# G.S. Kostiuk Institute of Psychology of the National Academy of Educational Sciences of Ukraine

### **PSYCHOLOGY AND PEDAGOGICS**

#### VOL. 2

Recommended by the Ministry of Education and Science of Ukraine as a text-book for the students of the higher educational establishments

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The textbook "Psychology and Pedagogy" presents the principles of the normative course of psychology and pedagogy. It analyzes the correspondence to mental processes, mental activity, emotional-volitional sphere, and individual personality traits. Aspects of personality psychology, group psychology, and communication psychology are examined. Methodology is explored extensively, covering the application of worldview principles from theory to practice and creativity.

The modern development of technologies creates new challenges for creative thinking and youth personality formation. As G.S. Kostiuk once predicted, practical activity serves as the foundation capable of rethinking established approaches to education and creativity. However, the rapid implementation of technologies leaves many open questions requiring methodological understanding. Today, the key task is to find methods that can stimulate the creative development of individuals in a technological environment.

Research conducted within the framework of cultural-historical theory confirms the importance of a genetic approach that takes into account self-development and the dynamics of creativity. The experimental-genetic method allows isolating genetic-primal units within genetic programs, which constitute entire classes of educational tasks. Creativity development cannot be confined to traditional stimulus-response models or simplified algorithm use.

To encompass the full spectrum of culture, principles of a genetic-modeling method were developed, based on:

- 1. Unit Analysis Principle isolating the initial contradictory relationship generating a class of phenomena as a whole;
  - 2. Historicism Principle unity of genetic and experimental lines in research;
  - 3. Systematic Principle a holistic view of mental formations;
- 4. Projection Principle active modeling and reproduction of mental forms under specific conditions.

Unit analysis highlights the genetic-primal unit of personality – the need – as the informational and energetic property of humans expressed in life's expansion through ontogenesis and phylogenesis. The experimental-genetic method combines "unit analysis" with the genetic trajectory of scientific research, giving this analysis the status of scientific substantiation for the development of mental processes. This research approach led to all mental formations being considered as processes rather than static entities.

A series of specialized tasks at the end of each section ensures active and conscious assimilation of the educational material. Thus, the cornerstone of modern methodology for fostering creativity in the growing generation lies in the integration of the genetic-creative method, ensuring freedom of choice, stimulating independent thinking, and fostering harmonious coexistence between technology and human imagination.

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### ПСИХОЛОГІЯ І ПЕДАГОГІКА

### **Tom 2**

За загальною редакцією академіка С. Д. Максименка

Підручник для студентів вищих навчальних закладів

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У підручнику Психологія і педагогіка викладено принципи нормативного курсу Психології і педагогіки. Проаналізовано відповідності психічним процесам, психічній діяльності, емоційно-вольовій сфері, індивідуальним особливостям особистості. Розглядаються аспекти психології особистості, психології групи та психології спілкування. Широко розглядається методологія- це застосування принципів світогляду у пізнанні від теорії до практики і творчості. Сучасний розвиток технологій створює нові виклики для креативного мислення та формування особистості молоді. Як колись

передбачав Г.С. Костюк, саме практична діяльність виступає тим фундаментом, що здатен переосмислити усталені підходи до навчання і творчості. Проте швидке впровадження технологій залишає чимало відкритих питань, які потребують методологічного осмислення. Сьогодні ключовим завданням стає пошук таких методів, які здатні стимулювати креативний розвиток індивіда в умовах технологічного середовища.

Дослідження, культурно-історичної проведені межах теорії, підтверджують важливість генетичного підходу, що враховує саморозвиток і динаміку творчості. Через експериментально-генетичний метод який дає можливість вичленити генетично-вихідні одиниці в предметах генетичних програмах яка конституює весь клас навчальних задач. Розвиток креативності не може бути замкнутим у межах традиційних моделей стимул-реакції або спрощеного використання алгоритмів. Для того, щоб охопити всю палітру культури, ми розробили принципи побудови генетико-моделюючого методу принципах: базується на 1) принцип аналізу за одиницями (вичленування вихідного суперечливого відношення, що породжує клас явищ 2) принцип історизму (принцип єдності експериментальної лінії у дослідженні); 3) принцип системності (принцип цілісного розгляду психічних утворень); 4) принцип проектування (принцип активного моделювання, відтворення форм психіки в особливих умовах). Принцип аналізу за одиницями і вичленити генетично-вихідну одиницю особистості – нужди – це інформаційно-енергетична властивість людини, яка полягає в експансії життя в онто і філогенезі. В експериментальногенетичному методі «аналіз за одиницями» поєднався з генетичним шляхом наукового дослідження, і в результаті цього даний аналіз набув статусу наукового обтрунтування розвитку психічних процесів. Такий підхід до дослідження привів до того, що всі психічні утворення як щось стале почали розглядатися як процеси. Серія спеціальних завдань наприкінці кожної частини забезпечує активне та свідоме засвоєння навчальної інформації. Таким чином, ключова ланка сучасної методології розвитку творчості зростаючого покоління полягає в інтеграції генетико-креативного методу, який забезпечує свободу вибору, стимулює самостійність мислення і сприяє гармонійному співіснуванню технологій та людської уяви.

Всі права захищені. Жодна частина цієї публікації не може бути відтворена, збережена в інформаційно-пошуковій системі або передана в будь-якій формі або будь-якими засобами, електронними, механічними, фотокопіюванням, записом або іншим способом, без попереднього письмового дозволу видавця.

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## CHAPTER II INTRODUCTION to PEDAGOGICS

### Part 1 THE SUBJECT AND TASKS OF PEDAGOGICS

### 1.1. Pedagogics as a science

"Pedagogy" is a word of Greek origin. Its name is consistent of Greek words: "pedas" and "ago" that stand for noun "child" and verb "to lead" respectively. Thus literally this word means "leading of children".

Gradually the word "pedagogics" began to be used in the more general sense for an art designation «to conduct the child on life», i.e. to bring up it and to teach. Such understanding of pedagogics has remained to the middle of XX-th century. And only in the last decades developed understanding of that a pedagogical leading is needed not only to children, but also to adults.

Pedagogy is a combination of knowledge and skills aimed at education and upbringing of a person. Pedagogy is a science of essence, rules, principals, methods and forms of education and upbringing of a person on all age-specific stages of his personal and professional development.

Nowadays pedagogy is a science of personal humanistic upbringing and self-upbringing, education and self-education, of a comprehensive and harmonic development of a socially active individual.

Taking into account the essence of pedagogy, it is considered as:

- science that has its rules;
- practice that indicates practical use of theoretical statements;
- art that requires creative inspiration of a pedagogue.

The most short, general and at the same time rather exact definition of the modern pedagogics is a science about education of the person. The concept "education" here is used in the widest sense, including formation, training, and development.

It is known that any branch of knowledge is formed as a science only if the specific subject of investigation is determined.

The subject in Pedagogy as a science is a pedagogic process, the process of teaching and upbringing of a person at educational establishments. In the wide sense – the whole process of humanistic upbringing and self-upbringing, life-long studying and self-studying, the development of socially active personality, investigation of laws and regularities of pedagogic phenomena and processes. Pedagogics' subject is the educational activity which is carried out in teaching and educational establishments.

**The object** of studying and investigation in pedagogy are:

- real process of transmission of socio-historical experience and culture of mankind to the new generation;
- upbringing, teaching and development of socially active personality at different stages of his life; preparation for the professional activity and for the realities of life;
- organization and management of this process at social and common educational establishments, etc.

**Function of Pedagogy** – cognition of laws of upbringing, education and teaching of people. *Pedagogics' function* is to investigate laws of education, formation and training of people.

**Aim** of pedagogical science – forming of thorough and harmoniously developed personality, that can be constantly socially active.

**Main tasks** of pedagogy are the improvement of educational content; working out of fundamentally new facilities of teaching; working out of new forms and methods of teaching and improvement of old ones; improvement of the content and methodology of upbringing, etc.

### 1.2. The basic pedagogical categories.

During the period of formation of pedagogy as a science were determined three fundamental categories (main notions) – upbringing, teaching and education. The basic pedagogical concepts expressing scientific generalisations are called **pedagogical** 

**categories.** Education, training, formation, and also development and formation are the basic pedagogical categories.

*Upbringing* – is a purposeful and organized process of personality forming. In the wide social sense – it's a social phenomenon, the transmission of historical cumulative experience from one generation to another.

Teaching – is understood as a purposeful and organized process of interaction between the teacher and the student, directed to the receiving of knowledge and skills, forming of Weltanschauung, development of intellectual abilities and potential of students.

*Education* – is a process and the result of teaching. It is the volume of systematic knowledge, skills and ways of thinking which were mastered by the student.

**Education** is the purposeful and organised process of development of a person.

In wide social sense education is a transfer of the experience from the senior generations to younger. Experience is understood as knowledge known to people, abilities, ways of thinking, moral, aesthetic, legal laws. In narrow social sense education is understood as the directed influence on the person from public institutes with the purpose of formation of certain knowledge, sights and belief, moral values, preparation for life.

In wide pedagogical sense education is specially organised, purposeful and operated influence of group-members, teachers on the trainee with the purpose of formation of the set of qualities, Usually it is carried out in teaching and educational establishments and covering all teaching and educational process. In narrow pedagogical sense education is a process and result of the educational work directed to the solution of certain educational problems.

**Training** is the following basic category of pedagogics. It is specially organized, purposeful, operated process of interaction between teachers and trainees, directed on mastering of knowledge, abilities, skills, outlook formation, and development of intellectual abilities and potential talents of trainees, fastening of skills of self-education.

The training basis is knowledge, abilities, skills.

*Knowledge* is reflexion by the person of the objective reality in the form of the facts, representations, concepts and scientific laws.

*Abilities* – readiness meaningly and independently to carry out practical and theoretical actions on the basis of the acquired knowledge, life experience.

*Skills* – the components of practical activities shown at performance of necessary actions, brought to perfection by repeated exercise.

Giving trainees certain knowledge, teachers always give them all necessary orientations, forming the major world outlook, social, moral and many other perceptions. Therefore teaching has a forming character. Precisely any education always contains bringing up elements. Teaching – it is upbringing, upbringing – is always teaching.

Education is the result of training. It is a certain amount of the systematised knowledge, abilities, skills, and ways of thinking which the trainee has mastered.

The person is considered to be educated if he/she has mastered certain volume of the systematised knowledge and has got used to think logically, allocating causes and effects.

Depending on volume of the received knowledge and reached level of independence of thinking are disitnguished primary, secondary and higher education. By character and an orientation education is subdivided into the general, professional and polytechnical.

**Formation** is the process of a person development as a social being under the influence of all factors – ecological, social, economic, psychological etc.

**Development** is a process and result quantitative and qualitative changes in the human body, It is connected with constant changes, transitions from one condition in another.

### 1.3. System of a pedagogical science

The system of a pedagogical science can be analyzed by various signs depending on an orientation of studying and desire to receive answers to this or those questions.

In the process of differentiation of scientific discipline the following fields of pedagogy were distinguished: general pedagogy,

age-specific pedagogy, professional pedagogy, social pedagogy, comparative pedagogy, also history of pedagogy and pedagogy of higher school, etc.

All **branches of pedagogy** form the developing system of pedagogical sciences.

Development of education as a public phenomenon, *history of pedagogical* doctrines is investigated by pedagogics history.

The general pedagogics is the base scientific discipline studying the general laws of education of the person, developing the general fundamentals of teaching and educational process in educational establishments.

The age pedagogics is a discipline studying laws of teaching of the growing persons which reflects specificity of teaching and educational activities defined for the different age groups.

Higher school pedagogics is a discipline which studies laws of teaching and educational process and conditions of the higher educational institution, specific problems of getting higher education.

In a subsystem of social pedagogics such branches as *family pedagogics*, re-education of offenders and other people with various infringements and deviations in development are studied by the special pedagogics. Training questions of education of deaf-and-dumb and deaf persons are stdied by *surdopedagogics*, blind – *tiflopedagogics*, mentally ill – *oligofrenpedagogics*. The modern stage of development of pedagogic as a science is based on self-development of the scientific branch, which combines the processes of integration and differentiation and wide co-operation with other sciences – philosophy, psychology, sociology, physiology, economy. The connection of pedagogy with history, literature, geography, medicine, ecology is obvious.

*Psychology* studies the regularities of the development of psyche, and pedagogic studies the effectiveness of those upbringing influences, the lead to changes in the internal world and behaviour of a person.

Philosophy sciences (sociology, ethics, esthetics and other) help pedagogy to distinguish the aim of upbringing, to take under consideration the influence of common regularities on human existence correctly, provide with updated information about the latest changes in science and society, regulating the direction of upbringing

Anatomy and physiology of a human compose the basis for understanding the biological essence of a human – the development a higher nervous activity, the first and the second signal systems, the development of organ of senses, musculoskeletal system, cardio-vascular system, and respiratory system. The anatomy and physiology are the base for understanding of biological essence of the person – development the higher the nervous activity, the first and second signal systems, development and functioning of sense organs, cardiovascular and respiratory systems.

In the history of medicine there was formed a field that unites medicine and pedagogy – medical pedagogy. In most cases the doctor has to unite his activity with upbringing and education, so the physician during the process of communication with patients, their investigation, treatment, has to solve different medical-pedagogical problems. Medical-pedagogical activity has great importance for the working with contingent of healthy people. In this case it plays the prophylactic role and medical personnel has to fulfill a number of upbringing and pedagogical actions.

Pedagogic and medical sciences:

- medical sciences take under consideration the psychological and pedagogical data for the working out the problems of health and illnesses of grown-ups and children;
- on the basis of medicine, pedagogic and psychology the following sciences appeared: school hygiene, medical psychology, neuropsychology and other;
- taking under consideration the data of pedagogy and psychology the problems of communication between the doctor and the patient should be solved the popularity of medical knowledge, training of medical personnel, etc.

Especial value for pedagogics has its close *relations with the psychology* that studies laws of mentality development of the person. Psychology mainly investigates the development of mentality, and pedagogics-efficiency of those educational influences which lead to the planned changes in the world of person's behaviour. Each section of pedagogics finds a support in corresponding section of psychology: didactics, for example, leans

against the theory of informative processes and intellectual development; the education theory is based on psychology of the person.

Integration of sciences has led to appearance of pedagogical psychology and psychopedagogics.

The interconnections between pedagogics, history literature, geography, anthropology, medicine, ecology, economy, and archeology are obvious.

### 1.4. Methods of pedagogical research

Ways of investigation of objective reality are called **research methods**. By means of methods each science is getting information on a studied subject, analyzes the obtained data.

**Methods** of scientific investigation, as it is known, are the ways of receiving of scientific information with the aim of establishment of regularities, connections, relationships, dependences and development of scientific theories.

**Method of scientific pedagogical investigation** – is the way of investigation and mastering of complicated psychological pedagogical processes of forming the personality, establishment of objective regularities in upbringing and teaching.

Traditionally pedagogical methods of investigation are observation and self-observation, experiment, conversation, questioning, testing.

**Observation** is the most accessible and widespread method of investigation in pedagogical practice. Scientific observation is a specially organised perception of investigated object, process or the phenomenon in natural conditions. For increase of efficiency of observation it should be long, regular, versatile, objective and mass. Underlining importance of the method of observation, its availability and prevalence, it is necessary at the same time to specify its disadvantages. Observation does not open inside of the pedagogical phenomena; by use of this method it is impossible to provide full objectivity of the information.

**Conversations, discussions** in which relations of people, their feelings and intentions are coming to light. Pedagogical conversation as a research method differs by purposeful attempts

of the researcher to get into personal world of the interlocutor, to establish the reasons of his actions.

*Method of conversation* is the source and way of perception of pedagogic phenomenon, by the direct communication with people that are studied by investigator in the natural conditions. The results of conversation should be compared with the data of observation.

**Pedagogic experiment** – is research establishment or checking of some method or ways of teaching and upbringing in specially created conditions. *Pedagogic observation* – is specially organized perception of pedagogic process in natural conditions. While organizing the observation, the plan of observation, terms of it and fixing the results are the most important.

Experiment is scientifically conducted activity of transformation of pedagogical process in precisely controlled conditions. Experiment – it is a strictly controllable pedagogical observation, with the only difference that the experimenter observes the process which he expediently and systematically carries out. Experimental researches can be long and short-term depending on a theme and the purpose. Reliability of experimental conclusions directly depends on observation of experimental conditions. Depending on the place of conduction there are distinguished natural and laboratory pedagogical experiments.

**The natural experiment** represents scientifically organised activity to check out the hypothesis without interruption of teaching and educational process.

**Laboratory experiment** is conducted at specially equipped premise, in specially created research conditions. Natural experiment is more valuable then laboratory one because it is closer to reality.

**Testing** is the purposeful investigation, identical to all examinees, spent in strictly controllable conditions, allowing measuring objectively the studied characteristics of pedagogical process. Testing differs from other ways of investigation by accuracy, simplicity, availability, possibility of automation. If to speak about purely pedagogical aspects of testing, we will specify first of all the possibility of using tests in measuring the progress of studying. The tests are most widely used to check elementary skills,

such, as reading, writing, and also to check various levels of studying to distinguish the level of mastering of knowledge and skills.

Processes of education, formation, and training have group character. Most often applied methods of their studying are mass polls. These polls can be oral (interview) or written (questioning).

*Method of interview* – is really helpful in those cases, when the investigator is confident in the objective and honest answers. Interview doesn't suppose the asking of specifying questions, which can take place during the ordinary conversation.

*Method of questionnaires* – is used to receive the information about the typicalness of some phenomena of teaching and upbringing process.

*Method of psychological-pedagogical testing* – is the detection of certain level of knowledge and skills or general intellectual development of a student.

For the investigation the optimal complex of methods is used. The investigator should follow the requirements for the results of scientific-pedagogic investigations: social actuality, scientific novelty, theoretical and practical value, scientific objectiveness and significance, accessibility of conclusions and recommendations for their usage in other scientific investigations or in practical activity.

Main *criteria* of scientific-pedagogic effectiveness are the receiving of new result, adding new scientific results, theoretical knowledge that help the process of upbringing, teaching, education of students.

### **Key Notions**

Pedagogics, education, training, development, categories of pedagogics, system of pedagogical sciences, Methods of pedagogical research, Observation, Experiment, Conversations, discussions, Testing

### Questions and tasks for individual work:

- 1. What is the pedagogics? From the proposed answers choose correct one, and proved its reliability.
  - a) The pedagogics studies laws of development of the child and defines ways of its education.

- b) The pedagogics is a science about education, formation and about teaching of people.
- c) Pedagogics is the art of tutors' influence on the trainee with the purpose of outlook formation.
- d) Pedagogics is a science about education of the person.
  - 2. What problems are put in front of pedagogical science?
- a) Education, training of growing generation,
- b) Investigation of laws of education.
- c) Investigation of upbringing as a factor of spiritual development of a personality.
- d) Studying of problems of formation and training of people in modern world.
- e) Human nature research.
  - 1. What is subject of pedagogics? What are its functions?
  - 2. What are the main pedagogical categories?
  - 3. What is the formation? What is its structure?
  - 4. What is the development of the person?
  - 5. Characterise system of pedagogical sciences.
  - 6.8. What do you know about new branches of pedagogics?
  - 7.9. What is the method of scientific research?
  - 8.10. What is the main aim of pedagogical observation?
  - 9.11. What is the pedagogical experiment?
  - 10. 12. What is the pedagogical testing?
  - 11. 13. What kinds of pedagogical tests do you know?

### Used and suggested literature

- 1. Костюк Г. С. Учебно-воспитательный процесс и психическое развитие личности. К., 1989.
- 2. Вишневський О. Теоретичні основи сучасної української педагогіки. Дрогобич, 2006.
- 3. Галузинский В. М. Психология и педагогика: методика комплексного изучения. К., 1989.
- 4. Звєрєва І.Д., Коваль Л.Г. Практикум з педагогіки. К., 1996.
  - 5. Касьяненко М. Д. Педагогіка співробітництва. К., 1993.
- 6. Комплексне вивчення психології та педагогіки. Вступ до психології та педагогіки. Навчальний посібник. За ред. Скрипниченко О. В., Бурлака Я. І. та ін. К., 1992.

- 7. Коробов Є. Т., Распопов І. В. Методи навчання: Навчальний посібник. Дніпропетровськ, 1996.
- 8. Лозова В. І., Москаленко П. С, Троцко Г. В. Педагогіка. Навчально-методичний посібник. К., 1993.
- 9. Нечепоренко Л. С. Педагогика личности. Харьков, 1992.
- 10. Система народного образования в зарубежных странах на современном этапе. Сборник научных трудов под ред. Мельниченко Б. Ф. К., 1990

### Part 2. HISTORY OF PEDAGOGICS DEVELOPMENT

# 2.1. Appearance of the science of upringig. Classical antiquity.

The requirement of transfer of experience to growing generations has appeared together with the human being. For the first time the science of upbringing has appeared in the countries of the Ancient East (Egypt, China, India) where serious attempts of generalisation of experience of education have been undertaken. All knowledge of the nature and person, a society has accumulated in philosophy, where the first pedagogical generalisations were done as well.

There were three widespread types of schools: priestly (attached to temples and ministers of religion were being prepared there), court (copyist-officials were being prepared there for administrative-economic needs) and military (commanders were being prepared there).

Pedagogical idea reached its apogee in the Ancient Greece and Rome. It is not accidentally origins of the theoretical pedagogics are found in the works of great Greek philosophers like Socrat (469-399 B.C.), Plato (427-347 B.C.) and Aristotle (384-322 B.C.) who formulated the basics of age-specific periodization and found stages of education and upbringing of a man, development of his personality.

There were two systems of education in the Ancient Greece: Spartan and Athenian. In the Spartan schools slave-owners' children were taught to read, write, counting and a lot of time spent on military studies, got musical education. Particular attention in the Spartan schools was paid to ability to answer questions gently and laconically. Inhabitants of Laconia (region of Sparta) were especially famous of this kind of art, and this is where the phrase "laconic style" originates. Athenian system of education was more comprehensive and developed. Female education was limited by home education, and boys studied starting from 7 years at paid and private schools. They were taught the basics of reading and writing, studies music and singing, later – physical trainings. Young men from noble families of about 16-

18 years continued their education in gymnasiums where they studies philosophy, literature, policy.

Original result of the development of Greek-Roman pedagogical idea was the works of the ancient Roman philosopher and pedagogue Mark Kventilion (35-96). His labor "Speaker's education" had been staying for a long time the main book where pedagogical ideas and admonitions were realized and it were studied at all oratorical schools.

From the very beginning, educators have tried to find interesting ways to bring out the possibilities of intelligence and a love of learning from their pupils. The advent of writing circa 3000 B.C.E. resulted in a style of education that was more self-reflective, with specialized occupations requiring particular skills and knowledge: scribes, astronomers, and so forth. In ancient Greece, philosophy helped questions of educational methods enter national discourse. In both Republic and Dialogues, Plato advocated a system of instruction using the Socratic method of teaching through questions. Through the clever use of questions and answers, Plato's teacher, Socrates, was able to show even an uneducated slave boy how the logic leading to the Pythagorean Theorem was within him.

### 2.2. The Middle Ages Pedagogics

Period from the fall of the Roman Empire (V century) till the first revolutions (XVI century) is the epoch of Middle Ages and in the sphere of education and upbringing – the church denomination epoch. In the eastern countries the school reflected prevalent religious ideology and world view (Hinduism, Buddhism, Islam). In the western Europe monopolism is seen from a mere listing of the existing at that time types of schools: parochial, cloistral and cathedral. At all these schools children of 7-15 years were taught the basics of reading and writing, religious dogmas and singing of psalms and prayers.

Development of craft and trade in XIII-XIV centuries resulted in the appearance of religious schools where children of artisans received elementary education. Interests of feudal lords in the Middle Ages were guaranteed by the so-called knightly system of education. The basics of this system made up "seven knightly virtues": horse riding, swimming, managing spear, fencing, hunting, chess, prosody and playing musical instruments. Since the time they launched their first school in 1548, the Jesuits believed that a high quality education is the best path to meaningful lives of leadership and service. The Jesuits adapted available educational models while developing their own pedagogical methods to become the "schoolmasters of Europe." Ignatian pedagogy, which embodies five key teaching elements-context, experience, reflection, action, and evaluation-is the process by which teachers accompany learners in the lifelong pursuit of competence, conscience, and compassionate commitment. This method aims to support teachers to be the best teachers, motivates students by personalizing their learning experience, and stresses the social dimension of both learning and teaching. Underlying the educational process in its entirety is the religious dimension, for the ultimate purpose of such education is considered to be the discovery of God.

