality control have been introduced in all universities.

The international standards ISO 9000 (ISO / MS) describe an effective quality management system in which all processes and actions are monitored and documented. The basis of quality management, in accordance with MS ISO 9000 series, are eight principles:

- customer orientation,
- leadership role of leadership
- employee engagement,
- process approach
- a systematic approach to management,
- continuous improvement,
- fact-based approach to decision making
- mutually beneficial relationships with suppliers.

The main criteria are:

Graduate as a citizen:

- Strives for continuous self-improvement, self-knowledge, self-development
- Strives to realize itself as a citizen, specialist, worker
- Is committed to a healthy lifestyle.
- Owns a complex of methods and skills of interaction with the outside world for the realization of their potential inclinations and needs

Graduate as a potential professional:

- Owns system knowledge
- Master ways of organizing activities
- Ready to continue education in a certain university
- Ready to adapt in society

15.4. Working an advisor in high schools, His main functions

In the classical form, an adviser is a subject for choosing and implementing an individual educational trajectory of university studies, for ensuring the mobility and flexibility of curricula in the conditions of the credit system of education. Educators-advisers should represent the academic interests of students and participate in the preparation of all necessary information materials on the organization of the educational process, provide them to the student on electronic media and assist in the preparation and adjustment of the individual curriculum; monitor the timely preparation and availability of teaching and learning materials; fulfillment of the rules for conducting the boundary and final control in all disciplines of the specialty.

Advisors are especially needed in the first and second years, their role is to help psychologically help younger students to adapt to the new conditions of study at the university, including them in the communicative process. The teacher-adviser, realizing his personal and professional abilities, conducts collective and individual work with students in different dimensions of student life.

Taking into account these principles of education in the credit system of training, the modern teacher-adviser at the university should not be considered only as a representative of the faculty (institute). This is a senior colleague, advisor, friend and mentor of students, whose duties include both motivation and real psychological and pedagogical assistance to students in achieving holistic personal and professional growth.

In the process of educating students in academic groups, almost all the main areas of the educational process can be used:

• moral, aesthetic, physical, legal, civil, economic;

• mental, environmental;

• labor - (during the production practice, and in the performance of independent work).

The goal of the teacher-adviser is to: form the student's personality, capable of realizing their creative and creative potential, for successfully fulfilling their individual personality roles in all spheres of modern life; transform the student academic group into a friendly, organized team with common goals; to create conditions in the student academic group for organized and systemic educational activities at the university during the period of study; increase the responsibility of each student in the academic group for their studies; to bring students intolerance to violations of the academic discipline at the university during the learning process.

The tasks of the teacher-adviser in the implementation of psychological and educational activities:

 assisting students in defining an individual learning path and mastering an innovative educational program;

Identification of personal-individual needs, interests and inclinations of students when choosing a particular learning path in the relevant specialty;

 conducting psychological and pedagogical consultations for students in the selection of disciplines for the new academic year;

Assisting students in the preparation of individual curricula, if necessary - their adjustment as a whole;

Participation in the work of expert commissions that consider issues of general academic performance and academic status of students at the university. System functions of the teacher - adviser in the educational process.

 The teacher-adviser systematically conducts information on political, economic, historical, cultural, spiritual and moral topics and attracts students to the general preparation and independent carrying out of this work in an academic group.

 The pedagogue-adviser attracts the most capable and creative students to participate in organizational and research work at the university.

 The teacher adviser develops the holistic interest of each student in community work, both at the university and beyond, to patronage work, including volunteer work (orphanages, schools, technical colleges).

 The teacher-adviser monitors the overall performance of students, provides psychological and pedagogical assistance to those who are lagging behind in their studies, and attracts excellent students to this work.

 The teacher-adviser organizes with the participation of the teachers of his group creative, scientific, technical, historical, cultural, social and political discussions on current topics of our time.

 The teacher-adviser with the help of teachers organizes visits by students to spectacular events, museums, theaters, art galleries, and promotes the mastery of artistic and aesthetic culture by students.

 The teacher-adviser coordinates the performance of educational functions by the teachers who work in his group. Educator-adviser should be involved in the issues of everyday life and spiritual and cultural leisure of the student (student dormitories).