#### 2.3. Renaissance

The Renaissance (XV – XVI), rebirth of the interest towards ancient cultural heritage, is characterized by humanization of education, refusal from severe discipline established by physical strength, proper of the medieval school. The pedagogy of the epoch highlighted stimulation of keen interest of students towards knowledge and strived for creation of such an atmosphere which changed it into joyful and interesting process for children. To accomplish this task the use of visual methods, games, lessons amid animate nature, excursions were in common practice. In the Renaissance a new type of general secondary education appears. It was named "classic" and was characterized by study of Latin and Greek, ancient literature and art. Gymnasium was an educational institution.

The ideals of upbringing and education of the Renaissance are present in the novel by François Rabbles (1449-1553) "Gargantuan and Pantagruel", in the treatise poem by Erasmus de Rotterdam (1466-1536) "About elementary education of children", in a number of works by Michael Monten (1533-1592) and other outstanding thinkers and pedagogues, in which pedagogical views of humanistic education of philosophers and scientists were embodied.

The rise of pedagogical ideas and views was accompanied by origin of new forms of pedagogical thought, renovation of views on nature and practice of education and upbringing of person.

Only in the XVII century the pedagogical thought was beginning to depend on the data of progressive pedagogical experience. Thus Wolfgang Ratke (1571-1635), German pedagogue, worked out a substantial notion of education and corresponding methodology, having set criteria for pedagogical investigations.

It is in this period when pedagogy began to separate from philosophy and to form a scientific system.

During the mid-1600s in what is now the Czech Republic, the educator Comenius wrote the first children's textbook containing vivid illustrations, entitled The Visible World in Pictures. Known as the "Father of Modern Education," Comenius believed in a holistic approach to education. He taught that education began in the earliest days of childhood and continued throughout life, and that learning, spiritual, and emotional growth were all woven together. Unlike most of society at the time, he also advocated the formal education of women. Well respected throughout northern Europe, he was asked to restructure the Swedish school system.

Pedagogy became a science thanks to works and authority of Jan Amos Komenskii (1592-1670), outstanding Czech pedagogue, who made an attempt to put to system and to prove objective rules of upbringing and education. He stated his main ideas in the work titled "The great didactics" (1654) which won general recognition. The whole work by Komenskii is spotlit by belief in heyday of human personality: "Person is the highest, most perfect and superior creation". The pedagogue's fundamental idea is generalization of all knowledge, accumulated by culture and civilization.

Komenskii J.A. was the first to prove the principals of education and upbringing, create a harmonious system of general education (the idea "to teach everybody and everything"), call upon to teach in mother tongue and not in Latin (as it used to be in medieval school), worked out a class and lesson based method of teaching which is still used nowadays in many countries. That is why he is called the father of pedagogical science.

### 2.4. Pedagogics in XVII-XIX-th centuries

During the period XVII – XVIII a stage of generation of new pedagogical ideas from research, innovative schools in that time was outlined. In the Age of Enlightenment the historical fact of development of pedagogical thought is concerned with the names of J.

Locke (1632-1704), J.-J. Rousseau (1712-1778), I.G. Pestalozzi (1746-1827), I.F Herbert (1776-1841), F.B. Frobel (1782-1852), V.A. Diesterweg (1790-1866) and other.

J, Locke, English philosopher and pedagogue, concentrated his main efforts on the theory of upbringing. In "Thoughts about upbringing" he set forth his views on the process of upbringing gentleman – a person who combines both erudition and business characteristics.

French enlightener Jean-Jack Rousseau in his treatise "Emile, or About Upbringing" rose up the idea of correlation between development and upbringing, giving preference to development.

Swiss pedagogue Johann Henry Pestalozzi proved the idea of combining learning with labour and developed recommendations for the system of family upbringing. He proposed to orient on the knowledge of behaviour while working out the basis for education.

German pedagogue Fredrick Wilhelm Frobel described the laws of upbringing in his composition "Upbringing of a Person". He saw the main assignment of upbringing to find and develop the creative potential of a person

German pedagogue-enlightener Wilhelm Adolph Diesterweg has developed many points of the theory of pedagogical labour, the ties between the upbringing and intellectual education, the overcoming of formalism in education.

German philosopher and pedagogue Johann Fredrick Herbert described the four- leveled model of the lesson, the system of developmental exercises, and proposed the idea of upbringing lesson. In his famous book "General Pedagogic" he stated the independence of pedagogy as a science, concentrating the attention on the methodological tools. He proposed the practical ways of moral education. In his works he greatly determined the future development of pedagogic.

During the 1700s, the philosopher Jean-Jacques Rousseau presented his methodology on the education of children in his novel Emile, the story of the education of a young boy. Within his novel, Rousseau described the importance of having a focus on both environment and personal experience. Different learning stages are described: for example, during the "the age of nature" (from ages 2 to

12), Rousseau argued that a boy should receive no moral instruction or verbal learning, as the mind should be "left undisturbed until its faculties have developed." Instead, education during this stage should be focused on physical and sensory development. Books are eschewed during Emile's education, with the exception of Daniel Defoe's Robinson Crusoe, a novel that reinforced Rousseau's ideal of the solitary, self-sufficient man.

In the late eighteenth and early nineteenth centuries, Johann Heinrich Pestalozzi, a Swiss pedagogue and educational reformer, greatly influenced the development of the educational system in Europe and America. His educational method emphasized the importance of providing a loving, family-type environment in which the child can grow and flourish naturally, balancing their intellectual, physical, and technical abilities, with emotional, moral, ethical, and religious growth. Pestalozzi asserted that education should be centered on the child, not the curriculum. Since knowledge lies within human beings, the purpose of teaching is to find the way to unfold that hidden knowledge. Pestalozzi proposed direct experience as the best method to accomplish this, advocating spontaneity and self-activity, in contrast to the rigid, teacher-centered, and curriculum-based methods generally used in schools. He advocated an inductive method, in which the child first learns to observe, to correct its own mistakes, and to analyze and describe the object of inquiry. In order to allow children to obtain more experience from nature, Pestalozzi expanded the elementary school curriculum to include geography, natural science, fine art, and music.

Friedrich Wilhelm August Fröbel, a German educator, also made substantial advances in children's education, particularly the invention of the kindergarten system for young children. His own difficulties as a child, his love of nature, and his faith in God, combined with his experiences with Pestalozzi's educational system, were the foundation for his insights into the education of very young children. He recognized the importance of play in order to allow their creativity to unfold and blossom. His school included a large room for play, as well as a garden outside for the children to grow flowers and other plants. Thus, he developed the kindergarten–a "garden for children" where they could grow naturally, with support from their parents and teachers.

Next stage of pedagogic development as a science is connected with its enrichment with philosophical knowledge under the influence of pedagogic treatises, novels and essays. As a result, the philosophers and scientists discussed the problems of interconnection of theory and practice of education and upbringing.

In XVIII-XIXth centuries the intensive development of pedagogical thought resulted in foundation of special educational establishments for the training of pedagogues. This way the pedagogic was formed as a separate educational subject. The first professional teacher training establishments appeared in Germany.

By the middle of XIXth century the influence of philosophy on the development of pedagogic had changed. The inserting of pedagogical problems into universal Weltanschauung schemes has been changed by philosophical conceptions of upbringing and education. For example F. Nitshe (1844-1900) has singled out the problem of elite upbringing – of genius, governors, lawmakers. Their genius should be manifested not only in arts, science, philosophy, but in assertion of life values.

In XIXth century along with classical secondary school, the wide development had got the professional and substantial schools, where the natural and mathematical subjects dominated.

A contemporary of Fröbel, Johann Friedrich Herbart, had a very different approach to education. Based on his views of philosophy, which were based on a philosophical realism, and psychology, that all mental phenomena result from the interaction of elementary ideas, Herbart believed that a science of education was possible. Herbart's work and his belief that a science of education was possible led to the establishment and acceptance of pedagogy as an academic discipline studied on the university level.

In his work Universal Pedagogy (1906), Herbart advocated five formal steps in teaching, which were translated into a practical teaching methodology:

preparation - relating new material to be learned to relevant existing ideas (memories) to stimulate the student's interest (prepare students to be ready for the new lesson)

presentation - presenting new material in the form of actual
experience of concrete objects (present the new lesson)

association – comparison of the new idea with existing ideas to find similarities and differences and thus implant the new idea in the mind of the student (associate the new lesson with ideas studied earlier)

generalization – procedures designed to take learning beyond perception and experience of the concrete into the realm of abstract concepts (use examples to illustrate the lesson's major points)

*application* – using the newly acquired knowledge so that it becomes an integral part of the life of the student (test students to ensure they learned the new lesson).

Herbart's ideas were widely adopted in Germany and also the United States, translated into the simple five-step teaching method that became the basic pedagogical practice in the nineteenth century. By the twentieth century, however, the steps had become mechanical and Herbart's underlying ideas on ethics, psychology, and aesthetics had been forgotten. In their place, new pedagogical theories, such as those of John Dewey in the United States, which freed the child from what had become a controlled learning environment, grew in popularity.

Although his teaching methodology was overtaken by new ideas, Herbart's institution of pedagogy as an academic field has remained. The idea of a science of education, including psychology as a source of information about the nature of the learner as well as the learning process, has continued to advance teaching methods.

# 2.5. Pedagogics in the XX-th centuries. Modern foreing pedagogical concepts.

From the beginning of XXth century the number of pedagogical centers had grown distinctly, the sharing of experience between the scientists worldwide had become more popular. Russian Pedagogic of the period had chosen the way of developing the ideas of upbringing of a person of a new society (after revolution period) The educational system was totally changed. The most famous scientists of that time were S.T. Shatskiy (1878-1934), A.S. Makarenko (1888-1939), V.A. Suhomlinskiy (1918-1970) and others.

In the XXth century the system of education of developed countries has got some common features together with preserving originality caused by national traditions. The most famous representatives of American pedagogic are John Duwi (1859-1952) and Edward Thorndike (1874-1949).

In the XX-th century the educational system at different countries has got some common features, preserving at the same time the originality caused by national traditions.

The importance of psychology in understanding the interest, abilities, and learning processes of students, has become an integral part of theories of education. **Theories of learning** have been developed to describe how people learn; these theories aid in the development of various pedagogical approaches. There are three main perspectives in educational psychology: Behaviorism, Cognitivism, and Constructivism.

Behaviorism, a term coined by American psychologist John B. Watson, is based around the idea of a stimulus-response pattern of conditioned behavior. One of the most famous experiments in classical conditioning was performed by Russian physiologist Ivan Pavlov. By introducing the sound of a bell before placing food in front of a dog, Pavlov was able to create a conditioned response in the dog where the dog would salivate at the ringing of the bell alone.

Some of the most important developments in behaviorism, especially as it relates to pedagogy, occurred in the mid-twentieth century with the work of B. F. Skinner. Skinner studied operant, or voluntary, behavior, and called his approach "operant conditioning." Skinner's mechanisms included: positive reinforcement, negative reinforcement, non-reinforcement, and punishment. In a classroom setting, non-reinforcement might consist of ignoring misbehavior in the hope that lack of reinforcement would discourage the behavior.

Cognitivism became the dominant force in psychology in the late twentieth century, replacing behaviorism as the most popular paradigm for understanding the learning process. Cognitive theory is not a refutation of behaviorism, but rather an expansion that uses changes in behavior as indicators for processes within a learner's mind. The concept of cognitive theory utilizes the concept of "schema," a structure of internal knowledge, as well as the concept of short and long term memory. Cognitive theory suggests that meaningful information is easier to retain, and new information is affected by context, environment, and previous schemata.

Constructivism is a set of assumptions about the nature of human learning. It values developmentally appropriate teacher-supported learning that is initiated and directed by the student.

According to the constructivist approach, learners construct and interpret their individual realities based on their perceptions of experiences. Learning is regarded as a process in which the learner actively constructs new ideas or concepts based upon current and past knowledge and beliefs. Constructivist learning, therefore, is a very personal endeavor, whereby internalized concepts, rules, and general principles may consequently be applied in a practical real-world context. The teacher acts as a facilitator, encouraging students to discover principles for themselves and to construct knowledge by working to solve realistic problems. Working with other students enables the sharing of viewpoints and an emphasis on collaborative learning. Constructivist theories are behind many modern teaching styles, such as Generative Learning, Inquiry-based instruction, Discovery Learning, and knowledge building, promoting the student's free exploration within a given framework or structure.

### **Key Notions**

Classical antiquity, The Middle Ages, Renaissance, Pedagogics in a XVIII-th century, Pedagogics on a boundary of the XIX-XX-th centuries, Modern foreign pedagogical concepts, Pedagogical ideas of the East.

### Questions and tasks for individual work:

- 1. What has defined pedagogics development as sciences? Choose the correct answeres:
  - Progress in science and technology.
  - Care of parents about the happiness of their children.
  - Objective need of preparation of the person for life and work.
  - Increase of the role of education in public life.
- 3. When did appear a science about education?
- 4. Allocate the basic periods of development of pedagogical thought.
- 5. What countries and why it is necessary to consider to be an ancestral home of education?
- 6. What are the purposes and main ideas of a Spartan educational system?

- 7. What are the purposes and main ideas of the Athenian educational system?
- 8. What are the purposes and main ideas of the Roman educational system?
  - 9. What are main characteristics of medieval education?
- 10. What are the purposes and main ideas of education in the period of Renaissance?
  - 11. What are the purposes and main ideas of "classical education"?
- 12. What purposes and structure of modern education? Name well-known teachers-educators.

#### **Used and suggested literature**

- 1. Вишневський О. Теоретичні основи сучасної української педагогіки. Дрогобич, 2006.
- 2. Галузинский В. М. Психология и педагогика: методика комплексного изучения. К., 1989.
  - 3. Звєрєва І.Д., Коваль Л.Г. Практикум з педагогіки. К., 1996.
  - 4. Касьяненко М. Д. Педагогіка співробітництва. К., 1993.
- 5. Комплексне вивчення психології та педагогіки. Вступ до психології та педагогіки. Навчальний посібник. За ред. Скрипниченко О. В., Бурлака Я. І. та ін. К., 1992.
- 6. Костюк Г. С. Учебно-воспитательный процесс и психическое развитие личности. К., 1989.
- 7. Лозова В. І., Москаленко П. С, Троцко Г. В. Педагогіка. Навчально-методичний посібник. – К., 1993.
  - 8. Нечепоренко Л. С. Педагогика личности. Харьков, 1992.
- 9. Система народного образования в зарубежных странах на современном этапе. Сборник научных трудов под ред. Мельниченко Б. Ф. К., 1990

## Part 3. The General Laws of Development

### 3.1. Development of the person. Heredity and environment

**Development** is the process of quantitative and qualitative changes in a human body. The Result of development is formation of the person as a biological species and as a social being. Biological in the person is characterised by the physical development including and morphological, biochemical, physiological changes, the social development finds expression in mental, spiritual, intellectual growth.

The human being is not born as a personality, and becomes it in the process of development. As a personality the human being is formed by a social system through the purposeful and thought over education.

Development of the person is a difficult and long process. Changes in our organism occur throughout all life. A developmental motive power is struggle of contradictions. The person should not search, or think out any contradictions, they appear as a dialectic consequence of change of the needs generated by development.

What reasons define development of the person? It is established that process and results of human development is defined by joint influence of three factors – *heredities, environment and education*.

Natural (biological) in the person is that connects him with ancestors, and through them – with live world. The Reflexion of biological is heredity.

**The heredity** is understood as transfer from parents to children of certain qualities and features. The bearers of heredity are genes (in transfer with gr. "Gene" – giving birth).

From parents to children external features are transferred: peculiarities of constitution, hair colour, eyes and skin, the combination in the body of various fibers is genetically programmed, blood types, a Rhesus factor are defined. Hereditary properties include the features of nervous system that define character and other mental processes. Hereditary nature have blood illnesses (hemophilia), diabetes, some endocrine disorders, and also some illnesses causing mental frustration (schizophrenia).

The pedagogical aspect of research of laws of human development covers studying of three problems – inheritance of intellectual, special and moral qualities.

The question on inheritance of intellectual qualities is important. Investigating of abilities as individual-psychological features of the person as conditions of successful performance of certain kinds of activity, teachers distinguish them from makings – potential possibilities for development of abilities. The analysis of the facts allows answering to the risen question – only makings are inherited, not the abilities.

Teachers of the whole world recognise that there can be adverse for development of mental abilities a heredity. Negative predispositions create, for example, languid cells of a cerebral cortex at children of the alcoholics, etc.

Understanding of process of inheritance of intellectual makings the modern pedagogics predetermines practical ways of education and training people. It is concentrated not on revealing of distinctions and the adaptation of education to them, but on creation of the equal conditions for development of different makings available at every person.

Special are called makings for a certain kind of activity (musical, art, linguistic, mathematical, etc.). Children possessing special inclinations, reach more good results.

The question about inheritance of moral qualities is important and contradictive.

Leading position of domestic pedagogics long time was the statement that all mental qualities of the person are not inherited, and are got in the course of interaction of an organism with environment. It was considered that the person is not born malicious or kind, generous or avaricious. Children do not inherit moral qualities of the parents. What the person will be, depends on environment and education.

In the western pedagogics the statement that moral qualities of the person are biologically caused dominates. People are born kind or malicious, fair or decevable (M.Montessori, E.Fromm, K.Lorentz). The basis for such conclusions serves the data received at studying of behaviour of the person and animals. Recently also the domestic scientists (P.K.Anokhin, N. M.Lmosoi, etc.) have spoken in favour of heredity of moral qualities of the person and its social behaviour.

The person becomes the person only in the course of socialisation, i.e. dialogue, interaction with other people. The reality in which conditions the development of the person is going on, is called **environment**.

Formation of the person is influenced by various external conditions, including geographical, social, family. Such general characteristics as a public sling, the system of relations of production, material living conditions, etc. The closest environment is a family, relatives, friends. The family in many respects defines a focus of interest of the child, its needs and sights. Moral and social qualities of the person also are upbrought in the family.

### 3.2. Activity as the development factor

Influence on development of a heredity, environment and education is supplemented with one more important factor – **activity of the person**. It is understood as all variety of activities of the person, all that he/she does. Direct relations between results of development and intensity of activity are obvious: the more the person is ingaged in a certain area, the higher level of its development is in this area.

In the process of activity there is an overall and complete development of the person, its attitude to the world around is formed.

Main types of activity are game, study, work.

According to the direction there are distinguished informative, public, sports, art, technical, and gedonistic (directed on pleasure reception) activity. A special kind of activity is communication. Activity can be active and passive. All types of activity (labour, cognitive) have the same constant source – needs.

### 3.3. Age and specific features of development

To each age there corresponds the level of physical, mental and social development.

The age periodization is based on allocation of age features. Age features – characteristic lives for the certain period of development of anatomo-physiological and mental qualities. The essence of age features visually reveals on an example of physical development of the person. As biological and spiritual development of the person are

closely connected between themselves changes that correspond to age appear in mental sphere as well.

Full periodizations of development cover all human life with the most typical stages.

The basis of a pedagogical periodization is made by stages of both physical and mental development, on one hand, and conditions in which education proceeds, – on the other.

Taking under consideration of age features is one of the basic pedagogical principles. Age features cause a choice of forms and methods of teaching and educational activities.

The practical pedagogics is based on the laws physical development:

- At younger age physical development of the person goes faster and more intensively,
- Physically the child develops non-uniformly: during one periods faster, during others more slowly,
- Body parts develop non-uniformly and not proportionally.

With physical inseparably linked the spiritual development in which dynamics is also accompanied by considerable fluctuations that are caused by non-uniformity of nervous system maturing and development of mental function. Spiritual development of people proceeds non-uniformly.

In human development there are general and especial features. The general are peculiar to all people of certain age, special distinguish a certain person. Special in the human being is called individual, and the person with strongly shown special is individuality. Individuality is expressed in individual intellectual, moral, strong-willed, social and other features. Perceptions concern specific features, thinking, memory, imagination, temperament, character of the person. Specific features influence development of the person.

The individual approach as an important principle of pedagogics consists of management of development of the person, based on knowledge of features of its personality and living conditions. The individual approach in pedagogics means the adaptation of forms and methods of pedagogical influence to specific features. "Difficult" pupils, and also children with delays in development are especially need an individual approach. The individual approach creates

optimum possibilities for development of informative forces, propensities of each pupil.

Diagnostics is the general way of getting the information on studied object or process.

Physical development of the person is diagnosed rather simply. Specially developed tests (specifications) measuring degree of development of the general and special qualities are applied for this purpose. Spiritual, social development is extremely difficult to diagnose. The most widespread method of studying of the allocated qualities – testing.

#### **Key Notions**

Development of the person, Heredity and development, Influence of environment on development of the person, Activity as the development factor, Age and specific features of development, An age periodization; Irregularity of development, the individual features, Diagnostics of development.

### Questions and tasks for individual work:

- 1. What is the development?
- 2. What factors cause development of the person?
- 3. What is heredity?
- 4. What are the main heredity properties?
- 5. What features are inhereted from parents to children?
- 6. What are the pedagogical aspects of investigation of human development consistenses?
  - 7. What are the makings? Whether they are inherited?
- 8. What is the role of inclinations in inheritance intellectual qualities?
  - 9. Are moral and social qualities inherited?
  - 10. What is the environment?
- 11. How does the environment influence the development of the person?
  - 12. How activity influences development of the person?
  - 13. What principal types of activity do you know?
  - 14. What is diagnostics of development?
  - 15. What are the age features?
  - 16. What makes a basis of a pedagogical periodization?
  - 17. Please formulate the laws of physical development

18. What dependence exists between age and speed of spiritual development?

#### **Used and suggested literature**

- 1. Вишневський О. Теоретичні основи сучасної української педагогіки. Дрогобич, 2006.
- 2. Галузинский В. М. Психология и педагогика: методика комплексного изучения. К., 1989.
  - 3. Звєрєва І.Д., Коваль Л.Г. Практикум з педагогіки. К., 1996.
  - 4. Касьяненко М. Д. Педагогіка співробітництва. К., 1993.
- 5. Комплексне вивчення психології та педагогіки. Вступ до психології та педагогіки. Навчальний посібник. За ред. Скрипниченко О. В., Бурлака Я. І. та ін. К., 1992.
- 6. Костюк Г. С. Учебно-воспитательный процесс и психическое развитие личности. К., 1989.
- 7. Лозова В. І., Москаленко П. С, Троцко Г. В. Педагогіка. Навчально-методичний посібник. – К., 1993.
  - 8. Нечепоренко Л. С. Педагогика личности. Харьков, 1992.
- 9. Шванцара И, Диагностика психического развития. Прага. 1978

# CHAPTER II DIDACTICS: THE THEORY OF TEACHING AND EDUCATION

## Part 4. Essence of process of training

### 4.1. Didactics as a process

One of the two main pedagogical processes is the process of teaching.

In modern understanding the teaching are characterized by the following signs: 1) bilateral character, 2) joint activity of the teacher and pupils, 3) a management from the teacher, 4) integrity and unity, 5) systematic the organized, 6) correspondence to the laws of age development of pupils; 7) management of development and learning of pupils.

**Didactics** (from rpeq. «didakticos» – teaching and «didasko» – studying) – the part of pedagogics studying the problems of training and development, its purpose, content, methods, means. Thanks to itm it carries out two main functions:

- Theoretical.
- Practical.

The basic categories of didactics are:

Teaching is activity of the teacher in realisation of the purpose of teaching, informing, education, comprehension and practical application of knowledge.

**Learning** – process during which on the basis of knowledge, exercise and experience the new forms of behaviour and activity appear.

**Training** is interaction of the teacher with the pupils, directed on chievement of the set objective.

**The purpose** (teaching, educational) – to what training is aspired to.

**The contents** (training, education) – system of scientific knowledge, practical skills with are necessary to be mastered by the pupil during the course of training.

**The form** is a way of realization of educational process. The form is connected with quantity of trainees, time and a training place, etc.

**Method** is a way of achievement of the purpose and tasks of training.

**Means** – subject support of educational process. Means are the voice (speech) of the teacher, his/her skills, textbooks and etc.