15.5 Tutor and office recorder functions

Learning the basics of scientific knowledge should not be reduced to simply telling the students a “positive” amount of this knowledge, but should “push” the student to the ability to develop an active personal (personal) position in working with this knowledge and in knowledge. In practice, the tutor will:

• create conditions for the group to work under this program (provide a group of 10–20 people with all the necessary resources);

• take care of the emotional climate and working atmosphere in the group;

• organize the work of the group and each student individually with the training manual; conduct group discussions on thematic tasks;

advise students on practical tasks and project development;

• organize an assessment and self-assessment process for each educational element separately;

• provide individual assistance and support to students of both academic and psychological nature.

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ATTENTION!

In terms of the credit system of education, we are faced with new categories and concepts:

- a tutor, summer semester organization, students 'independent work, as well as the Registrar's office

The Registrar's Office is a structural part of the faculty and is designed to facilitate the organization of the educational process under the credit system and to ensure the quality control of knowledge. The main activities of the Registrar's office are:

- organization of the educational process;
- quality control of students;
- drawing up and control over the execution of the academic calendar;
- organization and control of the implementation of the block-rating system (BRS);
- organization and control of the current exams;
- the study of the academic performance of the session, final certification, control sections of students' knowledge; - organizing and conducting graduation students (design and presentation of diplomas to graduates);
- statistics and statistical reporting.

The main activities of the Registrar's office are:

- the introduction of a credit system of education; - introduction of the BRS into the educational process;
- preparation of orders for the examination session;
- registration of the individual curriculum of students;
- keeping records of academic progress;
- organization of the summer semester;
- execution of orders for admission to the session, the extension of the session;
- formation of student groups and flows according to the chosen elective courses;
- determination of profitability of the created groups and subgroups.

In its activities, the Registrar's Office is subordinate to educational and training and support units within its competence.

Self Test Questions

1. Specify the features of the linear and matrix structure of university management.
2. Describe the stages of design of test materials at the credit technology of training.
3. Expand the portfolio method as a way to assess the quality of education. What types of portfolios do you know?
4. What is the quality management of education. What is it for?

GLOSSARY ON PEDAGOGY OF HIGHER SCHOOL

The proposed glossary is based on a glossary developed at the Department of Social Pedagogy and Self-Knowledge of the L.N. Gumilyov Eurasian National University.

Active learning - the organization of the educational process, aimed at the full activation of the educational and cognitive activity of students through a wide, integrated, use of didactic and organizational and managerial tools

Upbringing is a social, purposeful creation of material, spiritual, and organizational conditions for the assimilation by the new generation of social and historical experience in order to prepare it for social life and productive work.

Humanization of education is the process of creating conditions for the upbringing and training of a humane personality by methods, forms and means aimed at developing spiritual qualities and personality traits, at satisfying its individual needs and interests.

Humanitarian education - saturation of educational programs for training specialists with humanitarian disciplines necessary for the formation of humanism and the development of new thinking

Globalization is a process of global economic, political and cultural integration and unification.

Thesis - qualification research project showing the student's willingness to work in the specialty

Regularity is a reflection of objective, necessary, general, stable and repeating interrelations in the same conditions.

Patterns of the pedagogical process - stable recurring relationships between the constituent parts, components of the pedagogical process.

Integration - (from the Latin. Integrum - the whole; Latin. Integratio - restoration, replenishment) - consolidation, unification

A collective is an association of people whose life and activity is motivated by the goals and objectives of a society in which self-government bodies function well, and interpersonal relations are characterized by a high level of organization, responsible dependence, a desire for social success, a wealth of spiritual aspirations and interests.

Colloquium is a form of testing and evaluating students' knowledge in the education system, mainly in universities.

Course work - work performed by students at the end of a course of study - “evidence” of the success of work in a given course or in a particular discipline.

Lecture - (Latin lectio - reading) - oral systematic and consistent presentation of the material on any issue, topic of the issue, etc.

Personality - the human individual as a product of social development, the subject of labor, communication and cognition, determined by the specific historical conditions of society.

Management - (from the English. Management - management, management, management

Methodology of pedagogy - the doctrine of the principles, methods, forms and processes of knowledge and transformation of pedagogical reality.

Methods - ways, ways to achieve the goal

Modernization - improvement, renovation of the object, bringing it in line with new requirements and standards, technical conditions, quality indicators

Modular learning is based on the following basic idea: the student must learn on his own, and the teacher must control his student: motivate, organize, coordinate, advise, control.

The modular technology of training is a standardized, detailed system of design principles for teaching and program documentation for the implementation of flexible modular training programs and the organization of the learning process with their use and is aimed at learning based on the principle of professional competence.

Education is the result of a person's mastering the social experience of generations in the form of a system of knowledge, skills and abilities, relationships.

Training is a purposeful process of direct transmission and assimilation of the experience of generations in the interaction of a teacher and a student.

The paradigm (from the Greek. Παράδειγμα, "example, model, model") is a set of fundamental scientific principles, concepts and terms, accepted and shared by the scientific community and uniting the majority of its members. Provides continuity of development of science and scientific creativity.

Pedagogy - the science of human education

Higher education pedagogy is the science of the laws governing the process of upbringing and professional training of a specialist in a university setting, which develops the theory, methodology, technology of organization and

control this process.

Pedagogical mastery is a complex of personality traits that ensures a high level of self-organization of the teacher's professional activities.

Pedagogical process is a joint activity of students, taking place with the participation and guidance of teachers, aimed at learning social experience and the formation of the personality of each student, ready for development and self-realization in work and social life.

Pedagogical technology - strictly scientific design and accurate reproduction guaranteeing the success of educational activities.

Imitation is the conscious or unconscious copying by an individual of the features of performing operations of another individual, carried out when performing operations together or under observation.

Principles of education - the fundamental ideas or value bases of human education. They reflect the ideology of society, the level of its economic development and, therefore, its requirements for the reproduction of a particular personality type.

Principles of learning are the basic requirements for the learning process, following which allows you to optimize it.

Problem-based learning is a way of active interaction of a subject with problem-represented learning content, in the course of which he joins objective contradictions of scientific knowledge and ways to solve them. Learning to think, creatively assimilate knowledge.

Design is the process of creating a project, i.e. a prototype, a prototype of the intended or possible object, state; a set of documentation intended for creating a specific object, its operation, repair and liquidation, as well as for checking or reproducing the intermediate and final decisions on the basis of which this object was developed. The concept of "design" does not include the stage of the project.

Process - Moving Forward, Changing

Developmental learning is a learning theory developed by Zankov, D. B. Elkonin, and V. V. Davydov. and implying the introduction of higher forms of thinking into learning, including theoretical ones; creating conditions for learning at a high level of difficulty, based on the zone of the nearest development of the personality, the realization of the creative potential of students

Independent assimilation is the purposeful assimilation of elements of objectivized experience chosen by the subject himself.

Seminar (from the Latin. Seminarium - hotbed, greenhouse) - a form of training and practical exercises aimed at deepening the theoretical knowledge of the discipline in which students (students, trainees) discuss pre-prepared questions, reports, and abstracts

The quality management system is a set of interrelated and interacting procedures for the management and management of the organization in relation to quality.

The educationsystem is a set of educational programs and standards, a network of educational institutions and government bodies, as well as a set of principles that determine the functioning of the system.

Socialization - the assimilation of a certain system of knowledge, values, norms of behavior, which allows the individual to function as a full-fledged member of society.

Creativity is a process of activity that creates objectively new material and spiritual values. The main criterion that distinguishes creativity from manufacturing (production) is the uniqueness of its result. Guided learning is a purposeful learning that is carried out under the guidance of a teacher.

Form of organization of training - the external design of the activities of participants in the educational process, the expression of a predetermined order and mode

The goal is a mental representation of the final result.

The purpose of education is a meaningful presentation of the final result of pedagogical activity. The general goal of education is the formation of a fully and harmoniously developed personality.

Heuristic learning - learning, which aims to design the student's own meaning, goals and content of education, as well as the process of its organization, diagnosis and awareness.

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