**Results** are to want the training leads and degree of realisation of the planned purpose.

The training purposes – it to what the training aims. Any training is always purposeful. The content, the organisation, forms and training methods submits to the purposes of training. There are distinguished general (which describe knowledge and skills which should be mastered by all) and individual (training of the certain person is supposed) training purposes.

At practical realisation the purpose acts the system of specific targets. The training purpose – system of problems that are solved by training.

### 4.2. Content of educational process

The content of educational process is the system of knowledge, the skills which have been selected for studying at a certain educational institution. The content of educational process as the system can have various structure of a statement. The content of educational process is defined by curricula and programs of subjects.

Consistency reflects interrelations between objective, essential, necessary, general, steady and repeating under certain conditions. Strictly fixed consistencies are laws. Laws and consistences are the main components of the scientific theory.

There are following **general laws of the process of training**:

- Law of the purpose of training,
- Law of the content of training,
- Law of quality of training,
- Law of methods of training,
- Law of management of training,
- Law of stimulation of training.

**Didactic principles** (principles of didactics) are the main provisions defining the contents, organizational forms and methods of educational process according to its overall aims and laws.

**The system of didactic principles** is made by the following avowed principals:

- Principle of consciousness and activity
- Principle of presentation of training;
- System and sequence principle;
- Durability principle;
- Availability principle;
- Scientific character principle;
- Principle of connection of the theory with practice

**The purpose of didactic diagnosing** is timely revealing, estimation and the analysis of a current of educational process. Diagnosing components are monitoring, evaluation of knowledge and skills of trainees.

Control means revealing, measurement and evaluation of knowledge, skills of trainees. Check is called revealing and measurement; it is a compound component of control. Control contains also evaluation (as process) and an evaluation (as result) checks. Evaluations are fixed in the form of marks.

Basis for progress evaluation of the pupil are results of control.

The test is a set of tasks, oriented on definition of level of mastering of certain parts of the contents of training.

#### Classification of tests:

- Tests of the general mental abilities, intellectual development,
- Tests of special abilities in various areas of activity,
- Tests of progress,
- Tests for definition of separate qualities of the person (Memories, thinking, character),
- Tests for definition of level of good breeding.

Forms of test control: preliminary control; current control; thematic control; total control.

### **Key Notions**

Essence of process of training, The training purposes, Content of educational process, Classification of laws of teaching, System of didactic principles, Diagnostics of teaching and learning.

#### Questions and tasks for individual work:

- 1. What represents training process? From the resulted definitions choose the true:
  - a) Training process consists of transfer of knowledge to the trainees;
  - b) Training process consists of mastering of knowledge by trainees;
  - c) Training process consists of management of knowledge;
  - d) Training process assumes control of mastering of knowledge, skills, abilities;
  - e) Training process is a bilateral co-operative activity between teacher and students;
  - f) Educational process bilateral operated process of co-operative activity between teachers and the pupils,
  - g) Educational process bilateral operated directed process of cooperative activity between teachers and the pupils directed to intellectual development, formation of knowledge of trainees, development of their abilities
    - 2. By which signs the process of training is characterized?
    - 3. What is called didactics?
    - 4. What are the functions of didactics?
    - 5. What are the basic categories of didactics?
- 1) education, 2) upbringing, 3) development, 4) abilities, 5) skills, 6) teaching, 7) studying, 8) training, 9) knowledge, 10) structure, 11) the purpose, 12) the content, 13) the form, 14) a method, 15) means, 16) process, 17) results.
  - 6. Give definitions of the basic didactic categories.
  - 7. What is the training purpose?
  - 8. What is the content of educational process?
  - 9. What do you understand as training principles?
- 10. Using the received knowledge, choose from the listed statements which are related to the methods of control:
- 1) oral control, 2) written control, 3) individual questionnaire, 4) sistematization, 5) written credit, 6) face-to-face exam, 7) oral credit, 8) emotional influence, 9) seminar employment, 10) case studies, 11) the programmed control, 12) self-checking, 13) mastering of knowledge, 14) tests 15) examination.
  - 11.What is learning?

- 12. What is the testing of learning?
- 13. Give classification of kinds of tests.
- 14. What forms of test control do you know?

### Used and suggested literature

- 1. Коробов Є. Т., Распопов І. В. Методи навчання: Навчальний посібник. -Дніпропетровськ, 1996.
- 2. Лозова В. І., Москаленко П. С, Троцко Г. В. Педагогіка. Розділ "Дидактика". Навч. метод, посібник. К., 1993.
  - 3. Маркова А.К. Формування мотивації навчання. К., 1990.
  - 4. Оконь В, Введение в общую дидактику. М., 1990.
- 5. Падалка О.С., Нісімчук А.М., Смолюк І.О., Шпак О.Т. Педагогічні технології. К., 1995.
- 6. Подласый И. П. Исследование закономерностей дидактического процесса, М., 1991
- 7. Скрипченко О.В., Падалка О.С. Психолого-педагогічні основи навчання. К., 2005.
- 8. Україна XXI століття. Державна національна програма. Освіта. (проект)ю К., 1992.

# Part 5. Methods, Types and Forms of Training

### 5.1. Contents and Classification of methods of training

Training method (fr gr. metodos – a way to something) – it is the activity of the teacher and the pupils, directed on achievement of the set purpose of training. As training methods (didactic methods) are often understood set of ways, ways of achievement of the purposes, solving of tasks of education.

Classification of methods of training is its system regulated according to certain signs. Now a lot of classifications of methods of training are known. We will consider essence and features of the well-developed classifications of methods of training.

#### Traditional classification.

In the given classification are defined five methods:

- Practical (experiences, exercises),
- Evident (an illustration, demonstrations),
- Verbal (an explanation, the story, conversation, lecture),
- Work with the book (reading, citing, noting),
- A video method (viewing, training).

### 2. Classification of methods by usage.

Following methods are defined:

- Mastering of knowledge,
- Formations of skills,
- Application of knowledge in creative activity,
- Repetition
- Checks knowledge, abilities, skills

As the general sign of classification is considered stages through which takes place training process.

### 3. Classification of methods by type (character) of cognitive activity.

In the given classification following methods are defined:

• Explanatory-illustrative (knowledge to the pupil is proposed in "a ready" state, the teacher will organise various ways of perception of this knowledge),

- Reproductive (the teacher not only gives knowledge, but also explains them, durability of mastering is provided by many multiple repetition of knowledge),
- A problem statement (a transitive stage from the executor stage to creative activity, when pupils are not yet ready to act independently to solve problem, that is why the teacher is showing a way of solving the problem, from the very beginning up to the end),
- Partially search (pupils extract knowledge intependently, the teacher will organise only search of new knowledge by various means),
- Research (the teacher together with pupils formulates the problem; pupils independently search for the solution).

### 4. According to the didactic purposes there are defined two groups of methods of training:

The methods promoting primary mastering of educational material (methods of an oral statement, conversation, search methods of training, research method),

- The methods promoting fastening and perfection the obtained knowledge (exercise and practical works).
- 5. The Greatest distribution in the last decade of didactics has got the classification of methods of training offered by the academician. K.Babaksky.

In it there are defined three big groups of methods of training:

- Organisation and realisation methods studying-cognitive activity,
- Methods of stimulation and motivation studying-informative activity.
- Quality monitoring and self-checking.

The story – concerns verbal methods of an oral statement. The main function of the given method is training.

Conversation is the oldest method of didactic work. Leading function – main advantage of conversation that it as much as possible makes active thinking.

Lecture differs from the other methods of a verbal statement by: more strict structure, logic of description of a teaching material, an

abundance of the given information, system character of illumination of knowledge.

*Discussion.* The essence of the given method consists in an exchange of sights on a concrete problem. The main function of discussion is stimulation of informative interest.

*Demonstration* – a method which consists of showing to the pupils the phenomena, processes, objects in their natural world.

The illustration assumes display and perception of subjects, processes of the phenomena in their symbolical image by means of posters, cards, portraits, photos, drawings, schemes and etc.

*Exercise* – the method of the training representing systematic organised repeated performance of actions on purpose mastering by them or increase of their quality.

The laboratory method is based on independent carrying out of experiments, researches by pupils and applied at studying physics, chemistry, and biology.

Informative (didactic) games – specially created situations modelling a reality of which pupils are offered to find a way out. The main appointment of the given method is to stimulate informative process.

Methods of the programmed training are directed to increase – management efficiency of educational process and independent work of pupils that are carried out on individual rate and under control of special means.

Training control. The main function of the given method is a control and correction. Organic inclusion of control in educational process thus is very important to provide and to reach that control simultaneously carried out training and developing functions.

In the given method distinguish:

- *Oral control*. It is carried out by the individual quiz;
- *Written control*. It is carried out with the help conrol works, compositions, written tests and etc.
- *Laboratory control* is directed to check abilities of pupils to use the labware;
- The Programmed control differs by high objectivity;
- *Self-checking* assumes the development of ability to find independently the committed errors.

### 5.2. A choice of methods of training.

The choice of methods of training cannot be any. It is possible to distinguish six general conditions which define a choice of a method of training:

Laws and training principles.

The content and methods of a certain science.

The purposes and training problems.

Educational possibilities of pupils (age, level of preparation).

External conditions.

Possibilities of teachers (experience, level of preparation).

### 5.3. Types of training. Modes of study.

In modern pedagogics there are used three **kinds of training**:

- Explanatory-illustrative, named also traditional,
- The programmed.

Explanatory-illustrative (traditional), the Explanation in a combination with presentation – the main methods

Such training, hearing and storing – leading types of pupils' activity, faultless reproduction the studied-main requirement and the basic criteria of efficiency.

*Problem training.* It is characterized by the following features: organization of training by independent getting knowledge in the process of solving of educational problems, developments of creative thinking and informative activity of pupils. The main stage of problem training is creation of a problem situation.

The programmed training. A main objective is to improve management of educational process.

**Forms** of the organisation of training-it external expression of the co-ordinated activity teachers and the pupils, carried out in a certain order or mode. Organizational modes of study are classified by various criteria:

- By quantity of pupils (mass, collective, group, micro-group, individual forms),
- In a study place (school and out-of-school forms),
- On duration of employment (a classical lesson 45 minutes, the combined lesson – 90 minutes, combined shorten lesson – 70 minutes).

The greatest distribution has got the class-fixed system of the training which appeared in a XVII-th century.

Auxiliary forms of the organisation of study are the various additional supplementing and developing to class-fixed activity of pupils. These are: mugs, practical works, seminars, conferences, consultations, open classrooms, independent work and other forms.

#### **Key Notions**

Classification of methods of training, Essence and contents of methods of training, A choice of methods of training, Types of training, Modes of study.

#### Questions and tasks for individual work:

- 1. What should be understood as a training method?
- 2. Between the listed statements choose training methods:
- 1) conversation, 2) an oral statement. 3) lecture, 4) the story, 5) an explanation,) work with the book, 7) problem training, 8) discussion, 9) informative game. 10) generalisation, 11) exercise, 12) a laboratory method, 13) written exercise.
- 3. From the listed statements choose factors, that distinguish methods training:
- 1) the training purpose, 2) level of motivation of training, 3) quantity and complexity of a teaching material, 4) level of readiness of pupils, 5) age, 6) training time, 7) quantity of pupils in a class, 8) level of readiness of the teacher.
  - 1. What features differe the lecture method?
  - 2. What is educational discussions?
  - 3. What is the essence of demonstration?
  - 4. What differs illustration from demonstration?
  - 5. When and what for exercises are applied?
  - 6. What is the laboratory method?
  - 7. When and what for the informative games are applied?
  - 8. What is the training control?
  - 9. How the choice of optimum methods of training is carried out?
  - 10. What is the essence of explanatory-illustrative training?
  - 11. What features characterise problem training?
  - 12. How the programmed training is carried out?
  - 13. . What are the organizational modes of study?
  - 14. Name auxiliary forms of the organisation of training

#### Used and suggested literature

- 1. Коробов Є. Т., Распопов І. В. Методи навчання: Навчальний посібник. -Дніпропетровськ, 1996.
- 2. Лозова В. І., Москаленко П. С, Троцко Г. В. Педагогіка. Розділ "Дидактика". Навч. метод, посібник. К., 1993.
  - 3. Маркова А.К. Формування мотивації навчання. К., 1990.
- 4. Максименко С.Д., Назар М.М. Построение проукраинских ментальных карт для обеспечения информационной безопасности граждан Украины (Часть первая). Fundamental and applied researches in practice of leading scientific schools. Issue: 4 (10): Psychology. Economics / Ed. by S. Maksymenko, V. Lunov, A. Hall. Co-pub. Publishing office: Accent Graphics Communications Hamilton, ON, 2015. P. 88-108.
- 5. Максименко С.Д. Теорія і практика психолого-педагогічного дослідження. К.: КДІП, 1990. 240 с.
- 6. Максименко С.Д. Основи генетичної психології. К., 1998. 218 с.
- 7. аксименко С.Д. Общая психология. М. К.: Рефл-бук, Ваклер, 1999. 528 с.
- 8. Максименко С.Д. Загальна психологія. К.: Форум, 2000. 543 с.
- 9. Максименко С. Д., Соловієнко В. О. Загальна психологія: навч. посібн. 2-ге вид., стереотип. Київ: МАУП, 2001. 256 с.
- 10. Максименко, С. Д. (2002). Розвиток психіки в онтогенезі: Теоретико-методологічні проблеми генетичної психології (Т. 1). Київ: Ваклер.
- 11. Максименко.С.Д. Загальна психологія. Вінниця: Нова книга, 2004. 701 с.
- 12. URL : https://psycholing-journal.com/index.php/journal/ part/view/715
- 13. Максименко С. Д., Максименко К. С., Папуча М. В. Психологія особистості: підручник. Київ: ТОВ «КММ», 2007. 296 с.
- 14. Sergiy D. Maksymenko, Mykola B. Yevtukh, Yaroslav V. Tskekhmister, Kseniia S. Maksymenko, Olena O. Lazurenko. Psychology and Pedagogics: Text-book. K.: Publishing house 'Slovo', 2012. 520 p.
- 15. Maksymenko S.D. (2015). Genesis of Personality Existence: monography. Montreal: Accent Graphics Communication

- 16. Максименко С.Д., Орап М. Psycholinguistic Predictors of Health (Психологічні предикатори здоров'я) // Psycholinguistics. −2018. − №24(1) –P. 252-268.
- 17. Максименко С., Ткач Б., Литвинчук Л., Онуфрієва Л. (2019). Нейропсихолінгвістичне дослідження політичних гасел із зовнішньої реклами. Психолінгвістика. Психолингвистика. Psycholinguistics, 26 (1), 246–264. DOI 10.31470/2309-1797-2019-26-1- 246-264.
- 18. Maksimenko S.D., Serdiuk L. Psychological Potential of personal self-realization. Social Welfare. Interdisciplinary Approach, 6(1), 93-100
- 19. Maksymenko, O. Lysenko Modern methods of diagnosing virtual addiction among adolescents: relevance and prospects. Монографія/ за ред. Аніти янковської, Riga, Latviaa,: IZDEVNICIBA BALTIJA PUBLISHING, 2019.C.-394-410
- 20. Maksimenko S.D. Principles of website design for professional psychological diagnosis in different specialities. Information Technologies and Learning Tools / Institute of Information Technologies and Learning Tools of NAES of Ukraine. -2019. Vol. 73., No 5. P. 284-294.
- 21. Максименко С.Д., Костюк О.В., Максименко К.С., Немеш О.М., Луньов В.Є.Мультилінгвістичний дискурс невротизації майбутніх лікарів: монографія. Київ: "Видавництво Людмила", 2020. 171 с
- 22. Максименко С.Д. Психологічні особливості розуміння студентами Інтернет-текстів, Psicholinguistics.—2020. Vol. 28(1),— P. 95-105.
- 23. Maksymenko, S.D.(2021) Genetic principles of creative personality confident as a propulsion of mental development. Ottawa: Accent Graphics Communications and Publishing. Glasgow: Society for the support of publishing initiatives and scientific mobility Limited.-615 p.
- 24. Максименко С.Д., Я.В. Руденко, А.М. Кушнєрьова, В.М. Невмержицький. Психічне здоров'я особистості: посібник для вищих навчальних закладів. Київ: "Видавництво Людмила", 2021. 438 с.
- 25. Максименко С.Д., Яланська С.П. Генетико-креативний підхід: діяльнісне опосередкування особистісного розвитку: монографія. Київ: "Видавництво Людмила", 2021. 508 с.
- 26. Максименко С.Д., Піроженко Т.О., Пророк Н.В., Папуча М.В. Психологічний портрет особистості дитини:вікові періоди Київ: "Видавництво Людмила", 2021. 104 с.

- 27. Maksimenko S.D. Features of the components of students' psychophysiological readiness to work as teachers, Idōkan Poland Association "IDO MOVEMENT FOR CULTURE. Journal of Martial Arts Anthropology", Vol. 21, no. 2 (2021), pp. 11–18
- 28. Максименко С.Д., Руденко Я.В. Мультипсихологінчий дискурс вокалотерапії психосоматичних розладів особистості: монографія / С.Д. Максименко, Я.В. Руденко. Київ: «Видавництво Людмила», 2021.904 с.
- 29. Максименко С., Деркач Л., Кіричевська Е., Касинець М.Психологія когнітивних процсів: науковий посібник / Національна академія педагогічних наук України, Інститут психології імені Г.С. Костюка. Київ: «Видавнцтво Людмила» 2022. 420 с.
- 30. Maksymenko S.D., Viktor Burlaka, Oleksii Serdiuk, Jun Sung Hong, Lisa A. O'Donnell, Vitalii Panok and others. Child Internalizing Problems in Ukraine: The Role of Prosocial and Antisocial Friends and Generalized Self-Efficacy/ Societies 2022, 12, 144.
- 31. Максименко С.Д., Ірхін Ю.Б., Деркач Л.М., Марусинець М.М., Касинець М.М. Психологічна організація модульного формування когнітивних здібностей: генетико-креативний підхід: навчальний посібник. Том 1. Київ: «Видавництво Людмила», 2023. 384 с.
- 32. Максименко С.Д., Ірхін Ю.Б., Деркач Л.М., Марусинець М.М., Касинець М.М. Психологічна організація модульного формування когнітивних здібностей: генетико-креативний підхід: навчальний посібник. Том 2. Київ: «Видавництво Людмила», 2023. 356 с.
- 33. Максименко С.Д.Медична психологія: підручник / за редакцією академіка С. Д.Максименка. Том І. Київ: «Видавництво Людмила», 2023. 458 с.
- 34. Максименко С.Д.Медична психологія: підручник / за редакцією академіка С. Д.Максименка. Том 2. Київ: «Видавництво Людмила», 2023. 520 с.
- 35. Maksymenko S.D., Lunov, Vitalii, Matiash, Mykhailo and Subbota, Spartak and Tolstoukhov, Anatolii, Ukrainian Syndrome: How Ukrainian Youth Understands the New Norm of Life and Relates to Leraing in face to 2022- Full-Scale Russian/ SSRN. −2023–№1(January 15, 2023). –P. 1-10
- 36. Максименко С.Д., Ірхін Ю.Б., Деркач Л.М., Марусинець М.М., Касинець М.М. Психологічна організація модульного формування

- когнітивних здібностей: генетико-креативний підхід: навчальний посібник. Том 1. Київ: «Видавництво Людмила», 2023. 384 с.
- 37. Максименко С.Д., Ірхін Ю.Б., Деркач Л.М., Марусинець М.М., Касинець М.М. Психологічна організація модульного формування когнітивних здібностей: генетико-креативний підхід: навчальний посібник. Том 2. Київ: «Видавництво Людмила», 2023. 356 с.
- 38. Maksymenko S.D., Maksymenko K.S., Svitlana Yalanska, Nina Atamanchuk, Valeriy Zhamardiy, Vikoriia Donchenko Psychophysiological unloading with compliance taking into accounr: aeroapiphythotherapy resource. Acta Balneologica. − 2023. − № LXV (2), P.98-104
- 39. Максименко С.Д., Деркач Л.М., Розуміння сучасної когнітивної війни в глобальному вимірі, її генезис в українському контексті: огляд та напрямки майбутніх досліджень. Оборона і стратегія. університет оборони БРНО. Випуск: Том 23, №1 ( червень 2023).С.126-148
- 40. Maksymenko S.D. The Historical Sense of Psychological Crisis: Modern Understanding of Genetical-Psychological and Integrative Approach. SSRN. −2023−№ 3 (May 9, 2023). −P. 1-10
- 41. Максименко С.Д., Носенко Е.Л., Експериментальна психологія: Підручник для студентів. К.: Центр учбової літератури, 2023. 360 с.
- 42. Максименко С.Д., Загальна психологія. Навч. посібник для студентів вищих навч. закладів. –Вид. 2-е, перероб. та доп. К.: Центр навч. літератури, 2023. 272 с.
- 43. Maksymenko, S., Ivashkevych, E., Kharchenko, Y., Tarnavska, O., & Sinjavska, N. Semantic and Pragmatic Meaning of Discursive Units in the Process of Communication of a Psychotherapist with a Client. PSYCHOLINGUISTICS, 34(1)2023, 129-172.
- 44. Максименко С.Д., Л.М. Деркач, Ю.Б. Ірхін. Диференційна психологія. Видання 2-ге, перероблене і доповнене: підручник/ за загальною редакцією академіка С.Д. Максименка. Київ: «Видавництво Людмила», 2024. 572 с.
- 45. Maksymenko, Serhii, Orthobiosis in Human Development: A Genetic Psychological Perspective on Personality Traits and Their Pathologization (January 29, 2024).
- 46. Генеза сучасної інформаційно-когнітивної (гібридної) війни в українському контексті та глобальному вимірі: наукове дослідження/

- С.Д. Максименко, Л.М. Деркач. Київ: «Видавництво Людмила», 2024. 128 с.
- 47. Максименко С.Д. Методологічні принципи конструювання модульного психологічного супроводу і психічного здоров'я : навчальний посібник. Том. 1 / С.Д. Максименко. Київ: Видавництво Людмила, 2024. 718 с.
- 48. Максименко С.Д., Гришко О.Д., Психологічний супровід і психічне здоров'я: навчальний посібник. Том. 2 / С.Д. Максименко, О.Д. Гришко. Київ: Видавництво Людмила, 2024. 468 с.
- 49.Организационные формы обучения/Под ред, Ю. И, Малеванного.– К., 1991
- 50.Падалка О.С., Нісімчук А.М., Смолюк І.О., Шпак О.Т. Педагогічні технології. К., 1995.
- 51.Скрипченко О.В., Падалка О.С. Психолого-педагогічні основи навчання. К., 2005.
- 52.Україна XXI століття. Державна національна програма. Освіта. (проект)ю К., 1992.

### Part 6. Content of Education

### 6.1. Concept and structure of education

The most important component of spiritual life is the system of education, which is associated with the implementation of the process of knowledge dissemination. It deals with the activities of actually formed social institutions that prepare young people for life on the basis of the knowledge gained in pre-school, in secondary, vocational, technical and higher educational institutions.

The importance of education in human life is growing, and therefore it cannot be limited only to the period of study. The urgent need for a constant increase in the level of knowledge has led to the emergence of such an interesting phenomenon in social life as continuing education. This process is accompanied by the search for new forms and methods of learning that contribute to the correct formation of a scientific worldview, a deeper understanding of the economic and social changes taking place.

Education is one of the oldest social institution, which is caused by the needs of society to reproduce and transfer knowledge, skills, habits, prepare new generations for life, prepare subjects of social action to solve economic, social, cultural problems facing humanity. In the modern world, education is a complex and diverse social phenomenon, a sphere of transmission, mastery and processing of knowledge and social experience. Education is a certain system of educational and educational institutions that carry out various forms of involving their experiences in the development of cultural wealth. Education integrates various types of educational and educational activities, their content into a single social system, orients them to the social order, to the social needs of humanity. Among the social institutions of society of modern civilization, education occupies one of the leading positions. After all, the well-being of man, the position of culture and spirituality in society, the pace of economic, scientific and technical, political and social progress depend precisely on the quality and level of education. Learning, skills, study, and other concepts and terms are used to ensure the educational process.

The foundations of a person's upbringing, his diligence and many other spiritual qualities are laid from an early age. The role of preschool institutions is great in this. However, their significance is underestimated. Quite often, it is lost sight of the fact that this is an extremely important stage of education, on which the fundamental basis of a person's personal qualities is laid. And the point is not in the quantitative indicators of "coverage" of children and satisfaction of parental requests. Kindergartens, nurseries, complexes are not just a means of "supervision" of children, their physical, mental and spiritual development takes place here.

In a person's life, learning takes a long period, taking away his productive creative forces and years. When applying for a profession, a young person must study for at least ten to fifteen years, and for a profession of higher qualification – the training reaches twenty years. Education interferes with a person's life from childhood; in fact, a person does not have a clear idea of the psychological consequences of such interference.

After all, a tradition has already been established: in a family a child reaches six or seven years of age and then they send him to school, forgetting about his physical, psychological, etc. preparation. It is believed that a child should learn, master knowledge, general and responsible phases of learning fall on the period of social self-affirmation, manhood of a person – professional, family, civic. Sometimes a child manifests certain inclinations from an early age, but they are not noticed in the family, and they are not noticed at school, and in the meantime, the inclinations are suppressed, and the interest, the attraction to certain knowledge in the child fades, does not develop.

At all times, education has given a person life guidelines, influenced the formation of his worldview, ensured the continuity of language, traditions, thereby contributing to the consolidation of society, the formation of national self-consciousness and the preservation of national culture. It is advisable to analyze what role education plays today. Currently, the social role of education has significantly increased in society. According to most researchers, education is becoming one of the most important factors in the formation of a new quality of the economy and society, and the

prospects for the progressive development of humanity largely depend on its direction and effectiveness. The development of globalization leads to increased competition between producers of goods and services both at the national and international levels. In these conditions, maintaining competitiveness requires the creative work of innovators who create new, rather than simply improving the quality of existing products. This requires new incentives incentives for creative self-realization of the individual. Today, we need not blind executors of the leader's orders, as was the case for many hundreds of years, but creative employees who want and can create new things. The education of such employees involves a different education system. At school and university, teachers are called upon to develop creative abilities, to teach not to know, but, above all, to understand. Nowadays, it is increasingly being said that educational value is not so much the system of knowledge and skills acquired by a person, but rather the assimilation of options for their acquisition, the ability to acquire new knowledge, the ability to mobilely and effectively - independently or in interaction with other people - to overcome existing gaps. This type of activity no longer allows us to evaluate the education system based only on success indicators. In this regard, the question of the need to develop a new system for assessing the quality of education and creating a new educational paradigm is acute.

The quality of education has traditionally been a priority goal of state education policy in most countries. The concept of "quality of education" has had different meanings at different times. Even more differences in the meanings of this concept can be seen in comparison with the understanding of the quality of education in different countries. However, recently adopted strategic documents related to educational process general illustrate in 1) democratization of approaches to assessing the quality of education; 2) convergence of domestic and global approaches in understanding the quality of education. The lack of solid criteria for assessing the quality of education is currently a global trend. This can be illustrated by the UNESCO Education Monitoring Report, presented on October 9, 2017 at the UN General Assembly [1]. In 2005-2014, the UN implemented the Education for Sustainable Development Program.

One of its 17 Sustainable Development Goals is quality education, which provides for ensuring "inclusive and equitable quality education and promoting lifelong learning opportunities for all." This program has been further developed. On September 25, 2015, the UN General Assembly adopted a new resolution approving a new action plan "Transforming our world: The 2030 Agenda for Sustainable Development". In this document, goal No. 4 "Quality education" provides for "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all". There are several rating systems that determine the place of a higher education institution (HEI) in the educational hierarchy. Currently, the most famous are the QS-THES, Shanghai, Webometrics, and Reitor rankings. These ratings are different. Accordingly, world universities occupy different places in them. In September 2021, a new ranking of the best world universities was published according to the QS World University Rankings [2]. When compiling the QS World University Rankings, universities are evaluated on six criteria (in descending order of importance): 1) reputation in the academic environment (this is the main criterion); 2) attitude towards university graduates by employers; 3) citation of publications of university employees; 4) ratio of teachers to students; 5) relative number of foreign teachers at the university; 6) ratio of foreign students to all students. The QS World University Rankings include the 1000 best universities from around the world, covering 80 different locations. The main news was the impressive successes achieved by Asian universities. Twenty-six educational institutions from the Asian continent are now included in the global top 100, more than ever before. The first place in this list was taken by the Massachusetts Institute of Technology (USA). Second place was taken by Stanford University (USA), and third by Harvard University (USA). The top 10 also includes: California Institute of Technology (Caltech) (USA), University of Oxford (UK), ENT Zurich (Switzerland), University of Cambridge (UK), Imperial College London (UK), University of Chicago (USA). Among Asian universities, the following can be distinguished: 11th position - National University of Singapore (Singapore); 13th - Nanyang Technological University (Singapore); 15th - Tsinghua University (Mainland China); 22nd -University of Hong Kong (Hong Kong SAR); 23rd – Peking University (Mainland China). Ukrainian universities are also represented in this

ranking: 477th place is occupied by V.N. Karazin Kharkiv National University; 601-650th - Taras Shevchenko Kyiv National University; 650-700th - National Technical University "Kharkiv Polytechnic Institute". Also, the British publication Times Higher Education annually forms a world reputation ranking based on the results of an expert survey of representatives of the global academic community. Universities are evaluated according to 13 indicators, including the quality of education, scientific research, technology transfer, funding, reputation assessment, etc. But unlike the ranking of the best HEIs, only one criterion plays a major role in the reputation ranking - the opinion of scientists who have great authority and merit in scientific work. The compilers admit that the ranking is subjective, but state that no one can better assess the reputation of universities than scientists. The Times Higher Education World University Rankings 2023 includes 1799 universities from 104 countries and regions, which makes it the largest and most diverse university ranking to date [3]. This year's ranking analyses over 121 million citations from over 15.5 million scientific publications and includes responses to a survey of 40,000 scientists from around the world. The University of Oxford tops the rankings for the seventh year in a row. Harvard University remains in second place, while the University of Cambridge rose from fifth to third place last year. The highest-ranking new entrant is Italy's Humanitas University, which is ranked in the 201–250 group. The United States is the most represented country overall (177 institutions), and also the most represented in the top 200 (58). Mainland China now ranks fourth in terms of the number of institutions in the top 200 (11 compared to 10 last year), overtaking Australia, which dropped to fifth place (together with the Netherlands). Five countries are included in the ranking for the first time - all of them are located in Africa (Zambia, Namibia, Mozambique, Zimbabwe and Mauritius). This year, Ukrainian universities are also among the universities included in the ranking. Sumy State University took 405-500 places. Lviv Polytechnic National University, which has been highly rated in the ranking for seven consecutive years, entered the group of 601-800 best universities in the world, as in the previous year. Kharkiv National University of Radio Electronics - 1001-1200 places. II. Factors determining modern requirements for education.

At the stage of globalization, the transition to a new economy based on knowledge has become clearly defined. Intellectual and social capital has begun to play a decisive role. To increase the intellectual level of the population, it is necessary to change the requirements for education, which mainly forms human capital. In the new conditions, a new type of education is needed. Schools and higher education institutions should primarily teach a creative approach. Truly modern education should include three elements: the formation of a creative personality, teaching and upbringing. The state of education in the state is an indicator of the quality of life of society, and therefore in many economically developed countries the state remains the main entity that maintains the education system and determines the strategic directions of its modernization. In order to determine the place of education in a particular economic system, it is necessary, first of all, to identify the global trends in the socioeconomic development of society. As S.O. Sysoeva notes, the development of the education system in modern conditions is influenced by the following four interrelated factors: the rapidity and development processes; of social socio-economic transformations in society, which led to the emergence of a fundamentally new phenomenon for our economy and social existence - the labor market; globalization processes, which responded to integration trends in the world; information "explosion" in society, caused by the emergence of new information technologies and multimedia [4]. In the scientific community, there are many discussions about the need to build a new model of education for the sustainable development of civilization. This is due, first of all, to the fundamental contradictions in the development of both society and education itself. To assess the knowledge system, an approach has traditionally been used that considered education as a means and process of transferring knowledge, skills and abilities from one generation of people to another. Therefore, the goal of education according to this approach is determined by the "social order" of society to train currently in-demand specialists, and the quality of education – by its compliance with the requirements of the present. But the very understanding of education as the transfer (as well as the accumulation, reproduction) of knowledge and culture from past generations to the present has turned out, according to experts, to be

incapable of meeting the needs of modernity. The disadvantage of this approach is the inability to take into account the prospects for the development of society, the needs of the individual in selfdevelopment, as well as innovative aspects of education. Education should "anticipate" and anticipate the vital interests and needs of future generations of people. Therefore, among modern researchers of the education system, a personality-oriented approach is gaining popularity, according to which education is considered as a method and process of personality development. Modern education, which will serve the digital economy, should be aimed at training a creative worker, with a developed imagination and an innovative approach to the tasks set. The criterion for assessing the quality of such education will be the level of a specialist's abilities in professional activity, the level of self-development and the ability to self-education. According to the position of I.S. Kalenyuk and O.S. Padalka, the main global trends that determine the increasing role of higher education in social development are: - the decisive role of education in the formation of a knowledge economy (as a generator and transmitter of knowledge and information); - diversification of funding sources (from mainly state funding to a wide range of sources of income for higher education institutions and the actualization of the problem of increasing the efficiency of spending these funds); - changing requirements for the content, methods and forms of the educational process (competence-based approach, the need to form new skills: the ability to learn throughout life, the ability to work with large of information, information and communication amounts technologies (ICT), creativity and the ability to work in a team); changing organizational forms of educational activity (concentration and centralization of university activity, diversification: parallel network universities. distance education): education. internationalization of education (the need for unification educational content on an international scale, recognition diplomas); - globalization of education (formation of the world market for educational services, growth in the number of foreign students, emergence of transnational, cross-border education, increased competition and emergence of world university rankings) [4, p. 150]. It is also necessary to take into account that the modern globalized economy develops thanks to new knowledge and

technologies [6, p. 7]. The world is becoming increasingly competitive. Modern conditions change the nature of human work, and therefore the requirements for professional training are changing. A modern employee must constantly replenish the volume of his knowledge and skills. Reducing the period of the "life cycle" of knowledge and professions places a requirement on the higher education system for further individualization, constant updating of curricula, and the introduction of modern educational technologies. III. Conditions for the formation of a new education system The creation of a new education system primarily involves a change in the cultural values of society. Modernization of education is manifested in the search for new ways of developing educational systems; development and experimental testing of models of advanced development of educational institutions in accordance with the development of optimal ratio between balance. an finding a "marketability" of education and its main task – training, upbringing, development of the individual, preparing it for life in modern society, which cannot be implemented exclusively according to market criteria [7].

The new direction of education should be oriented towards the formation of the need for regular updating and replenishment of knowledge, improvement of skills and abilities, in which they are consolidated with subsequent transformation into competencies. A graduate of a higher education institution (HEI) must have general cultural and professional competencies. Thus, each country (and Ukraine is no exception here) determines in which elementary (basic) human competencies qualification levels, as well as any qualifications, will be thoroughly described. In Ukraine, the following were chosen: "knowledge" (empirical and theoretical), "skills" (as the application of knowledge), "communication", "autonomy and responsibility" and "integral competence" (for a certain level). The competency approach has its supporters and opponents. If we turn to the documents of the Bologna Process, the definition of European colleagues is rather traditional. They consider competence as a dynamic combination of knowledge, skills, and abilities. The Bologna Process assumes a common understanding of the content of qualifications and degrees of all programs of the countries participating in it. It requires the definition of general and specific competences of graduates as the

main direction. An important feature of the modern approach to the education system, which distinguishes it from previous, traditional approaches, is the developers' desire to significantly increase student activity, which is expressed in the phrase: "Specific types of professional activity, for which a specialist is mainly prepared, are determined by the higher education institution together with students", and even more: "The higher education institution is obliged to provide those who study with a real opportunity to participate in the formation of their curriculum, including the possible development of individual educational programs". This allows students not only to have information about the work program in the discipline, but also provides for the possibility of participating in its creation. A new requirement when mastering the general education program is also the mandatory conduct of scientific and research work by students. Also, the modern stage of the evolution of world civilization is accompanied by significant social transformations, which are defined as the transition from an industrial society to an information society, the emergence of which is associated with the information revolution and the development of information technologies. The combination of education and technology is considered the main key to human progress. Education inspires technology, which, in turn, is the basis of education. Therefore, it is obvious that information technologies have influenced changes in the methods, goals and potential of education. The significance of the use of modern information technologies in the learning process is currently caused by multiple factors, and primarily: - the complication of the pedagogical process in an educational institution in the conditions of integration of special disciplines, as well as the integration of an educational institution; the increase in the subject world of the student, which contributes to an increase in the volume of educational material and the significance of its generalization; - the increase in areas of activity, the need to solve numerous professional tasks: project, research, technological, etc. The use of modern information technologies in the education system contributes to the optimization of the management of the cognitive activities of students and teachers. This, first of all, will allow creating better conditions for the training of pedagogical personnel capable of participating in the implementation of programs for the informatization of education; to increase the level of

professional interaction between teachers and students through the implementing projects, possibility of joint including telecommunications projects; to increase the effectiveness students' independent work with traditional and electronic resources; implement continuous general education, when students will be able to actively participate in the organization of the learning process, choosing courses available in time thanks to telecommunications. To implement these tasks, it is necessary, first of all, to convey these goals to students, and also an active position of the scientific and pedagogical staff is required, which directs and regulates the educational trajectory of students. In addition, an important role is played by the educational environment created in a higher education institution, which will contribute to the transparency of assessment criteria, the availability of resources, such as a library, laboratories, computer classes, study areas, etc. It is also necessary to take into account the needs and rights of education seekers, to establish feedback with students when making decisions about improving the educational process. IV. Conclusions Thus, the education system is the main source and resource for the formation of human capital, and the educational capabilities of the information environment determine the real prospects for the modernization of the educational sector. While education in the past was focused on teaching and learning, information technology has brought changes to education, so that education is now increasingly perceived as a process of creating, preserving, integrating, transmitting and applying knowledge. The perception of knowledge itself has also changed, while knowledge may once have been perceived as immutable, it must now be perceived as "revisionist, creative, personal and pluralistic". The future of education is not determined only by the development of modern information technology, but rather that this "future will depend on how society constructs (and interprets) the place of technology" in the educational process. We are moving from education "in any case" to education "just for you", where education is aimed at meeting the needs of individual students. It is in this direction that modern approaches to creating a new education system, a new educational paradigm, should develop.

Significant for understanding the proposed issues regarding the theoretical, methodological and applied aspects of educational policy and its implementation in the context of globalization are the works of Ukrainian scientists V. Andrushchenko, V. Zakharchenko, V. Kremen, S. Nikolaenko, M. Stepko, etc. Among Polish and foreign specialists, the works of F. Altbach, A. Bielow, E. DeCorte, D. Douglas, O. Zolotov, M. Kwiek, J. Kuzminov, S. Michael, S. Marginson, A. Mettinger, E. Moren, G. Rozowski, J. Salmi, D. Semenov, U. Teichler, A. Torkunov, I. Frumin, E. Heselkorn, Z. Sharota, F. Schlosek, J. Yuzhvyak, and others were devoted to this issue. Their research is aimed at solving the problem of achieving the highest excellence in university education. In this context, the works devoted to the management of higher education institutions are significant, in particular: O. Bodnar, T. Borova, N. Volyanyuk, O. Galusa, G. Dmytrenko, I. Drach, G. Yelnikova, V. Kamyshyn, V. Kuryl, V. Maslova, V. Olivnyk, Z. Ryabova, L. Sergeeva, O. Snisarenko, T. Sorochan, G. Tymoshko, L. Fedulova, T. Finikova, E. Khrykov, O. Sharov, S. Shevchenko, V. Yakovets; and the Polish ones: K. Byala, T. Vavak, M. Vuytitska, S. Kwiatkowski, M. Kwiek, K. Leya, M. Pastwa, E. Potulitska, I. Rutkovyak, A. Piasetska, M. Chechora, P.Shtomptka, J. Yuzhvyak and others. The peculiarities of the educational process are revealed in the works of I. Baryshevskaya, B.Bezyazychny, A. Korabahina, V. Khudyakova, T. Chernova, etc. The issues of the formation of the personality of a future specialist and his professional training are devoted to the works of M. Vasilyeva, I. Kovalenko, V. Lozova, N. Mozgova, D. I. Prokopenko, V. Sydorenko, L. Tkachenko, G. Trotsko, O. Fedorenko, etc. The psychological and pedagogical aspects of personal potential, its components and opportunities for productive development are presented in the works of I. Bekh, D. Bogoyavlenskaya, L. Vygotsky, S. Glukhovskava, V. Dolgunov, G. Levashova, E. Kos, N. Leites, V. Semichenko, D. Urbanyak-Zayonts, O. Yakovleva, etc. Instead, the issues of educational process management are mainly treated from the perspective of its organization, administration and information support measures through the use of IT, which are revealed in the works of V. Hrytsenko, I. Plish, S. Tarasova, O. Tulin, I. Justyk, enhancing the characteristics of its accessibility and quality. Separate works provide reviews of the "results management" system in its various areas, which is mainly considered by foreign authors (B. Dzyudzyuk, Hans de Bruyl).

Ukraine, in its development, seeks to join a new type of social relations that is spreading in the world. Their features are the increasing role of information technologies and knowledge in the economy, the innovation of production, which changes the living conditions and value orientations of people. All this requires changes and modernization of the existing Ukrainian education system in accordance with the new challenges of today, which has preserved many outdated features since Soviet times. The question of its reform has been repeatedly raised among both scientists and politicians. Despite this, decisive actions by the Ministry of Education and Science of the country (MES) began around 2016 and are designed for the medium-term perspective, which does not allow us to fully assess the results obtained in various areas. But the analysis of the current state of state regulation in the field of education and its changes in accordance with previous years is important, as it allows you to form the main directions of further research. According to the current reform of the education system, systemic changes are envisaged by 2020 in four main areas: - reform of "New education Ukrainian School" modernization of vocational and technical education; - ensuring the quality of higher education; - creation of a new system of management and financing of science.

# 6.2. The essence and regularities of the educational process in higher education.

The university carries out training and education of students, which in its entirety constitutes the educational process.

In terminology, the "educational process" has many conceptual blocks (definitions, explanations, interpretations of meaning), however, not all of them are synonymous. Educational process Pedagogical process Educational and educational process Educational activity Education Each educational institution carries out training and educational work, which in its entirety constitutes the educational and educational process (pedagogical) process, which is implemented as an organized interaction of teachers and students (subjects and objects of education). The concept of "educational and educational process" means a set of educational classes, classroom and extracurricular

educational work in higher education. The pedagogical (educational) process is a process of interrelated and interconnected activities of a teacher and a student, aimed at the effective and efficient achievement of the goals of education and training.

The pedagogical process is a specially organized, purposeful interaction of teachers and students, the purpose of which is to solve educational problems and develop the personality. The organization of the pedagogical process requires a holistic approach to the collective solution of educational and upbringing tasks at each educational session, supporting educational activities with various extracurricular work on the academic discipline, skillful combination of efforts with student self-government, establishing ties with the community, etc. The learning process is a form of cognition of objective reality, mastering the experience of humanity, interaction between a teacher and a student. It consists of two interrelated processes – teaching and learning. Learning is a complex phenomenon, a dynamically moving process, has a dual nature through the two-way educational interaction of the teacher and the student (students) and, accordingly, the educational activity of the first and the learning activity of the other subject.

The essence of learning in higher education is distinguished by its specificity of both the teaching process and learning, which is determined by the goals and objectives of higher education. Fitsula M.M. Golovenkin V.P. Fitsula M.M. Fitsula M.M. Vitvitska S.S. 2. The educational process in higher education is a complex system, with independently functioning subsystems, has its own logic. The student, having his own goals and objectives, masters the proposed content of the training, performing certain types of work and educational tasks, thus carries out training, the result of which is learning. Each of the participants in equal educational interaction carries out specific educational actions, types of operations and work inherent to such a subject, but, guided by multidirectional goals, directs active cooperation towards the development of the potential capabilities of the central subject – the student, on the path of his social development and acquisition of professional competence.

Mutual activity, cooperation of the teacher and the student in the process of communication within the educational process is pedagogical (educational) interaction. The effectiveness of the

educational process will determine the formation of dynamic interaction "teacher – student", "teacher – student – students". The following relationships are established between subjects (subjects and objects): – information – information exchange, – organizational and activity – joint activity, – communicative – communication, – management and self-management.

Successful educational activity will depend on the ratio of relationships. Law of Ukraine "On Higher Education". Section X. Participants in the educational process Article 52. Categories of participants in the educational process 1. Participants in the educational process in higher educational institutions are: 1) scientific, scientific-pedagogical and pedagogical workers; 2) higher education applicants and other persons studying in higher educational institutions; 3) practitioners involved in the educational process in educational and professional programs; Fitsula M.M. 4) other employees of higher educational institutions. The process of upbringing, training, education and development of university students has a dialectical nature, is determined by the nature of pedagogical laws. The pedagogical process in higher education is influenced by technological development, e.g., ICT.

The dependence of the educational process on the nature of social relations, the economic state and financial capabilities of the country, the development of pedagogical theory and practice, etc. is noticeable.

The educational process consists of components, e.g., in a broad sense, the structural learning process is formed by the following components: o target: forming the goal of studying educational material, the educational goal of the educational institution, etc.; o content: optimal selection of curriculum subjects, the content of educational programs and textbooks; o stimulating and motivational: encouraging students to active cognitive activity and forming appropriate motivation in them; o operational-effective: selection of techniques, methods, forms, and means of learning; o control-regulatory: control over the assimilation of knowledge and the formation of skills and abilities; o evaluative-resultative: identification of the level of "zun" of each student, the reasons for failure and their elimination. 2. The content of education in higher education The content of education is understood as a certain volume and nature of

systematic scientific knowledge, practical skills and abilities, as well as worldview and moral and ethical ideas that a person, in this case a student, must master in the process of learning. The content of education is understood as an orderly, integral set of elements and processes that form the educational system. The content of education is a scientifically substantiated system of didactically and methodically formed educational material for various educational and educational-qualification levels. We consider the content of higher education as the basis of subjective knowledge aimed at the ability of a specialist to participate in socio-economic interaction (knowledge society, knowledge economy), which ensures an adequate result through socially useful work, social responsibility, and a formalized set of values and demands of society.

The content of higher education is determined by the goals and needs of society. Recently, practice has increasingly been dealing with such phenomena and tasks where traditional empirical methods are powerless. The old way of thinking (ordinary, elementary, formed spontaneously at the dawn of human history, based on simpler forms of work on the reproduction of external forms and relations of things) has exhausted itself and limited (narrowed) the range of its competence. It clearly does not cope with the assimilation of a new, deeper "layer" of reality, because it does not provide it in complicated and constantly changing living conditions. The content of higher education and training in a specific field of science and profession is one of the determinants that determine the successful or adequate entry of a person as a graduate of an educational institution into the world of social relations.

The present actualizes the reorientation of Fitsul M.M. Vitvitska S.S. Lugovyi V.I. Slepkan Z.I. Golovenkin V.P. Bosenko V.O. 4 education to train a person as a carrier of specialized and general educational information, which was relevant in previous eras of social and civilizational development, into "carriers of certain qualities and specific opportunities", with a clearly expressed ability to self-education and the desire for a new level of education becomes key in ensuring the desired prospects for the development of society. Acute for society, and therefore the sphere of education, is the problem of "humanization of Man" (I.A. Zyazyun), therefore the educational task of

teaching a person "what a person needs to do in order to be a person" (I. Kant) is becoming more relevant.

In the selection of educational content, world experience has different approaches: encyclopedism, pragmatism, polytechnicism, existentialism, etc. In Ukraine, polytechnicism is a whole system of higher education that provides theoretical and practical familiarization with the sectoral principle of the functioning of the national economy (which is relevant in the industrial age), has a subject-polytechnic orientation, and is based on the study of the development of technology in various forms. In the USA, pragmatism is a worldview that puts all knowledge in direct relation to life and action, and requires a person to use ideas, judgments, and theories only in accordance with their ability to satisfy needs and interests. In France, encyclopedism is the formation of human culture, the comprehension of diverse knowledge into a relatively unified picture of the world. In England, existentialism emphasizes that a person is responsible for his actions only when he acts freely, has freedom of will, choice, and the means to implement them. The higher education institution is faced with the task of choosing: should the foundation of higher education be the fundamentality of knowledge or the pragmatism of action? Axiological problems regarding the content of higher education concern the issue of "breadth" and "narrowness" of acquiring general and professional knowledge. Such a dilemma means: a universal professional with a thorough general education receives a fundamental higher education. In contrast, highly specialized performers are always needed, but narrowing the training in higher education of a specialist only with specialized education, without a foundation of basic knowledge, will mean that the main "productive force" of society will be made up of artisans - specialists who are oriented only to a specific task, regardless of a general scientific worldview, understanding of civilizational development in a historical context, systemic thinking, and adherence to humanistic values, and we will rely on them to pave the way to the future society. "No matter how much you pack it with special knowledge, it will be Witvitska S.S. Practice in medieval schools - the "seven liberal arts" consisted of two cycles (stages) of study - the trivium and the quadrivium. The subjects of the "trivium" were: grammar, rhetoric, dialectic. The subjects of the "quadrivium" were: arithmetic, geometry, astronomy, music. Due to the decline of culture

in the Middle Ages, the rich content invested in these areas of knowledge by ancient scholars was reduced to a limited number of elementary information that was used for religious purposes. For example, grammar was interpreted as a science necessary for understanding church books, rhetoric as a guide for composing church sermons, astronomy for calculating Easter, dialectic for disputes with heretics, arithmetic classes were largely reduced to the mystical interpretation of numbers. In the era The Renaissance, in connection with the collapse of feudalism and the needs of production, changes occurred in the content of education. The secular character of the "7 liberal arts" was restored. Gradually, this system was replaced by the system of classical gymnasiums. In Ukraine, the "7 liberal arts" were studied in fraternal schools and colleges. Engelmeyer P. "a learned craftsman until you give him a humanitarian view of the socioeconomic aspects of his profession" - in relation to engineering work and, accordingly, engineering knowledge. There are 4 main elements of the content of education: - Information to be mastered: knowledge accumulated by mankind - these are the basic ideas, concepts, theories, concepts of science; knowledge about the ways, methods of cognition, types and methods of mental actions. - Methods of activity skills, abilities. - Experience of emotional and value attitude to knowledge. - Experience of creative activity: transfer of knowledge, variability, combination. Mastering the content in modern Ukrainian higher education takes place mainly in a "monocentric" educational environment.

In order for the content of higher education to transform into the content of the student's subjective learning and the content of his future professional activity, certain conditions for conducting the educational and educational-research process must be created in the scientific-pedagogical environment of the university. And in order for the content of learning to be comprehended by students, the conditions of the cognitive-educational environment must be developed around each subject of learning. The content of education in the university is transformed into the content of learning. The content of education, and therefore the content of learning, are the most important components of the process of training a specialist. The content of education is the desired result, the goal facing the education system and the individual. The goal, as is known, is the mastery of the

individual by the system of certain "zones", experience of creative activity, social, ideological and professionally significant personal qualities. Thus, the content of education is the goal that the education system implements. The content of learning acts in accordance with the content of education as a means to the goal and represents the composition, content and structure of educational information offered to students for comprehension. The content of education also includes a set of tasks, assignments, exercises that ensure the formation of professional and educational skills and abilities, the accumulation of initial experience of professional activity. The content of education in higher education is determined by the standards of higher education such documents as curricula, training programs, textbooks. The content of education is reflected in the standards - educationalprofessional and educational-scientific programs, and the content of education - in curricula, training programs, textbooks, manuals and other didactic materials, that is, in the structure of methodological support of the educational process. Further, the content of higher education is determined and formalized in accordance with the selected educational models and implemented in daily practice by various forms of education. The most important problems of forming the content of education and education are: - establishing the necessary and sufficient knowledge and skills for carrying out professional activities; - fundamentalization and professionalization of education; - establishing the optimal ratio of theoretical and practical training in each academic subject, the optimal volume of educational practices, etc.; - technological feasibility of transforming the content of education into the content of education, etc. Lerner I.Ya. Golovenkin V.P. Golovenkin V.P. 6 3. University student, development of the student's personality in education, formation of the student as a future specialist Today, the student is defined as the main active figure in educational activity. The student is both an object and a subject at the same time: as an object, he appears as an individuality that develops, as a subject - he is a personality that strives for self-improvement. For higher education, a difficult task is to create appropriate conditions for the transition of each student from an object to a subject position in educational activity. A modern specialist is a comprehensively developed personality with humanistic values, developed creative qualities, possesses systemic thinking, endowed with a sense of social

responsibility and the ability to projective and predictive activity. One of the important functions of higher education is the development of the student's personality. In the classical sense (according to the principle of "paideia"), the education system should ensure the holistic and versatile development of a person, the comprehensive development of a future specialist in a holistic educational and educational process. Recently, the relevance of creating environment of student-centeredness (from "human-centeredness", "child-centeredness) has emerged. Back in the second half of the 20th century, it became apparent in higher education that the classical model of education "from teacher to student", the traditions of building an educational environment do not fully meet the requirements of personality development. Today, new circumstances of human life put forward new requirements for the educational system, for educational activities, for the teacher himself. The widespread terminology in the educational system is "personally-centered", for example, interaction or education is revealed through the active position, the active potential of the student as a subject of educational activity. The subject-activity approach and active learning environment in the organization of the educational process are built on the basis of subject-subject relations of its participants "around" the central person - the student. The culture of child-centrism should determine all the activities of a modern teacher.

The center of attention and organization of the educational process in higher education is the student with his needs, drives, and motives. The child is the sun around which the entire pedagogical process revolves. Education, the educational environment, and educational interaction centered around the individual are based on the assumption that a person is not yet sufficiently well-known by himself, and only he himself, as well as with the help of a specialist, can try to build his education, consciously take risks, and ultimately be responsible for the results of his movement in a constantly changing, difficult to predict environment. This led to such a concept as the "trajectory of the educational movement." Real subject-subject educational interaction in higher education primarily involves creating conditions for equal relations between all participants in the educational and educational-research process, prioritizing relations for one of the subjects, namely, the student, and centering the educational-

cognitive-educational environment around a specific, each individual. In a built learning environment centered around the individual, a dialogue of full-fledged subjects of interaction should take place. That is, such learning is determined only by the subject-subject relations of its participants: teachers organize learning and create favorable (desirable) conditions for a productive educational process, while students carry out learning activities, that is, they are motivated and diligently comprehend the world. At the same time, the subjective orientation of learning in no way means the complete determinism of one participant in the educational process – neither the student nor the teacher. The student's subjectivity is determined by the presence of his own educational goals and objectives, the desire to master the content of education outlined in the program documents (in accordance with educational standards), mastering the methods of independent search for knowledge, the desire to develop the student as a person, mastering social values, striving for professional competence, motivation to perform specific types of work and educational tasks, and thus, by carrying out educational activities, achieve an educational result – learning in the cultural and professional sense. "The subject is, in fact, the one who has a future", because he is involved and is involved in the future, in the further development of society. Subjectivity is perhaps the main feature of learning.

In a student-centered learning environment, the functions of the participants in the learning process should be as follows: LEARNING SUBJECT - TEACHER LEARNING SUBJECT - STUDENT The teacher is the subject of the learning process, who builds an educational and cognitive environment, creates favorable (desirable) conditions for its functioning - productive learning, directs motivational influences on other participants - learning subjects - students (student) to achieve the set educational goals and objectives. Carries out the management of teaching-learning, is the organizer, moderator The student is the subject of learning activity in the case of conscious, motivated and active learning. Carries out learning activity - diligently comprehends world knowledge, develops methods for independent search for knowledge, forms of its implementation, active actions, etc. The teacher's task is to provide an accessible presentation of the content of knowledge in accordance with the content of the study, to outline the ways and possible means (or organization) of his study for the student

and to encourage him to actively seek knowledge independently. The student's task is to master social values, develop as a person, acquire professional competence, master the methods of independent search for knowledge. It is worth taking into account that the student's subjectivity is determined by: - the presence of his own educational goals and objectives, - the desire to master the content of the study outlined in the program documents, - mastering the methods of independent search for knowledge and gaining experience, - the desire for his own development as a person, - the mastery of social values, the aspiration for professional competence, - the motivation to perform specific types of work and educational tasks. Such motivated, active and systematic work is the prerequisite for achieving an educational result - learning. Krylov K. 8 The creation of the most natural environment for the development of the subject of student activity will be facilitated, or rather ensured by: - equality of subjects, - dialogical learning, - interactive communication, - joint activity of study participants, - activity of each subject, - exchange of life (educational, professional) experience acquired by each participant, priority of the creative component of education, – subjective activity of the teacher. The initial activity of a pupil, student, student, listener is most often not mentioned at all... so far in pedagogy textbooks its subjects appear completely impersonally – only in the plural: children, pupils, students, etc. It is significant that in the "Encyclopedia of Education" (2008), in both editions of pedagogical encyclopedias -"Pedagogical Encyclopedia" (1960s), "Russian Pedagogical Encyclopedia" (1990s) there are not even articles under the title "learning". Learning as a phenomenon in education has not yet been recognized by pedagogical science, in the scientific field of pedagogy there is no such category as "learning", such a category is distinguished by psychological science. Learning in the general psychological sense is an activity inherent to a person, which appears in the form of intellectual or physical actions. Scientific discussions against the background of reforming the basic conditions of learning in higher education are already taking place, but they do not yet affect educational practice. Learning - like an illegitimate child, it exists, rather weakly and little by little, but individuals and groups of individuals who should be responsible for its capacity do not recognize and mostly do not provide the conditions for its further, desired and

successful growth. It is already relevant to consider learning as a new pedagogical concept, with the transfer of higher education from the paradigm of learning (knowledge) to the paradigm of learning. It is clear that the concept of "learning activity" comes from the name of the subject of learning itself - the student, that is, the one who learns. Learning is a type of human experience acquisition, learning and is the transformation of "own experience with the help of socially produced knowledge". Learning is a purposeful process of students' assimilation of knowledge, mastery of skills and abilities. In a broad sense, learning is the mastery of social experience with the aim of using it in life. Let us dwell on three signs of learning. The main feature of learning is a person's conscious desire to master certain knowledge, acquire skills and abilities, achieve a given form of behavior, carry out a planned type of activity, etc. The defining feature of learning is goal orientation - a person's ability to set achievable goals and direct his/her activities to comprehend a new space of knowledge and acquire competencies in the learning process indicates his/her subjective nature. From the above, another essential feature of learning follows – the acquisition of new knowledge during learning activities. Goncharenko S.U. Ilyasov I.I. Fitsula M.M. 9 A thorough description, systematization of the basic parameters and comparison of the learning paradigm and the teaching paradigm show, in particular, the following differences: 1. According to the goals of learning, it is aimed at constructing learning situations. 2. The teaching paradigm orients teachers to design curricula and courses, while the teaching paradigm - to create a developing educational environment. 3. The learning process is linear, cumulative in nature, and the learning process is system-forming and open. 4. Knowledge according to the learning paradigm "comes from outside", is transmitted from the teacher in parts and is controlled by him, and according to the learning paradigm, it should be constructed by the student, is based on his individual experience, therefore he controls the process of acquiring the necessary knowledge and experience. 5. Approach to the organization and structure of learning: "Atomistic: parts precede the whole" under traditional conditions as opposed to learning priorities: "Integral: the whole precedes the part".

6. The mandatory presence of both the teacher and the student in the learning process, and the indispensable activity of the student form the basis of the learning process, even in the absence of the teacher. 7. Classes in the learning paradigm begin and end at a clearly defined time, classes in the learning paradigm are not strictly regulated, the educational environment is available to the student at any time. 8. The teacher and student (students) in the learning paradigm work in isolation, while in the learning paradigm they work in partnership as one team, where the teacher takes on the role of "manager of the educational process, creator of learning methods and educational environment". 9. The lecture system as the leading form and method of learning in higher education and the learning process are isolated (separated) and enter into contradictions. 10. Assessment knowledge for the traditional learning process takes place at the end of the course, and in the priorities of learning is constant, because it should demonstrate the improvement of the personality. Let us add here only that the assessment of learning-teaching results occurs: in the traditional system - in comparison with norms (formulas, definitions, etc.) and samples (exact answers), in the learning system the comparison of educational achievements should be in time relative to the previous level of education of one individual. The age of the student is of considerable importance in educational work. The typology of modern students is characterized by different levels of asymmetry), perception (functional information characteristics and a combination of success indicators: - low-(extroverts, left-hemisphere), successful medium-successful (extroverts, right-hemisphere), - high-successful (introverts, righthemisphere), - disharmonious (extroverts, left-hemisphere), have significant internal heterogeneity, are a variable level. Makarova N., Tryapitsyna A. Ananyev N.G. 10 4. The teacher and his functions in a higher educational institution A university teacher is a subject of pedagogical activity, an organizer of the educational process. It is the teacher who is responsible for creating conditions for the development of a comprehensively developed personality.

The teacher primarily acts as an organizer and leader of students' cognitive activity, creates conditions for productive learning (effective assimilation of knowledge, creation of a psychological climate, alternation of educational sessions, standardization of SRS work, setting goals and tasks, takes care of the development of students). The teacher as a subject performs a responsible task of higher education. The teacher as an object himself undergoes various influences in daily

pedagogical activity. (without subjective characteristics) The teacher must be an objective carrier and exponent of social values. It is a wellknown truth: "you can treat, judge and teach only with clean hands". The content of the academic discipline must pass through his consciousness. The teacher must have well-developed logical thinking, the ability to distinguish the main thing and identify logical connections in subjects and phenomena. The teacher can teach directly or indirectly (through a system of tasks). The activities of a university teacher consist of planning activities related to thematic material and educational activities, purely educational work, organizing activities, both their own and students', stimulating their activity, controlling, regulating and correcting the educational process and students' learning results, analyzing the results of activities. It can be argued that there are more than 40 specific types of work of a teacher in a higher school. In general, a teacher in a higher school performs several functions in a university: o pedagogical, o organizational, methodological, o scientific (research), - educational. There is a separation of general pedagogical functions into informational, mobilization, developmental, orientational and general labor functions into constructive, communicative, research, organizational. Another classification formulates functions that reveal the teacher's ability to professionally conduct pedagogical activities: - organizational as a leader, a guide in the "zun" labyrinth; - informational as a carrier of the latest information: - transformational in the transformation of socially significant content of knowledge into an act of individual cognition by the student; - indicative and regulatory, because the structure of the teacher's knowledge determines the structure of the student's knowledge; - mobilization for the transformation of the object of education into a subject, self-education, self-movement, selfaffirmation. Fitsula M.M. Slepkan Z.I. Fitsula M.M. Vitvitska S.S. Yesareva Z.F. Kuzmina N.V. Vitvitska S.S. 11 Pedagogical activity and professional stability of a higher school teacher is based on such components as: - motivational component - emotional component personal component - professional and pedagogical component. Teaching is the teacher's activity in the learning process, during which he sets cognitive tasks for students, communicates new knowledge, organizes observations, laboratory and practical classes, manages their independent work, checks the quality of "zun".

The effectiveness of teaching depends on both the skills and efforts of the teacher and the student's efforts to acquire knowledge, that is, on the effectiveness of learning. The main element of the pedagogical process is pedagogical tasks. Pedagogical activity is considered as a process of performing sequential tasks of different levels complexity. The determinant of a teacher's qualification can also be his pedagogical skills and pedagogical techniques in communication and non-verbal communication, observation, motivation and influence. The modern development of society is rapidly changing the roles of subjects in higher education. The teacher has lost his central position, and the development of the information society is also changing his priority in owning the source of knowledge. The teacher also acquires a new role under the guidance of distance learning, when he becomes the coordinator of the process of independent learning. 5. Features of the pedagogical and educational process in higher education. Functions of higher education o The main specificity of the educational process in higher education is that the pedagogical triangle, namely "transfer of knowledge - assimilation of knowledge - construction of a knowledge system" is supplemented by a professional triangle that connects the educational, educational and scientific-professional activities of teachers and students. o The essence of higher education is distinguished by its specificity of both the teaching process and learning, which is determined by the goals and objectives of higher education. o (Thus) The main features of the pedagogical process are the cooperation of the teacher and the student, aimed at achieving a single goal and the inseparability of the processes of teaching and education. The dynamics of the development of the pedagogical process depends on the relationship between teachers and students. o The features of the educational process are due to the fact that the objects of education are (should be) at the same time its subjects. o A feature is or should become the principles of person-centered education, relevant for modern times. The basis for building a personality-centered educational system in higher institutions is the design of learning conditions on the basis of subjectsubject relations of its participants. Kurlyand Z.N. Fitsula M.M. Fitsula M.M. Golovenkin V.P. Fitsula M.M. 12 o A significant difference of such an educational model is the leadership of the organizer (teacher, moderator) of teaching-learning, which is carried out through the independent search of active actions by the subject. This is achieved by creating the most natural environment for the development of the subject, through dialogical learning of subjects of the educational process, interactive communication and joint activities of training participants, exchange of life experience acquired by each participant and, which is extremely important, the priority of the creative component of education. o We emphasize that the presence or absence of dialogue and creative participation of the student in learning is a "cardinal", decisive feature or "basis" for building the educational process in a higher education institution and the characteristics of the educational environment as student-centered or not. So, the fundamental basis of educational interaction in a higher education institution is the form of dialogue between the subjects of the educational process. Where consciousness begins, there dialogue also begins. However, it is worth noting that while in higher education, the subjective pedagogical activity of the teacher is decisive, whose will will ultimately make the choice of a dialogical or other method of teaching students. o To the above features, it is worth adding the adaptation of students in a higher education institution, the age characteristics of student youth, the socialization of students in groups, as well as the role of departments in managing the educational process and their responsibility for learning outcomes. The driving forces (and contradictions) of the pedagogical process are: - The contradiction between the requirements for students and the real possibilities for their implementation – their compliance is the main contradiction. It is desirable that the requirements for those who study correspond to the "zone of proximal development" of a young person (L. Vygotsky). This is essentially a source of development of the educational process, if the established requirements are commensurate with the capabilities of those who study. Such a contradiction is also specified by others, of a lower order. - The contradiction between the complexity of the phenomena of social life and objects that the student studies, and his insufficient life experience. - The contradiction between the ultra-fast, accelerated flow of information and the ability to take it into account (implement flows) daily in the educational process. There is also a difference and, on this basis, a contradiction regarding the leading meaning of "learning to learn", that is, the actions, activities of the student and: - the one-sidedness of the educational process; -

fragmentation of learning, mosaic (clip) arrangement of its perception; – methods of verbal communication standardized (so far) in standards. The effectiveness of the educational process is determined, among other things, by its compliance with the content of education, forms and methods of learning.

Also, perhaps the primary task should be its compliance with the needs of social life. The criteria for the effectiveness of the pedagogical process are expressed in the form of indicators regarding the signs of education of those who study, where, among other things, it is indicated: culture of behavior, social activity, independence in all types of activity, formation of a scientific worldview, positive attitude to learning and interest in knowledge, diligence, professional orientation, etc. Bakhtin-Bibler Concept Fitsula M.M. Fitsula M.M. 13 Main functions of the learning process: The educational function involves the assimilation of a system of scientific knowledge by students, the formation of skills and abilities. The developmental function is manifested in the development of students' thinking, abilities; the formation of their will, educational interests, motives, etc. The educational function is aimed at the formation of a scientific worldview in students, the development of moral, aesthetic, labor and physical qualities of the personality. The functions of learning are closely interrelated and are implemented in daily practice.

The concept of "higher education", as well as the concept of human education in general, is considered in pedagogy as a social phenomenon. Human education itself, in its historical development, became a means of transferring knowledge from one generation (older) to another (younger). This is the central function of education. Education is a didactic system of activity that is constantly developing and changing, ensuring the upbringing and development of a person. The following are transmitted and assimilated:

- 1. the activity itself in its specific content;
- 2. the relations that arise in the process of this activity;
- 3. general principles, norms, model of activity and relations.

Social activity and social relations in the process of education are a manifestation of the social essence of education.

The social essence of education is manifested in the unity of the content, operational-procedural and motivational aspects of education,

which are embodied in the form of specific requirements that society places on education.

An important element of learning is the application of knowledge in practice.

Learning is the process of students' assimilation of information in the form of knowledge, skills and abilities with the help of a teacher (teacher) as the organizer of this process. The learning process is essentially a movement through cognition from ignorance to knowledge, from incomplete to more complete, broader and more accurate knowledge. In the learning process, cognitive, practical skills and abilities are formed, and students and students are developed and educated.

The logic of the learning process is an optimally effective path for the movement of a person's cognitive activity from the initial level of knowledge, skills and abilities and development to the required level of knowledge, skills, abilities and development. It includes a number of components: awareness and understanding of educational tasks; independent activity aimed at mastering knowledge; determination of laws and rules; formation of skills and abilities; application of knowledge in practice; analysis and evaluation of students' educational activities.

The concept of "learning process" covers all components of learning: the teacher, the forms, methods and means of learning that he uses; student who works under his guidance in class and independently at home; providing the educational process with clarity and technical means. The educational process is an active interaction between the teacher and the student, which consists of two interrelated processes – teaching and learning.

Teaching is the activity of the teacher in the learning process, during which he sets cognitive tasks for students, communicates new knowledge, organizes observations, laboratory and practical classes, manages their independent work, checks the quality of knowledge, skills and abilities. The effectiveness of the process depends on both the teacher's skills and efforts and the student's efforts to master knowledge, that is, on the effectiveness of learning.

Learning is a purposeful process of students' assimilation of knowledge, mastery of skills and abilities. In a broad sense, learning is the mastery of social experience with the aim of using it in life. The teacher can teach directly or indirectly (through a system of tasks).

The structure of the learning process is a structure that includes a number of interrelated components: perception (direct, indirect), understanding (awareness, comprehension, enlightenment), memorization, generalization and systematization, application, effective practice as an impetus for cognition and a criterion for the truth of the acquired knowledge.

Structurally, the learning process is formed by the following components:

- target forming the goal of studying the material in the lesson, the subject and the educational goal of the educational institution;
- stimulating and motivational encouraging students to active cognitive activity, forming appropriate motivation in them;
- content optimal selection of subjects of the curriculum, the content of educational programs and textbooks, as well as the thoughtfulness of the content of each lesson;
- operational and effective selection of techniques, methods,
   forms and means of learning;
- control and regulatory control over the assimilation of knowledge, the formation of skills and abilities;
- evaluative and effective identifying the level of knowledge, skills and abilities of each student, the reasons for failure and their elimination.

The main functions of the learning process:

The educational function is basic and involves the assimilation by students of a system of scientific knowledge, the formation of skills and abilities.

- 2. The educational function is aimed at forming the scientific worldview of students through the assimilation of a system of scientific knowledge about nature, society and man, the upbringing of moral, labor, aesthetic and physical qualities of the individual.
- 3. Developmental, especially for the spiritual, mental and physical development of the student, has a deep socio-psychological and pedagogical content. The content and goal of education is to ensure the constant development of the student, his spiritual formation, the harmonization of relations with the person and others, with the social environment. In this way, education at the state level creates conditions for

the development and self-development, upbringing and self-education, learning and self-study of everyone and everyone.

4. The function of self-improvement should ensure the constant self-education of students, self-education, systematic formation of learning skills and abilities, as well as motivation for educational and cognitive and future professional activities. The isolation of this function means the orientation of education to the European and world educational levels. In pedagogical theory, in which special attention is paid to self-improvement, self-determination, self-realization of the personality, the term "personality formation" is less and less common.

The methodological basis of the learning process is the theory of cognition, which studies the nature of scientific cognition and its possibilities, the main laws of the cognitive process, the forms and methods of human cognition of the surrounding reality, the conditions for the truth of cognition.

Cognition is the process of purposeful reflection of objective reality in the minds of people. Common in the processes of learning and scientific cognition is their focus on the knowledge of the laws and laws of the objective world.

The processes of learning and cognition have the following differences:

- cognition concerns the object of cognition itself, in learning it is possible to use its visual or verbal image;
- in cognition, objectively new, unknown things are discovered, while learning also involves the formation of skills and abilities, and cognition is only the disclosure of the truth;
- practice in learning helps to better understand and master the material, and does not serve as a criterion of truth, as in cognition.

The driving force of the educational process is the result of contradictions between cognitive and practical tasks, on the one hand, and the existing level of knowledge, skills and abilities, on the other hand. The driving forces of the educational process are its contradictions between:

- the requirements of society for the learning process and the general state of this process, which requires constant improvement;
- the level of knowledge, skills and abilities achieved by students and the knowledge, skills and abilities necessary to perform new tasks set before them;

- the frontal presentation of the material and the individual nature of its assimilation;
  - understanding of the material by the teacher and students;
- the theoretical form of knowledge and the skills to apply them in practice.

Optimization of the learning process (Latin optimus – the best, most convenient) – the process of creating the most favorable conditions (selection of methods, means of learning, provision of sanitary and hygienic conditions, emotional factors, etc.) to obtain the desired results without additional time and physical effort.

Y.K. Babanskyi includes the efficiency and effectiveness of the learning process among the criteria for optimal learning; the time and effort spent by teachers and students to solve educational tasks.

For centuries, society was satisfied with an extensive approach to organizing learning. This approach assumed the achievement of learning results due to quantitative factors (increasing the number of years of schooling, the number of hours spent studying academic subjects, etc.) and over time it exhausted its capabilities. With the development of science, an increase in the volume of information, the actualization of the problem of producing the intellectual wealth of society led to the need to intensify the learning process.

Intensification of the educational process (French: intensification, from Latin: intension – tension + fasio – I do) – tension, activation of the mental capabilities of the individual in order to achieve the desired results.

Laws and patterns of learning. The educational process has its own laws and patterns that determine the order of achieving the goals and objectives of learning, contribute to the effective management of educational activities, provide an opportunity to predict results, justify and optimize the content, methods and forms of learning.

The laws of didactics are its objective, internal, essential and relative stable relationships that are revealed during the organization and conduct of the educational process.

The following laws apply in domestic didactics:

- 1. The law of social conditioning of goals, content and methods of learning.
  - 2. The law of educational and developmental learning.

- 3. The law of conditioning of learning by the nature of students' activities.
  - 4. The law of integrity and unity of the didactic process.
- 5. The law of unity and interconnection of the theory and practice of learning.

The laws of the learning process are conventionally divided into objective and subjective.

Objective laws of the learning process:

- 1. Educational and developmental nature of learning. In the learning process, based on the assimilation of a system of scientific knowledge, a scientific worldview, moral, labor, aesthetic and physical qualities of students are formed, and their attitude to learning is developed. At the same time, personality development is taking place cognitive processes, attention, speech, emotional and volitional sphere, etc.
- 2. The conditionality of learning by social needs. Each stage of the development of human civilization requires a certain increase in the upbringing and education of a person, which is provided by learning.
- 3. The dependence of the effectiveness of the educational process on its conditions educational and material base, the availability of highly qualified pedagogical personnel, the interest of the public in the educational and educational process.
- 4. The dependence of the learning process on the age and real educational opportunities of the student the level of development of the intellectual, emotional and volitional sphere, the ability to learn and work capacity, attitude to learning, etc.
- 5. Learning involves purposeful interaction between the teacher, the student and the object being studied. The teacher must direct the cognitive activity of the student, control it even when he masters the subject independently.

The educational process is more effective only if the students are active. Subjective regularities:

- 1. Concepts can be learned only when students' cognitive activity is organized regarding the correlation of concepts, the separation of some concepts from others.
- 2. Skills will be formed only if the reproduction of operations and actions underlying them is organized.

3. The solid assimilation of the content of the educational material is facilitated by systematically organized direct and delayed repetition of this content and its introduction into the system of previously learned content.

The specificity of didactic regularities is that they reflect stable dependencies between all elements of learning – the activities of the teacher (lecturer), the activities of the student (student) and the object of assimilation, that is, the content of learning.

Knowledge of the laws of learning contributes to a deeper understanding of its principles. Learning is carried out on the basis of substantiated and practically proven didactic principles. Determined by the laws and objectives of upbringing and education, the principles of learning determine its direction, content, organizational forms and methods.

## 2. Principles of learning

The principle of learning (didactics) is a statement that determines the content, organizational forms and methods of educational work of a higher education institution.

Modern didactics considers the following principles:

- 1. The principle of scientificity, which involves the study by students of a system of scientific statements and the use in teaching methods close to those used in science. The principle requires revealing the cause-and-effect relationships of phenomena, events, processes, penetrating into their essence, demonstrating the power of human thought, introducing the methods of science, revealing the history of development, the struggle of trends, the interrelationship of sciences.
- 2. The principle of systematicity and consistency implies the systematic work of the teacher, taking into account the material studied when studying new material, revealing new material in parts, fixing students' attention on the main issues, thinking through the system of classes, showing intra-subject and inter-subject connections, systematic attendance of classes, sequence of homework, constant repetition of educational material, etc.
- 3. The principle of accessibility means that learning is successful and effective provided that its content, forms and methods correspond to the age characteristics of students, their mental capabilities. The implementation of this principle implies compliance with the rules

"from simple to complex, from known to unknown", from "close to distant".

- 4. The principle of the connection of learning with life is implemented, relying on the life experience of students, applying the acquired knowledge in practical activities, revealing the practical significance of knowledge.
- 5. The principle of consciousness and activity of students follows from the goals and objectives of the national school and those features that a meaningful approach to the acquisition of knowledge provides. Consciousness in learning is ensured by a high level of its activity.
- 6. The principle of clarity requires building the learning process on the basis of students' lively perception of objects and phenomena of objective reality. After all, sensory perception of educational material contributes to the formation of clear, accurate images of the imagination, activates mental activity, is an effective means of understanding the material, and depending on the nature of the reflection of educational objects
- 7. The principle of the strength of the assimilation of knowledge, skills and abilities. Knowledge, skills and abilities are strong if they form a system that is constantly updated, refined and consolidated (memorizing new material in combination with what has been learned; activating students during repetition; new grouping of material in order to systematize it; highlighting the main ideas during repetition; using various methods, forms and approaches during repetition; independent creative application of knowledge; constant return to previously acquired knowledge to find new meanings in it, reassessments, etc.
- 8. The principle of an individual approach to students allows everyone to follow their own path in the conditions of collective educational work. When implementing it, the level of mental development of each child, his knowledge and skills, cognitive and practical independence, interests, perseverance, and working capacity are taken into account. The teacher must not only know well the features of the educational and cognitive activity of his students, but also be able to provide them with assistance, organize individual work with those who need it.
- 9. The principle of emotionality is based on the fact that in the process of cognitive activity, students develop a certain emotional

state, feelings that can contribute to or hinder the successful assimilation of knowledge. The process of cognitive activity is promoted by a lively, imaginative presentation of educational material; optimistic completeness and logic of information presentation, the use of interesting examples; the use of visuals and computer technology; a sense of duty fulfilled; language, the teacher's attitude towards students, his appearance, etc.

The principles of learning are closely interconnected, they condition each other. None of them can be used without taking into account the others. Therefore, in the learning process, it is necessary to be guided by all the principles.

3. The concept of teaching methods and their classification.

Pedagogical skill involves mastering various methods, forms, and means of teaching, with the help of which the content of the world is realized at each level.

A teaching method is a method of orderly interaction between teachers and students, with the help of which the problems of education, upbringing, and development in the learning process are solved.

The concept of "teaching method" is closely related to the concept of "teaching method", which means "detail of the method" and is a partial concept of the concept of "method".

In didactics, there are different approaches to the classification of teaching methods.

A well-known researcher in the field of didactics, Yu. Babansky, identifies the following three groups of methods:

1. Methods of organizing and implementing educational and cognitive activities, which are aimed at transferring and assimilating knowledge and skills by students.

These include verbal, visual, and practical teaching methods.

) verbal teaching methods include explanation, story (artistic, popular science, descriptive), lecture (introductory, thematic, review, final, informational, problem), conversation (introductory conversation, conversation-message, conversation-repetition, control, reproductive, heuristic, Socratic, catechism), work with a textbook (reading the text, answers to the questions given in the textbooks after the text, memorizing the texts of rules, laws, poems);

Explanations. With their help, the content of facts and phenomena, laws, rules, concepts is revealed, complex issues are brought to an understanding, to conclusions and generalizations that are beyond the power of students. Explanations are accompanied by various means of visualization, observation, experiments.

The story, as a teaching method, is a monologue form of knowledge transfer. It is used when it is necessary to present educational material systematically, consistently. A properly constructed narrative includes an accurate description, narration, and logical substantiation of facts. A narrative can be artistic, popular science, or descriptive.

An artistic narrative is a figurative retelling of facts and actions of characters (for example, stories about geographical discoveries, the creation of artistic masterpieces, etc.).

A popular science narrative involves a theoretical analysis of certain phenomena.

A descriptive narrative is a consistent presentation of the features, characteristics of objects and phenomena of the surrounding reality (a description of a historical monument, a museum-estate, etc.). Each narrative should provide an educational focus for learning. The teacher should operate only with scientific facts that are still true, highlight the main idea, and speak in an accessible and emotional manner. A mandatory requirement is also the preparation of a plan.

Lecture. A feature of a lecture is an oral presentation of a large volume of educational material that is complex in terms of logic. It is practiced in high school and higher educational institutions. First of all, it requires familiarization with the lesson plan, which helps the audience follow the lecturer's opinion. It is important that students take notes on the content of the lecture, highlight the main points in it. Successful delivery of a lecture requires proper preparation: drawing up a plan; selecting material that reveals the content of the topic, visual material, as well as appropriate technical devices, etc. It is important for the teacher to be able to maintain the attention of students during the lecture. For this, an unusual beginning of the lecture, a problematic presentation of the material, interesting examples-illustrations of theses, as well as clarity, TZN, etc.

Educational lectures, according to their didactic purpose, can be introductory, thematic, review, instructional, and final.

The introductory lecture is designed to give a general idea of the tasks and content of the academic discipline, to reveal the structure and logic of a specific field of science, technology, or culture, its relationship with other disciplines, and to arouse students' interest in the academic subject.

A thematic lecture is always devoted to a specific course topic.

A review lecture is given to students before final exams, and to applicants before entrance exams.

The final lecture summarizes the studied material in a particular subject, highlighting the main issues and focusing on the practical significance of the acquired knowledge for further study. It should stimulate interest in a deeper mastery of the subject and determine the methodology for further independent work on it.

The most common type of lecture is informational, which involves transmitting to the audience a certain amount of information from a certain academic discipline by sequentially revealing scientific facts, phenomena, and processes. At the same time, they are simple consumers of ready-made educational information. However, the development of the domestic educational system, its humanization, and the tendency to realize the creative abilities of each individual have led to the emergence of new types of lectures – problem lectures, visualization lectures, lectures for two, lectures with pre-planned errors, and press conferences.

A problem lecture involves the assimilation of new information by its "discovery". The lecturer's task is to create a problem situation and encourage students to search for a solution to the problem, leading them step by step to the intended goal. For this, new theoretical material is presented in the form of a problem task, in the conditions of which there are contradictions that require resolution.

A conversation is a teaching method in which the teacher, using skillfully posed questions, encourages students to reproduce previously acquired knowledge, draw independent conclusions and generalizations based on the learned material.

By purpose, the following types of conversations are distinguished in the educational process:

- an introductory conversation is held during preparation for laboratory classes, excursions, and the study of new material;

- a conversation-message is based mainly on observations organized by the teacher in classes with the help of visual aids, notes on the board, as well as on the material of the texts of literary works and documents;
- a repetition conversation is used to consolidate the educational material;
  - a control conversation is used to check the acquired knowledge.

By the nature of the students' activity, the conversation can be:

- reproductive, which is aimed at reproducing previously learned material;
- heuristic (Socratic) when the teacher uses his questions to guide students to form new concepts, conclusions, rules, using their acquired knowledge and observations;
- catechism, the essence of which is to reproduce statements that require verbatim memorization.

The effectiveness of any type of conversation depends on the correct formulation of questions. The name of the student who will answer the question should be called only after a short pause, which must be given to think over the answer. Weaker students should be addressed more often. Long formulations and double questions that introduce confusion into the answer should also be avoided. If students cannot answer the questions posed, leading questions are used.

Working with a textbook. Independent work of students with printed text allows them to deeply comprehend the educational material, consolidate it, and demonstrate independence in learning. The most common types of such work include:

- reading its text in order to consolidate the knowledge gained in class. When starting to read a textbook, one should recall the material that was studied, which will help to penetrate deeper into the content of what was read. After reading the text, one should mentally reproduce the main theses of the topic;
- answers to the questions given in textbooks after the text of the topic. This teaches them to read the text carefully, helps to distinguish the main points in it, and establish cause-and-effect relationships;
  - memorizing texts of rules, laws, poems, etc.
- Visual teaching methods, which include illustration, demonstration, and independent observation.

The essence of illustration is to demonstrate illustrated manuals, posters, geographical and historical maps, diagrams, drawings on the

board, paintings (photographs, models, etc.). In the educational process, plants, living animals, minerals, and equipment are often directly used for illustration. Illustrations facilitate the perception of educational material, contribute to the formation of specific ideas, precise concepts.

Demonstration. It involves showing materials in dynamics (using devices, experiments, technical installations, etc.). This method is effective when all pupils and students are able to perceive the subject or process. The teacher focuses on the main thing, helps to highlight the essential aspects of the subject, phenomenon, accompanying the story with appropriate explanations. When demonstrating models and production processes at the enterprise, it is necessary to ensure compliance with safety regulations.

Independent observation is a direct independent perception by pupils and students of the phenomena of reality in the learning process. The methodology for organizing any observation involves several stages: instruction on the purpose, task and observation methodology; recording, selection, analysis and generalization of its results. The work performed must be evaluated.

3. Practical teaching methods include exercises, laboratory work, practical work, research work.

Exercises are essentially multiple repetitions of certain actions or types of activity for the purpose of their assimilation, which is based on understanding and is accompanied by conscious control and correction.

The following types of exercises are used in the learning process:

- preparatory, which prepare students to perceive new knowledge and methods of applying it in practice;
- introductory exercises contribute to the assimilation of new material based on the distinction between related concepts and actions;
- trial exercises are the first tasks for the application of newly acquired knowledge;
- training exercises contribute to the formation of skills in standard conditions (according to a model, instruction, task);
- creative in content and methods of implementation are close to real life situations;

control – mainly educational (written, graphic, practical exercises).

The number of exercises depends on the individual characteristics of students and should be sufficient for the formation of skills. Exercises should not be a random set of actions of the same type, but should be based on a system, a clearly planned sequence of actions, in particular, gradual complication. They should not be interrupted for a long time. The effectiveness of the exercise also depends on the analysis of its results.

Laboratory work is one of the forms of studying natural phenomena using special equipment, connects theory with practice, equips with research methods in natural conditions, forms skills in using instruments, teaches how to process measurement results and formulate correct scientific conclusions and proposals. Laboratory work is preceded by an instruction: notification of its purpose and tasks, familiarization with the equipment, explanation of the sequence of work, recording and registration of results. For laboratory work, instruction cards are drawn up, which pupils and students can read individually. The teacher monitors the performance of the work and, if necessary, provides consultations. During the performance of this work, safety rules must be observed. It ends with an oral or written report from each of its participants.

Practical work is similar in its characteristics to laboratory work. During it, the teacher organizes a detailed consideration by students of individual theoretical conclusions of the subject and forms the skills and abilities of their practical application. To do this, each student performs a specific task. Practical classes are held in classrooms or training laboratories equipped with the necessary teaching aids.

The list of topics for practical classes is determined by the curriculum of the subject. Usually they are planned after studying the topic or course. The stages of practical work are the teacher's explanation (theoretical understanding of the work), demonstration (instruction), rehearsal (2-3 students work, the rest observe), performance of work (each works independently on an individual task), control (the teacher accepts and evaluates the work).

Research work involves individualization of learning, expansion of the scope of students' knowledge. It is used in the process of studying any subjects. These are mostly reports on observations of natural phenomena, reviews of popular science literature, diagrams of devices, machines, and machines, and proposals for improving technological processes. Elements of research activity in the educational process contribute to the formation of activity, initiative, and curiosity, develop thinking, and encourage independent search.

Verbal, visual, and practical teaching methods in the activities of a teacher and lecturer are interconnected. The task of a teacher is to find their optimal ratio, preventing the unjustified prevalence of some and neglect of others.

2. Methods of stimulation and motivation of educational and cognitive activity are aimed at forming positive motives for learning, which stimulate cognitive activity and contribute to the enrichment of students with educational information. They include a) methods of forming cognitive interests (methods of educational discussion, ensuring success in learning, cognitive games, creating interesting situations, creating a situation of novelty of educational material, using students' life experience) and methods of stimulating duty and responsibility in learning (explaining to schoolchildren and students the social and personal significance of learning; putting forward requirements, compliance with which means they fulfill their duty; encouraging conscientious fulfillment of educational operational control over the fulfillment of requirements and, if necessary, pointing out shortcomings, comments).

Method of educational discussion. A discussion is a public discussion of a controversial issue. It involves an exchange of opinions between students, as well as between teachers and students. Discussion teaches to think independently, defend one's own views, develops the ability to analyze and argue statements, respect the opinions of others, critically evaluate other people's and one's own judgments. During an educational discussion, scientific conclusions are discussed, data that require preparation from sources that contain more information than a textbook. The discussion is designed not only to provide new knowledge, but also to create an emotionally rich atmosphere that would contribute to a deep penetration into the truth.

The method of ensuring success in learning involves helping a student who is lagging behind in learning, developing his interest in knowledge, and striving to consolidate success. Help is provided until they catch up with their peers and receive good grades. Such an

assessment raises the mood, awakens confidence in one's own abilities, and the desire to consolidate success. Ensuring success in learning is all the more effective, the stronger the belief in one's own strengths, the deeper the sense of self-worth.

The method of cognitive game is a planned entertaining learning activity with a didactic purpose. It has a significant impact on the student. The game in the educational process provides a favorable emotional atmosphere for the assimilation and reproduction of knowledge, facilitates the process of mastering the material, encourages educational work, relieves fatigue, prevents overload. With the help of the game, life situations are simulated that arouse interest in educational subjects.

The method of creating interesting situations involves the use of interesting stories, humorous excerpts, etc. in the process of teaching educational material, which are easy to attract attention.

The method of creating a situation of novelty of educational material obliges to emphasize at each lesson the novelty of knowledge that students have enriched, to create a psychological atmosphere in which they receive moral satisfaction from the awareness of their own intellectual growth. All this causes a desire to work more effectively on themselves, to value the time allocated for learning.

The method of using students' life experience. Knowledge and understanding of the scientific foundations of the course of processes that they have observed in life or in which they themselves participated arouses interest in theoretical knowledge, forms a desire to learn the essence of facts and phenomena that they encounter in life.

- 2. Methods of stimulating duty and responsibility in learning include explaining to students the social and personal significance of learning; setting requirements, compliance with which means they are fulfilling their duty; encouraging conscientious fulfillment of educational duties; operational control over the fulfillment of requirements and, if necessary, pointing out shortcomings and remarks. A sense of responsibility is brought up by involving weaker students in imitating the methods of work of stronger ones. It is also possible to collectively analyze a complex task. In this case, the teacher must not only set requirements, but also check their fulfillment.
- 3. Methods of control and self-control in educational and cognitive activities make it possible to check the level of students' assimilation of

knowledge, the formation of skills and abilities. This group includes methods of oral, written, test, graphic, programmed controls, practical testing, as well as methods of self-control and self-assessment.

Oral control (oral survey). It is the most common method in educational practice. Its use contributes to the mastery of logical thinking, the development and development of skills to argue, express one's thoughts competently, figuratively, emotionally, and defend one's own opinion. Oral questioning is carried out in the following sequence:

- formulation of questions (tasks) taking into account the specifics of the subject and the requirements of the program;
- preparation of students for the answer and presentation of their knowledge;
- correction and self-control of the presented knowledge in the process of answering;
  - analysis and evaluation of the answer.

By the level of cognitive activity, questions for verification can be: reproductive (provide for the reproduction of what has been learned); reconstructive (require the application of knowledge and skills in slightly changed conditions); creative (application of knowledge and skills in significantly changed, non-standard conditions, transfer of the learned principles of proof (methods of action) to the performance of more complex tasks).

Questions for oral verification are divided into main, additional and auxiliary.

The main question is formulated so that it is possible to give an independent detailed answer to it.

Additional questions are asked to clarify how students understand a certain question, formulation, formula, etc.

Auxiliary questions are often leading, they help the student correct mistakes, inaccuracies. All of them should be logical, clear, understandable and feasible, and their totality should be consistent and systematic. In the educational process, individual, frontal and condensed (combined) oral questioning are practiced.

Individual questioning involves a detailed answer "for assessment". In this case, it is important to determine in advance who exactly to call, how many students to interview, how much time to allocate for the interview, and also to predict what their friends will do

at this time. It is of great importance to involve students in assessing the knowledge of their friends through reviewing the answers.

Frontal questioning is a test of knowledge, skills and abilities of many students at the same time. In practice, frontal and individual questioning are often combined: the teacher formulates questions and conducts a conversation-testing of knowledge.

A condensed (combined) survey allows you to check the knowledge of several students at once: one answers orally, the rest – perform certain tasks on the board. After completing the task on the board, it is often analyzed by the entire group.

Using this method helps to establish close contact between the teacher and the student, allows you to learn the logic of completing tasks and their assessment, identify gaps or inaccuracies in the students' knowledge and immediately correct them. However, this method requires too much time for testing. In addition, students get nervous during the answer, the assessment is often subjective, because the content of the answer is not recorded, etc.

Written control. Its task is to test the knowledge, skills and abilities of students in writing. It allows you to find out the degree of mastery of skills and abilities in the subject, the quality of knowledge (volume, correctness, accuracy, awareness, ability to apply in practice).

Depending on the specifics of the subject, written control of knowledge is carried out in the form of a test, writing a work, recitation, dictation, etc. The topics of test papers, tasks, exercises should be clear and feasible, correspond to the level of knowledge of students. At the same time, they should require some effort, demonstrate knowledge of the actual material. Written tasks can also be homework.

The positive thing about written control is that in a short time it is possible to form an idea of the knowledge of many students, the results of the test are stored and there is an opportunity to identify details and inaccuracies in the answers. However, written testing requires a lot of time to read the papers, often leading to a decrease in students' literacy if teachers neglect spelling requirements.

Test control (English test – exam, test, experiment) involves the student choosing one or more options from the proposed list, ranking the list, inserting missing words, finding errors. This allows you to

check the knowledge of the entire group's educational material in a short time.

Test control allows you to use time effectively, sets the same requirements for everyone, helps to avoid excessive anxiety. It is also important that the objectivity of the assessment makes it impossible to be random in assessing knowledge, stimulates their self-control. However, the test can only reveal knowledge of facts, but not abilities, it encourages mechanical memorization, not the work of thought, and requires a lot of time to complete it.

Graphic control consists in the creation by the student of a generalized visual model that reflects the relationship, interconnections of certain objects or their set. It is used in drawing, geography, geometry, etc. classes. A visual model is a graphic image of the conditions of the problem, a drawing, a diagram, a scheme, a table (for example, a scheme of a historical battle, certain geographical and historical objects plotted on contour maps). Graphical control can be an independent type of control or an organic element of an oral or written test.

Programmable control is implemented by presenting standard requirements to all students, which is ensured by using the same number and complexity of control tasks and questions. In this case, the analysis of the answer, the output and fixation of the assessment are carried out using individual means (for example, a computer).

Practical testing is used when studying such subjects as physics, chemistry, biology, labor training, etc., which involve mastering a system of skills and abilities. It is carried out during laboratory and practical classes. During practical testing, it is found out to what extent students have understood the theoretical foundations of these actions.

The essence of self-control is the conscious regulation by the student of his activities in order to ensure such results that would correspond to the set goals, requirements, norms, rules, and samples. The purpose of self-control is to prevent errors and correct them.

Self-assessment involves a critical attitude of the student to his abilities and capabilities, an objective assessment of the achieved successes. Taking into account the peculiarities of the process and results of self-assessment, students are divided into those who overestimate themselves, underestimate themselves, and evaluate themselves adequately. To teach self-control and self-assessment, the

teacher must motivate the given assessment, offer the student to evaluate his answer himself. An effective method is also the organization of mutual control.

## 6.3. The importance of education in the development of society and the individual.

Education is an integral part of our life and it is impossible without it.

Why do people most often strive to get higher education? First, it develops a more or less versatile personality who is able not only to do work, but also to think. Some people even get higher education "for general development", and then do not work in their specialty. And of course, higher education provides great opportunities for employment, when occupying managerial positions. Higher education is also more prestigious, it increases a person's status in society.

All people are extremely different. Not all excellent students achieve success in life, not all university masters are actually smart and get a ticket to a happy future through education. There are interesting individuals who simply did not have the opportunity to get higher education, who had to work, for example. Or whose parents were unable not only to pay for a contract at a university, but also to help them live during their studies.

But education still plays a big role in a person's life. Depending on what a person studies, what he is interested in, his personality is formed. Someone will be well versed in technology, but write with mistakes. Someone will learn by heart all the poems of outstanding writers, but will never understand how the country's economy works.

Quality education is an important component in the life of every person, because it allows you to move forward and achieve success. Education develops self-confidence, gives skills and knowledge, helps to form a personality. School education plays a particularly important role in a person's life.

In the modern world, higher education is of particular value, it helps to get a good job and position, moving up the career ladder. High-quality education opens the way for us to the future, makes us socially and intellectually developed, gives us the necessary knowledge.

A person should learn throughout his life, and the education system should provide him with such opportunities.

If we delve into the terminology, then the concept of "education" means the process of obtaining knowledge, acquiring skills and abilities within the framework of mastering educational programs in specialized educational institutions. As for the impact of education on the personal growth of each person, it manifests itself in various directions, in particular:

- Broadening the horizons, forming a worldview based on the acquired baggage of knowledge and critical thinking.
- Development of individual abilities, self-knowledge. This is about memory, thinking, imagination, attention, the ability to notice details, and draw logical conclusions.
- Formation of positive personality qualities, such as responsibility, tolerance, independence and self-sufficiency, sociability.

An educated person is visible from afar. He stands out with a broad horizon, stable knowledge not only in his chosen profession, but also in other areas of human life and activity. A deep understanding of the world, critical thinking, responsibility and independence are the most important features that you will acquire in the process of persistent learning. The ability to be responsible for your own actions and deeds, solve problems, find a reasonable way out of a difficult, sometimes critical situation – all these are features of an educated, self-sufficient, comprehensively developed personality. Educated people are tolerant and sociable, they are able to find a common language with every person, even if this person's views on life are radically different or are frankly wrong.

The most important functions of education are teaching and upbringing in their continuous interaction. The goal of any educational system is to form such a practical worldview of a person that would better combine his professional activity with those general worldview values that are the basis of this system. Since philosophy, since its inception, has always performed the function of theoretical and reflective analysis of the worldview and its further development, it has also acquired important importance in the formation of new educational systems. Thus, the famous teacher and philosopher S. Hessen believes that pedagogical activity in general should be

considered as "applied philosophy". But education, in turn, has a significant influence on philosophy. In this regard, the outstanding American philosopher and educator John Dewey wrote: "When philosophical theory is indifferent to upbringing, it will not live." Based on this, he considered the results of educational activity as the main criterion of the truth of its philosophical principles, and the education system as the most important means of "improving society" and solving its most acute problems.

The interaction between philosophy and education has always played a significant role in the development of mankind, which was the reason for the emergence of such an intermediate discipline as the philosophy of education. It studies the basic laws of this interaction, its various forms. It is important to note that the philosophy of education is not limited to the analysis of only the problems of officially recognized pedagogical institutions, because educational activity includes a number of other means of forming a person: the family, other small groups, the media (especially television), literature, etc.

The modern era has posed fundamentally new important problems for education and its philosophical principles. The aggravation of global problems that increasingly threaten humanity requires significant changes in the entire strategy of the latter's activities, and therefore, the formation of a new type of practical worldview that will determine this strategy. In solving this problem, which has become the most important not only for modern thinkers and politicians, but also for humanity in general, modern education must certainly play a leading role. But it requires significant reform based on a new philosophy of education.

Therefore, thousands of books, both monographic and collective, and tens of thousands of articles, materials of various conferences, etc. are devoted to the development of the philosophy of education and the implementation of its achievements in educational practice. The subject of "philosophy of education" is now taught in almost all higher pedagogical (and not only pedagogical) educational institutions of developed countries. All these efforts are aimed at finding that modern paradigm of our activities and mechanisms for its implementation in modern education, which would be able to positively solve global and other urgent problems of humanity.

• The essence of the concept of "education"

Education is a social system. Being a subsystem of society, education has its own specific place in it. Determining the place of education in the social system is a complex methodological task.

Based on the analysis of socio-philosophical thought, at least two main points of view can be distinguished regarding the place of education in society, without denying the existence of other positions.

According to the first point of view, education is a subsystem of the spiritual sphere of society. Consciousness, as is known, is present in all spheres of society, because the life of society is, in essence, the life of a person. A person as a social subject brings his active principle into all social structures. We can characterize him as a subject of material production, as a social subject, as a political subject, and as a subject of spiritual production. At the same time, consciousness manifests itself differently in different spheres of social life. It seems to accumulate in an ascending order from the material-production sphere to the spiritual, reaching its peak in the latter. After all, the spiritual life of society contains the life of consciousness in its various manifestations. However, the spiritual life of society is understood not only as the life of consciousness in general, but also more specifically, as a specialized sphere of spiritual production in society, as a social form of transmission of spiritual culture (education), upbringing, socialization of people (means of mass communication, propaganda), etc.

The view of the education system as a special sphere of spiritual production really gives us the right to assert that education is a subsystem of the spiritual sphere of society. After all, as already noted, in the process of education a person joins spiritual values, comprehends the world of culture.

At the same time, according to another point of view, education is an element of the material and production sphere. Education is a specific element of the production sphere.

Education also performs the function of a kind of generator of new ideas. In the process of education, there is an exchange of information, experience, knowledge, as a result of which hypotheses often arise, which are subsequently implemented in the form of various concepts.

These functions of education are revealed within the framework of the spiritual sphere of society. If we talk about the functional impact of education on other spheres of social life, then the following functions can be noted.

- In the economic sphere: the function of forming professional qualities of employees, the function of using economic resources to improve the social conditions of education workers, students, etc.;
- In the political sphere: the function of instilling socially formed legal and political values; the function of forming patriotic beliefs, etc.;
- In the social sphere: the function of forming educational communities; the function of social support of the population, etc.

Subscriptions to financial news

The concept of education is the process and result of a person's assimilation of systematized knowledge, skills and abilities, the development of reason and feelings, the formation of a worldview and cognitive processes. An educated person can be called if he possesses ideas, principles and methods that determine a general approach to considering various facts and phenomena, has a high level of developed abilities, the ability to apply what he has learned to as many individual cases as possible, has acquired a lot of knowledge and, in addition, is used to thinking quickly and correctly.

Thus, the concept of "education" implies not only knowledge, skills and abilities as a result of learning, but also the ability to think critically, create, and evaluate from a moral standpoint everything that happens around him. This is a process that endlessly unfolds in the activities and communication of a person with the environment. This is achieved by involving a person in the most important types of activities.

Education is a socially organized and standardized process (and its result) of the constant transmission of socially significant experience by previous generations to subsequent ones, which represents, in the ontogenetic plan, the formation of a personality in accordance with the genetic program and socialization of the personality.

Education and sustainable development

The concept of sustainable development in its modern meaning was formulated in the report of the International Commission on Environment and Development (Brutland Commission) in 1987. This is development that provides a balanced solution to socio-economic tasks, as well as problems of a favorable environment and natural

resource potential in order to meet the needs of current and future generations of humanity.

This concept was initially put forward as a response of the world community to the growing threat of a global environmental catastrophe, but over time it became the only possible favorable alternative for overcoming all other global threats facing humanity – resource, social, demographic, etc. At the UN World Conference on the Environment, the concept of sustainable development became the basis on which decisions and documents were made and, first of all, the "Agenda for the 21st Century".

At the World Summit on Sustainable Development in 2002, four principles were formulated for achieving sustainable development by humanity:

- recognition of the problem;
- collective responsibility and constructive partnership;
- determination in joint actions;
- indivisibility and unity of the human community.

The proposed principles, in essence, repeat the foundations of education, recorded in the report "Education: a necessary utopia" of the UNESCO Commission on Education ("DELORA Report"). Education allows: to learn, to know, to live together, to work.

Thus, education is an educational, basic element of the transformation of society towards sustainable development by providing individuals with the opportunity to implement their ideas about society in life. It is this key role of education that is recorded in the main documents of world forums.

Sustainable development is the process of building a state based on the coordination and harmonization of social, economic and environmental components in order to meet the needs of current and future generations. The basis of sustainable development is the parity of relations in the triad "man – economy – nature".

Sustainable development involves the process of survival and reproduction of the nation's gene pool, activating the role of each individual in society, ensuring their rights and freedoms, preserving the environment, creating conditions for the restoration of the biosphere and its local ecosystems, focusing on reducing the level of anthropogenic impact on the natural environment and harmonizing human development in nature.

Ukraine can ensure the transition to sustainable development only through the effective use of all types of resources, structural and technological modernization of production, and the use of the creative potential of society for the development and prosperity of the state. Determining ways to ensure the sustainable development of the state should be based on the formulation of strategic goals of state-building, taking into account the realities of today, trends in the development of the world community, and the place and role of Ukraine in Europe and the world. The idea of sustainable development concerns not only the present: it is also addressed to future generations.

• Goals, principles and tasks of sustainable development

The main goal of sustainable development of Ukraine is to ensure dynamic socio-economic growth, preserve the quality of the environment, rational use of natural resource potential, meet the needs of current and future generations through the construction of a highly efficient economic system that stimulates environmental sustainability, productive work, scientific and technological progress, and also has a social orientation.

Ensuring sustainable development of Ukraine is based on the geopolitical, geographical, demographic, socio-economic and environmental features inherent to the state, taking into account which the main goals of sustainable development are:

- 1) economic growth the formation of a socially oriented market economy, ensuring opportunities, motives and guarantees for citizens' work, quality of life, rational consumption of material resources;
- 2) environmental protection creating conditions for citizens to live in a high-quality natural environment with clean air, land, water; protection and restoration of biodiversity, implementation of the ecological imperative of production development;
- 3) welfare the introduction of unified social standards based on scientifically substantiated standards of budget security per inhabitant, taking into account regional characteristics;
- 4) justice establishing guarantees of equality of citizens before the law, ensuring equal opportunities to achieve material, environmental and social well-being;
- 5) effective (sustainable) use of natural resources creation of a system of guarantees of rational use of natural resources based on

compliance with the national interests of the country and their preservation for future generations;

- 6) stabilization of population size formation of state policy to increase life expectancy and stabilize the population size, provide comprehensive support to young families, protect motherhood and childhood;
- 7) education ensuring guarantees of accessibility for citizens to receive education, preserving the intellectual potential of the country;
- 8) international cooperation active cooperation with all countries and international organizations for the purpose of rational use of ecosystems, guaranteeing a safe and favorable future.

At the center of sustainable development is a person who has the right to a healthy and fulfilling life in harmony with nature. Achieving these goals requires changing stereotypes of values, humanizing society, activating social policy and providing social guarantees to the population, strengthening the role of associations of citizens, business and scientific circles. To this end, in the field of education, it is necessary to ensure:

- 1) changing stereotypes of a person, forming a new system of values, starting from preschool age, taking into account the intrinsic value of nature and man as a part of nature;
- 2) the process of reviving and building the national education system as the most important link in educating citizens, forming a multi-variant investment policy in the field of education;
- 3) forming an educated, creative personality, developing his physical and moral health, creating state and public systems for providing the information necessary for environmental education and educating the population;
- 4) greening the educational process in preschool institutions, raising a humane, socially active individual from the first years of life, able to understand and love nature, and treat it with care;
- 5) increasing the publication of literature and visual aids about the natural resources of the state, their preservation, multiplication and rational use;
- 6) the opportunity for the population to obtain knowledge on issues of sustainable development and environmental protection, the development of informal environmental education using the media and popular publications;

- 7) increasing the social status of the teacher, improving the structure, content, forms and methods of education.
- The entry of humanity into the third millennium was marked by a change in the world community's view of the future, the recognition of education, human well-being and health as a priority for the development of society, which in the context of global trends should ensure its sustainable development. Today, it is not enough for education to meet the requirements of modernity, it must be ahead of the development of society. That is why the development of Ukraine is impossible without updating the content of education as the basis of its intellectual, cultural, spiritual, social and economic progress. The new strategy for the development of education should ensure the dialectical unity of humanity and nature, create the prerequisites for the harmonious existence of all forms of life and be based on humanity's awareness of the value of nature.
- E. Fromm also emphasizes this: "A new society is possible only when a new person is also formed in the process of its formation, or, in other words, if fundamental changes occur in the structure of the character of modern man. The need for a deep change in man appears not only as an ethical or religious requirement, not only as a psychological need, due to the pathogenic nature of the social character that exists today, but also as a mandatory condition for the physical survival of the human race [3, pp. 17–18]." The scientist convincingly proves that modern society (regardless of its political organization and forms of ownership) is sick, irrational, and must be radically restructured. A necessary condition for such restructuring is the formation of a new person through education.
- First of all, intellectual potential should ensure the transition of society to sustainable safe development, which requires a qualitative transformation of the person himself, who would have the ability to have a global vision of the world. In the consciousness of modern man, an understanding of the connection between the development (evolution) of society and environmental problems, the dependence of man on nature and its development, and not vice versa, should be established, which fills with hope for the prevention of global catastrophes and, above all, the loss of the biosphere of its stability.
- School, education, society should prepare a person who is able to live in a global space. That is why the crisis phenomena in society that

have arisen as a result of his negligent activity can be overcome by forming a new type of person – a person of the future. Then the question arises of what he should be like so that he can cope with the crisis problems of civilization, and also who will be responsible for his formation.

• We define the person of the future as educated, cultured, morally developed, capable of taking competent responsibility for new directions of social progress, a safe state of the environment. V. Andrushchenko writes: "Ukraine, like the whole world, is waiting for a new era and at the same time is trying to find a social, economic and scientific and technical platform for survival, a new paradigm of preparing a person for life, which would ensure not only an adaptive attitude to reality, but also a harmonious development of reality itself in accordance with the human dimensions of life dictated by the ideals of the 21st century [2, p. 36]".

If we see the turn of the person of the future towards socialization (the process of "entering" social life, a condition for self-realization), then the factor is the social sphere itself, and if towards harmonizing relations between man and nature for the sake of survival, the driving force is education as the center of preparing a person for a harmonious life.

At the same time, the report of the International Commission on Education and Science under the leadership of J. Delors in the official document "Education for the 21st Century", prepared for UNESCO (1996), states that in the face of the numerous challenges that the future poses to us, education is a necessary condition for enabling humanity to move forward towards the ideals of peace, freedom and social justice [5].

In line with this strategy, educational reform in Ukraine should include a number of innovations aimed at preserving the achievements of the past and at the same time modernizing the education system in accordance with the requirements of the time, the latest achievements of science, culture and social practice, in order to avoid new global crises.

In developed European countries, the share of science, education and culture in total spending is growing at an accelerated pace, not lagging behind the rapid changes in the social life of society, moreover, in Europe, the doctrine of human capital growth defines school as the basis for this. For many governments of Western Europe, the priority remains investing in people, which is practically a win-win, since education and upbringing turn into economic and ethical dividends. After all, it is estimated that 40% of the growth of the state's GNP is received at the expense of intellectual resources, which also determine the level of national security, because they are the main source of socio-economic progress. Although, so far in Ukraine there is a shortage of people with the necessary intellectual and moral qualities that would ensure a safe existence for society.

We believe that education has the role of a leading factor in the formation of a new type of person, a person of the future as an active and conscious defender of the environment, a person who is aware of his own involvement in the problems of environmental pollution, responsible for the state of the environment at the local and global levels.

Education in pedagogical literature is considered as a system that is constantly developing and appears not only as a set of formal institutions that ensure the transfer of knowledge and skills to the younger generation, not only as a learning process – the assimilation of this knowledge and skills; education, first of all, ensures the socialization of the individual, which means adapting it to society, mastering ready-made forms of social life, ways of interacting with nature and society and at the same time developing a person's own social experience, his or her lifestyle.

Education is a holistic pedagogical process of forming an image of oneself by a person, becoming oneself. It includes the processes of learning and upbringing, and at the same time provides for the socialization and individualization of the individual, its physical, intellectual, moral and social development, as well as the harmonious development of society. An educated person can be considered a person who has not only graduated from school, university, but is also ready for independent life, solving life's difficulties and contradictions in the interests of humanity, goodness, justice, and most importantly – responsible for his or her future and that of society.

The ideal of education ("educational ideal") S. Klepko connects with the understanding of socially significant ideas about the most desirable results of education as a system of achievements of

pupils/students, which corresponds to the dynamics of society and contributes to the success of the individual. The author considers the ideal of education as a representation of knowledge that integrates the current values of society and conveys the idea of the future in society, which is operationalized in setting the goal of education in educational policy, in creating theoretical models of the student, as close as possible to the needs of society and man [1, p. 26].

The goal of state education systems in the world, as critically noted by K. Robinson, is to train narrowly scientific university professors, contrasting them with the "right-hemisphere" ideal of education [4, p. 78].

A person whose brain asymmetry is determined not only by the influence of social factors, but also, above all, by the influence of education is a person of the future. We believe that in a situation of anthropological catastrophe, special importance should be attached to the development of the right hemisphere of the brain of people from childhood and at all stages of education, because it (the right hemisphere of the brain) is responsible for the formation of a holistic consciousness. It is the integrity of the vision of the world, it is the ability to comprehend the complex and non-trivial, it is creativity that is in demand today more than ever before, because only a holistic consciousness creates, builds a holistic world. A "fragmented" consciousness is destructive.

So, the condition for overcoming crisis phenomena in society is the formation of a new type of person, a person of the future, who will contribute to improving the ecological state of the environment, the social well-being of humanity, and its living conditions. The main responsibility for this should be taken by education, the result of which is a formed personality, fully ready for life, able to act independently, make decisions, distinguish good from evil, build relationships with different people and objects of nature in accordance with their own life positions, find the necessary information and successfully use it, building their own mentality. Therefore, society with its social demands, real problems and its development depend on the level of education of people. And education depends on the content of education, its priorities. The only way to transition to sustainable development of society is the formation of "advanced consciousness", primarily in the younger generation. Such consciousness will be ahead

of existence, without which an effective and timely transition of society to sustainable development is impossible, leading to the harmonization of the relations of humanity with nature.

Summarizing the above, we note that the main task of humanity in the III millennium is the qualitative transformation of man himself through the development of education, its content and priorities, which form the personality in accordance with the new global problems of society, ensuring its sustainable development.

# 6.4. Bologna Process and National Higher Education.

The Bologna Process is a process of convergence and harmonization of education systems in European countries within the framework of the Bologna Agreement, with the aim of creating a single European higher education space. The Bologna Process is a process of structural reform of national higher education systems in European countries, changes in educational programs and necessary institutional transformations in European higher education institutions. Its goal is to create a European scientific and educational space by 2012 to increase the employability of graduates of higher education institutions, improve the mobility of citizens in the European labor market, and increase the competitiveness of European higher education. Today, 46 European countries, including Ukraine, are its participants. In 2005, the Minister of Education Stanislav Nikolayenko signed the Bologna Declaration in Bergen on behalf of Ukraine.

# The main objectives of the Bologna Process

From the very beginning, the Bologna Process was designed to increase the competitiveness and attractiveness of European higher education, promote student mobility, and facilitate employment by introducing a system that makes it easy to determine the level of training and the degree of graduates. Another important goal that was set from the very beginning is to ensure high quality of the educational process. In the process of multiple meetings of ministers of education, the main provisions of a single educational process were developed. The division of students into undergraduates and postgraduates was proposed to be replaced by qualification degrees with an emphasis on learning outcomes. The concept of public control of higher education was introduced and is currently perceived as the main policy in the field of European higher education.

For participants who joined the Bologna Process before 2010, goals were set, the achievement of which is expected by 2010:

1. building a European higher education area as a key direction for the development of mobility of citizens with the possibility of employment; 2. formation and strengthening of the intellectual, cultural, social and scientific and technical potential of Europe; increasing the prestige of European higher education in the world; 3. ensuring the competitiveness of European universities with other education systems in the struggle for students, money, influence; achieving greater compatibility and comparability of national higher education systems, improving the quality of education; 4. increasing the central role of universities in the development of European cultural values, in which universities are considered as carriers of European consciousness. 5. The creation of the European Higher Education Area does not in itself mean the achievement of all the goals of the Bologna Process. Thus, we can now say that the Bologna Process and the European Higher Education Area have entered a new phase, namely consolidation and improvement, especially in light of the very different reactions to the implementation of the Bologna Process.

# Implementation of the Bologna Process in Ukraine

The processes of European integration are increasingly influencing such an important sphere of life of Ukrainian society as education. The Bologna Process in Ukraine officially began on May 19, 2005 with the signing of the declaration at the Bergen Conference. Now it is a matter of the national and institutional level of its implementation.

Today, 45 European countries, including Ukraine, have signed the Bologna Declaration, which emphasizes the need for European cooperation in ensuring the quality of higher education, improving the quality of specialist training, strengthening trust between education entities, mobility, compatibility of qualification systems, and strengthening the competitiveness of the European education system.

There are a significant number of problems of Ukrainian higher education in the context of the Bologna Process:

1. Excessive number of educational areas and specialties, 76 and 584, respectively. The best world higher education systems have 5 times less. 2. Insufficient recognition in society of the "bachelor" level as a qualification level, its lack of demand in the domestic economy. As a rule, we do not admit to universities for a bachelor's degree, but for a

specialty. 3. A threatening trend in mass terms towards a deterioration in the quality of higher education, which is growing over time. 4. An increase in the gap between educators and employers, between the education sector and the labor market. 5. Unjustified confusion in understanding the specialist and master's levels. On the one hand, there is a closeness of specialist and master's training programs, their equivalence in educational and qualification status, and on the other hand, they are accredited at different levels, respectively, III and IV. 6. We have come to terms with the neglect of advanced scientific research in educational institutions, which is the basis of university training. Our system of academic degrees is complex compared to the European one, which complicates the mobility of teachers and scientists in Europe. 7. The fate of such a widespread level of education as technical schools and colleges is being decided inadequately to the needs of society and the labor market, despite the fact that their number in the country is four times greater than that of higher education institutions of the III and IV levels of accreditation combined. 8. The system of advanced training and retraining, once well organized for a centralized economy, is a thing of the past. A new system that would meet the needs of a market economy has not been created in Ukraine. Therefore, the very important European principle of "education throughout life" cannot yet be fully implemented in the conditions of our country. 9. Ukrainian universities do not assume the role of methodological centers, innovators, pioneers of social transformations that the country should follow. The level of autonomy of higher education institutions in these matters is significantly lower than the average European one. Educational institutions with national status do not play the role of methodological leaders, while their number has reached about 40% of the total number of higher education institutions of III and IV levels of accreditation. According to the decision of the board of the Ministry of Education and Science of Ukraine dated April 24, 2003, the introduction of a credit-modular system is relevant in view of a number of shortcomings that the previous assessment system had. A number of problems were identified that hinder the entry of domestic science into the European scientific and educational space, including the training of scientific and pedagogical personnel, as well as the need to support young scientists not only by increasing scholarships, but also, for example, by providing

the best scientists with grants for scientific internships abroad. Despite the fact that the transition to the Bologna system is a long and complex process, its introduction is already yielding positive results. Reforming education will create a single market for highly qualified labor, ensure the mobility of teachers and students through the standardization of higher education degrees and, accordingly, diplomas. At the same time, the level of competition in the market for educational services will increase, which will force universities to improve their image by improving the quality of education and be able to provide a level of knowledge that guarantees students future employment in the European labor market.

# **Prospects for Ukraine**

First of all, these are new opportunities associated with the prospect of joining the pan-European educational space, namely: • recognition of Ukrainian diplomas at the international level; · greater mobility in the European space for students and teachers; · joint educational and research projects with European universities; · competitiveness in the European and global labor markets. Integration processes must be associated with important conceptual changes in the content and forms of education. In this area, new and interesting prospects are also opening up for Ukrainian educators. First of all, it should be noted that integration processes, as repeatedly emphasized in the founding documents of the Bologna Process, are combined with the preservation and development of the unique national experience and cultural heritage of each country. Therefore, the "European standard" in education in no way means standardization, leveling the specifics of the educational systems of European countries, but is aimed at their mutual coordination and harmonization with the needs of the modern world. It is no coincidence that "harmonization" is one of the key concepts of many documents. The semantic load of this concept is extremely capacious, because the main goal of upbringing and education is to teach a young person to live in harmony with the world around him and with himself by knowing this world, determining his place in it, mastering a certain type of activity. In modern conditions, the ability to adapt to rapid changes in all spheres of human life, the readiness to respond to the challenges of today is becoming an urgent necessity. In order to adapt educational activities to the dynamics of modern life, the European reform introduces a flexible system of educational credits, provides the opportunity to enroll and accumulate in the general educational achievement of a person not only his previous educational achievements, but also practical experience in a certain field, and the system of continuous education is supplemented by the opportunity to learn throughout life, at one's own pace, in accordance with the individual needs and capabilities of a person. Education becomes multidisciplinary, takes into account the need to master at least one foreign language, the latest information technologies. The rich Ukrainian experience will serve as a reliable "launching platform" for further improvement of the national education system and its harmonization with the European one, as well as the development of educational influences.

### **Prospects for students**

The state of affairs within the ECTS system - the harmonized system for assessing knowledge - looks different. Knowledge assessment according to the ECTS standard is possible using letters from A to F: grade A corresponds to the "five" received in a Ukrainian university, B and C – our grade "good", D and E – "satisfactory", these are passing grades. Grade F is not a passing grade, and the student must take the exam in the subject in the next session. The rules are that grades A in the ECTS system are worthy of only 10% of the best students in the academic group. The next 25% and 30% of successful students can count on good grades (B and C). Passing satisfactory grades are received by 25% and 10% of the remaining students. A student of a Ukrainian university - a participant in the "Bologna process" can already count on receiving a diploma supplement, in which traditional grades will be duplicated by grades according to the ECTS system. It is assumed that this diploma supplement can help our students with employment abroad. However, for now, continuing education in a master's degree at one of the European universities seems more realistic. universities or undergoing an internship under the interuniversity exchange program. The ECTS system can also be useful outside Europe, for example, in the USA or Canada: when continuing education in these countries, it is much easier to transfer "European grades" than Ukrainian "excellent" and "good". The diploma supplement may be of interest not only to those who will study under the master's program, but also to those who wish to enter the doctoral program of one of the European universities. At the same time, in order

to take a place in the master's program of a university of one of the European countries, it is necessary to go through a rather long and complex procedure of coordination with the coordinators of the graduating Ukrainian university and the receiving university. Program coordinators within the framework of the "Bologna process" must work in each university - a participant in this European educational project. The main coordinator of the university ensures the full participation of the university in the student exchange system. In addition to the main coordinators, the university must also have Their responsibilities coordinators. include descriptions of the faculty's curriculum, taking into account its compatibility with the requirements of the ECTS. Faculty coordinators provide advice to students who are going to go on an internship abroad, help in choosing a host university. Faculty coordinators of ECTS programs also compile a detailed faculty description package. These packages are a kind of advertising brochure of the faculty, which every foreign student interested in studying can request. This advertising brochure includes information about the faculty, starting with the mailing address and ending with a detailed description of mandatory and elective courses. This document also includes the number of hours allocated for studying each course and the number of credits that can be earned if you choose a particular course.

### 6.5. Education in other countries

Studying abroad is no longer unattainable. Every year, universities and schools in other countries open their doors to a large number of applicants. But the question is, how to study abroad? Is studying any different from what we are used to? It is hard to imagine that there are countries where children are not given homework. Lessons where you can relax. And there are countries where children study 10-12 hours a day. Plus, they attend additional classes on weekends and during holidays. Each country has its own rules and norms that affect the system. In addition to differences, you can also find general similarities: the development of individuality, purposefulness and inclusiveness. Tutors on the Tema platform are specialists who will not only provide knowledge in the chosen subject. They will also tell you about the principles and norms of culture within the country. And experience and qualifications will allow you to prepare a student of

any level of knowledge for exams in accordance with European standards.

## The education system in Western countries

Western education is one of the best. Because from the first grades, children are given not only school material, but also taught to be a person, develop abilities, and support in their endeavors. Individual programs allow you to choose subjects that can reveal potential and talents. If you are planning to move to one of the Western countries, the resource's teachers will help you learn the language and take international tests and exams.

#### Canada

The country's education is divided into free and paid, public and religious. Each province has its own system, which has similar features. In Canada, for young students, the path to education begins at the age of four or five. High school and middle school are built in blocks, in each block, students study four subjects per semester, and lessons last 75 minutes. In order for a child to receive a diploma and enter a university, he or she needs to score a certain number of points – credits. They are received for mastering the school program. If you don't have enough points, you can stay for the second year.

Instead of parent meetings and general journals, teachers provide information to parents individually, during a personal meeting. And the grades are not disclosed among students and are confidential information.

#### USA

Most public schools are free. And the education system does not have clear standards and prescribed programs. Every year students are redistributed to new cash desks. And when taking tests and exams, there is no general preparation, everyone studies according to an individual program. In the USA, there is no usual physical education. Physical education lessons are equated with a professional sport, where applicants can, thanks to their talents, obtain scholarships and free places at universities.

#### Great Britain

Education in the UK begins at the age of four. The country allows every child to receive free education. Great Britain is famous for boarding schools, where no one has the right to challenge clearly written rules and statutes. Conversations between teachers and parents take place behind closed doors. And grades are sent to e-mail at the end of each semester.

Studying in educational institutions requires participation in school and extracurricular social events and charity.

#### **Finland**

Finland's education is one of the best and is among the top five leaders in the world. There are no weak or elite schools in the country, everyone is equal. Education is completely free, from food in the cafeteria to school supplies. And the usual official address to teachers is replaced by a simple name.

Students are not divided into weak and strong. And comparing children is prohibited. An individual program is drawn up for each, from the number and direction of lessons to the level of difficulty of tests.

Those who do not keep up with the program or want to improve their grades can study for one additional year, after which they can transfer to college or continue their studies at a lyceum.

#### Spain

In Spain, there are state, semi-state, and private church institutions that allow you to get an international diploma. Along with Spanish, children must study Valencian and Catholic.

Students often stay in the country for a second year. And this is the norm for local residents.

#### **Education in the Middle East**

Speaking of education in the East, it is several times inferior to Western countries. Despite the fact that instead of the usual 4-5 hours, children study for ten or more hours, additionally attending various courses and tutors. On the Tema platform, you can find a tutor of various qualifications and areas. And you can book a lesson at a convenient time, day or night, by going to the "Tutors" section.

# Japan

Primary education is mandatory and free. And high school and secondary school are paid. The program between schools may differ from each other, but must necessarily comply with the state standard.

It is normal for the country to hold lessons on Sunday. And mothers can go to classes instead of students and take notes.

#### China

There are both private, state and educational boarding schools in the country. When moving to the first grade and after graduating from primary school, students take tests, which guarantees the transition to secondary school. Class size exceeds the usual norm, sometimes one class can accommodate from thirty to eighty students during a lesson. Much attention is paid to mathematics and Chinese. English is taught only by a teacher from Europe.

Much attention is paid to discipline. Daily constructions and exercises. In case of disobedience, the teacher is allowed to hit the student.

#### South Korea

The education system in South Korea is strictly controlled by the state. And studying in the last three grades before entering university is paid. After school, all children study with tutors. If a student receives a hundred points in mathematics and English, this is much more valuable than knowledge of their native language.

In educational institutions, grades are hidden from public view, you can find out the overall rating. And the transition to the next grade occurs regardless of the student's performance.

#### Israel

The majority of Israeli schoolchildren acquire knowledge in state religious institutions, the rest in Orthodox-religious ones. In Israel, there are mixed educational institutions, and there are separate male and female ones.

The system requires annual collection of funds from parents. If parents are unable to pay the costs, educational institutions are prohibited from excluding a student from classes and educational activities.

# Turkey

There are both state and private lyceums in the camp. Primary, secondary and high school are allocated four years each. In Turkey, there is mandatory training for preschoolers of three or four years. During this training, children learn mathematics, Turkish and English. Up to 60 students can study in one class in state institutions. In Turkish schools, there are mandatory buses that take children to school.

Education in the CIS countries

The Commonwealth of Independent States consisted mainly of Soviet republics, which still retained the former education system. An eleven-year education system and a twelve-point scale for assessing knowledge. And subjects are taught in their native language, regardless of the specifics.

#### Moldova

Moldova's education differs from the education system of other post-Soviet countries. Along with Moldovan, Romanian is a mandatory subject for passing the exam. In Moldova, completion of ten grades is mandatory. In addition to winter and spring holidays, children have an Easter weekend, which lasts ten days.

# Interesting about schools in different countries of the world

How much do children study in different countries

Discussions are currently underway regarding changes in the terms of education of Ukrainian children in primary, secondary and high schools. All changes for the average teacher and student are painful, incomprehensible, and therefore unnecessary. Let's "walk" through schools in different countries and see how many years children study in other countries. Of course, this should not reassure us, but it can enlighten us to some extent.

#### Education in Latvia.

Primary and secondary education are organized as a single system that covers children from the age of 7 and provides for nine years of compulsory school education. The last years of basic education (grades 7-9) can also be completed in gymnasiums, which mainly offer three years of full-time study in high schools for students aged 16 to 19. Academic achievements are assessed on a ten-point scale. After the 3rd, 6th and 9th grades, students are required to take a state test. Studying in the upper grades (grades 10-12) is not mandatory, but the percentage of the population receiving a complete secondary education remains high.

General secondary education can be obtained in upper secondary schools, gymnasiums or evening schools. These schools, as a rule, also offer programs for incomplete secondary education. Therefore, a student can study at the same school for the entire period, unless he/she decides to change schools. After completing upper secondary education, it is necessary to take centralized exams, which are evaluated, starting from the 2012/13 academic year, in percentage

terms. There are two students per capita in the country – one of the highest rates in the world.

## Education in the UK.

Education in the UK is mandatory for all citizens aged 5 to 16, that is, 11 years. There are two types of education: state (free education) and private (fee-paying educational institutions, private schools). Primary education in England lasts up to 11 years. Children learn a wide range of subjects, of which 12 subjects are compulsory. After completing primary school at the age of 11, children take their first exams. In secondary school, children continue to study the same subjects as in primary school, to which some new ones are added. In grade 10, children choose 5-10 subjects, in which they prepare purposefully for the exams for two years. At the age of 16, schoolchildren take the General Certificate of Secondary Education exams. This is the end of compulsory secondary education in England.

#### Education in Australia.

Australians study at school for 12 years. Education is compulsory for children aged 5 to 17 in all states and territories of the country. Children go to primary school (Primary School) at approximately 5-6 years, and after 6-7 years, depending on the state, they move to secondary school (Secondary School), which has two stages – the first 2-3 years are junior secondary school (Junior Secondary), and then senior secondary school (Senior Secondary). After completing 12 grades, a certificate of secondary education is issued, which is called differently in different states. In addition, in the senior grades of secondary school, you can take a vocational course to obtain a certificate, and some schools, together with one or another university, also offer university preparation programs (Foundation). In Australia, state schools predominate. 70% of schoolchildren study in state schools, the rest in private schools. School graduates receive a state certificate, the so-called Year 12.

# Education in Germany.

Germany has a four-stage education system: primary, two-stage secondary education and higher education. 9-year school education is compulsory, general and free.

In Germany, education begins at the age of 6. Primary school lasts until the age of 10, and then students move on to secondary school, which they graduate from at the age of 19. There are three types of

secondary schools. The simplest are basic schools, after which children enter vocational schools. Studying there lasts 5 years. More prestigious real schools, after which you can already count on entering university. Studying there lasts 6 years. And the best are considered gymnasiums, which last 8-9 years, but they practically guarantee their students admission to higher education.

#### Education in India.

In August 2009, the Indian Parliament passed the Right of Children to Free and Compulsory Education Act, which makes free education compulsory for children between the ages of 6 and 14. This made India the 135th country in the world to guarantee children the right to free education. In India, children start school at the age of 3-4, study 6 days a week, have 6-8 lessons a day, and have 35 minutes of lessons. There are no kindergartens in the country. All children, regardless of family status, can study free of charge in public comprehensive schools (up to 14 years old).

### Education in Canada.

Education in Canada is regulated at the provincial level, each of which has its own laws. Education is compulsory from the age of 6 to 16 everywhere, except for Ontario and New Brunswick, where the upper age limit is 18 years. In some provinces, under special circumstances, permission to discontinue compulsory education may be granted starting at the age of 14. The Canadian secondary education system consists of 3 main stages: grades 1-5; grades 6-8; grades 9-12. Children enter the first grade at the age of 6. Education in elementary school (grades 1-6, ages 6-12) and secondary school (grades 7-12, ages 13-18) is conducted in one of the official languages of the country -English or French. In most provinces, complete secondary education, which opens the way to higher education, takes 12 years, and in the province of Ontario - even 13 years. Only in the French-speaking province of Quebec do high school graduates finish after grade 11, and then those who want to prepare for university study for another two years at the preparatory department of the CEGEP system (French abbreviation, stands for College d'Etudes Generales et d'Edu-cation Professionnelle). Graduates of well-known Canadian private schools easily enter leading universities in the UK, the USA and Canada.

#### Education in the USA.

The age range in which school attendance is mandatory ranges from 5-8 to 16-18 years, varying from state to state. Some states allow leaving school with parental permission until it ends at 14-17 years, others require mandatory school attendance until the age of 18. At the same time, many states allow child prodigies to accelerate their education. The American education system is organized into three main levels: primary (including preschool and elementary school), secondary and higher. It is compulsory, starting from the age of seven in 29 states, from the age of six in 18 states and from the age of five in three states.

#### Education in Poland.

Primary education lasts 6 years and is free for all students. Education begins with the zero grade (the first year of school), the task of which is to prepare children for basic education. Children learn to communicate with each other, study arithmetic and the basics of natural sciences. At the end of the 6th grade, children take a test, which is informative in nature.

After graduating from primary school, children are transferred to secondary school. In Poland, there are several types of such schools:

## Junior secondary school (compulsory for all children)

– three-year study in a gymnasium (gimnazjum). Students take an external standard exam, which gives them the opportunity to continue their studies in the senior grades and is mandatory for all students. Based on the results of these exams, a decision is made as to where the student can continue their studies: in a college, lyceum or vocational school.

# Senior grades of secondary school

- 3 grades of lyceum, after graduation the graduate takes the final exam (egzamin maturalny) and receives a certificate of maturity. The exams are held in two stages: internal exams at the school and an exam by an independent commission.
- 3 grades of vocational school, after graduation the graduate receives a diploma confirming the professional qualifications assigned to them.
- 4 years of study at a technical school, graduates can take an exam to obtain a certificate of maturity, and also, along with it, receive a professional qualification.

After graduating from a lyceum, a graduate can enter a university without passing entrance exams.

#### Great Britain

It turns out that in English schools, students are prohibited from using slang or any speech expressions that differ from the official ones. For example, even simple phrases like "hello", "goodbye" are usually replaced with "good day", "goodbye". It is also not allowed to use various abbreviations and distortions of words. According to the authorities, such prohibitions will allow children to develop a culture of speech, which will help to further change the cultural level of the entire population.

#### France

French schools can surprise with their pronounced national color. Already at the age of 2-3, kids are sent to the so-called "nursery schools", where they are prepared for general primary education. Primary school education lasts 5 years, after which 4 years of college education continue. The final stage – education in lyceums and high schools lasts 2-3 years. It should be noted that French schools are considered the best educational institutions in all of Europe.

#### Mexico

Mexico has had a community education program for a long time. It was created at the initiative of the Mexican National Council for the Development of Education. The program is designed for that part of Mexican children who live in remote villages and do not have the opportunity to attend a regular school. Teachers in such community schools are most often students. The payment is quite symbolic, but after the internship, students receive grants to continue their studies.

#### Vietnam

Vietnamese schools and even kindergartens have decided to take the issue of improving the health and well-being of their students seriously. Recently, educational institutions have begun teaching with elements of yoga. Classes begin with sitting in the lotus position, teachers tell children parables. In general, during the day at school or kindergarten, children devote more than an hour to yoga. Such changes in schools also please parents, who are already noticing positive developments and changes in the physical and emotional state of their children.

The word "school" comes from the Greek word "skole", which means "leisure". There were no such schools as we are used to seeing now in Ancient Greece. Philosophers and their students gathered together in their free time and argued on various issues.

In 1565, the first primer for teaching children appeared, published by the first printer Ivan Fedorov.

On September 1, children in 122 other countries go to school – all of America and Europe. On January 1, the school year begins in 43 countries. In 16 countries, it begins in March, and in 10 – in August.

In Japan, the school year lasts from April 1 to March 1. Children have only one month of rest. One month of rest is also in Indonesia (in January) and in India (in April). In Norway and Mozambique, the holidays last 2 months. In Argentina, Ecuador, Panama, Sydney, students have a rest of as much as 4 months.

In different countries, there are different systems for assessing students' knowledge. If in Russia, Hungary and Yugoslavia 5 is the highest mark, and 1 is the lowest, then in the Czech Republic it is the opposite. In schools in Holland and Romania, grades are given from 1 to 10. In France, a 20-point grading scale has been introduced in lyceums.

The world's first English school for parrots and other talking birds has opened in Sydney, teaching them greetings, jokes and even poetry.

# **Key Notions**

Concept of education, Structure of education, Value of education in development of society and individual, Essence and laws of educational process at the higher school, Subject of pedagogics at the higher school, Learning styles, Learning in Different Age Groups, Preschool, Elementary school, Middle school and high school, College, Adult learners, Modern Teaching Methods, Bologna process, the national higher school, Education in other countries

## Questions and tasks for individual work:

- 1. What is the education?
- 2. What structure of education?
- 3. What is the general education?
- 4. What is the vocational training?

- 5. What is polytechnic education?
- 6. Name system of pedagogical sciences and define a place in it of pedagogics of HS.
  - 7. What is a subject and object of pedagogics of the HS?
  - 8. What is the primary goal of pedagogics of the higher school?
  - 9. Describe the main social function of training in high school.
  - 10. Define concept «psychological bases of process of studying.
  - 11. Define functions of principles of training at high school.
  - 12. Give classification of principles of training at HS.
  - 13. What do you know about Bologna process?
  - 14. Analise the modern education system in other countries.

# Used and suggested literature

- 1. Алексюк А. Н. Педагогика высшей школы, К., 1989.
- 2. Болонський процес у фактах і документах / Упор. М.Ф. Степко, Я.Я. Болюбаш, В.Д. Шинкарук та ін. К.-Тернопіль, 2003.
- 3. Вища освіта України і Болонський процес: навчальний посібник /За ред. В.Г. Кременя. Тернопіль, 2004.
- 4. Вища освіта України і Болонський процес: Навч. програма / Розроб.: М.Ф. Степко, Я.Я. Болюбаш, В.Д. Шинкарук та ін. К.-Тернопіль, 2004.
- 5. Журавський В.С., Згуровський М.З. Болонський процес: головні принципи входження в Європейський простір вищої освіти. К., 2003.
- 6. Максименко С.Д., Назар М.М. Построение проукраинских ментальных карт для обеспечения информационной безопасности граждан Украины (Часть первая). Fundamental and applied researches in practice of leading scientific schools. Issue: 4 (10): Psychology. Economics / Ed. by S. Maksymenko, V. Lunov, A. Hall. Co-pub. Publishing office: Accent Graphics Communications Hamilton, ON, 2015. P. 88-108.
- 7. Максименко С.Д. Теорія і практика психолого-педагогічного дослідження. К.: КДІП, 1990. 240 с.
- 8. Максименко С.Д. Основи генетичної психології. К., 1998. 218 с.
- 9. аксименко С.Д. Общая психология. М. К.: Рефл-бук, Ваклер, 1999. 528 с.

- 10. Максименко С.Д. Загальна психологія. К.: Форум, 2000. 543 с.
- 11. Максименко С. Д., Соловієнко В. О. Загальна психологія: навч. посібн. 2-ге вид., стереотип. Київ: МАУП, 2001. 256 с.
- 12. Максименко, С. Д. (2002). Розвиток психіки в онтогенезі: Теоретико-методологічні проблеми генетичної психології (Т. 1). Київ: Ваклер.
- 13. Максименко.С.Д. Загальна психологія. Вінниця: Нова книга, 2004. 701 с.
- 14. URL : https://psycholingjournal.com/index.php/journal/part/ view/715
- 15. Максименко С. Д., Максименко К. С., Папуча М. В. Психологія особистості: підручник. Київ: ТОВ «КММ», 2007. 296 с.
- 16. Sergiy D. Maksymenko, Mykola B.Yevtukh, Yaroslav V.Tskekhmister, Kseniia S.Maksymenko, Olena O.Lazurenko. Psychology and Pedagogics: Text-book.- K.: Publishing house 'Slovo', 2012.-520 p.
- 17. Maksymenko S.D. (2015). Genesis of Personality Existence: monography.Montreal: Accent Graphics Communication
- 18. Максименко С.Д., Орап M. Psycholinguistic Predictors of Health (Психологічні предикатори здоров`я) // Psycholinguistics. 2018. №24(1) –P. 252-268.
- 19. Максименко С., Ткач Б., Литвинчук Л., Онуфрієва Л. (2019). Нейропсихолінгвістичне дослідження політичних гасел із зовнішньої реклами. Психолінгвістика. Психолингвистика. Рsycholinguistics, 26 (1), 246–264. DOI 10.31470/2309-1797-2019-26-1-246-264.
- 20. Maksimenko S.D., Serdiuk L. Psychological Potential of personal self-realization. Social Welfare. Interdisciplinary Approach, 6(1), 93-100
- 21. Maksymenko, O. Lysenko Modern methods of diagnosing virtual addiction among adolescents: relevance and prospects. Монографія/ за ред. Аніти янковської, Riga, Latviaa,: IZDEVNICIBA BALTIJA PUBLISHING, 2019.C.-394-410
- 22. Maksimenko S.D. Principles of website design for professional psychological diagnosis in different specialities. Information Technologies and Learning Tools / Institute of Information

- Technologies and Learning Tools of NAES of Ukraine. –2019. Vol. 73., № 5. P. 284-294.
- 23. Максименко С.Д., Костюк О.В., Максименко К.С., Немеш О.М., Луньов В.Є.Мультилінгвістичний дискурс невротизації майбутніх лікарів: монографія. Київ: "Видавництво Людмила", 2020. 171 с
- 24. Максименко С.Д. Психологічні особливості розуміння студентами Інтернет-текстів, Psicholinguistics.–2020. Vol. 28(1),– P. 95-105.
- 25. Maksymenko, S.D.(2021) Genetic principles of creative personality confident as a propulsion of mental development. Ottawa: Accent Graphics Communications and Publishing. Glasgow: Society for the support of publishing initiatives and scientific mobility Limited.-615 p.
- 26. Максименко С.Д., Я.В. Руденко, А.М. Кушнєрьова, В.М. Невмержицький. Психічне здоров'я особистості: посібник для вищих навчальних закладів. Київ: "Видавництво Людмила", 2021. 438 с.
- 27. Максименко С.Д., Яланська С.П. Генетико-креативний підхід: діяльнісне опосередкування особистісного розвитку: монографія. Київ: "Видавництво Людмила", 2021. 508 с.
- 28. Максименко С.Д., Піроженко Т.О., Пророк Н.В., Папуча М.В. Психологічний портрет особистості дитини:вікові періоди Київ: "Видавництво Людмила", 2021. 104 с.
- 29. Maksimenko S.D. Features of the components of students' psychophysiological readiness to work as teachers, Idōkan Poland Association "IDO MOVEMENT FOR CULTURE. Journal of Martial Arts Anthropology", Vol. 21, no. 2 (2021), pp. 11–18
- 30. Максименко С.Д., Руденко Я.В. Мультипсихологінчий дискурс вокалотерапії психосоматичних розладів особистості: монографія / С.Д. Максименко, Я.В. Руденко. Київ: «Видавництво Людмила», 2021.904 с.
- 31. Максименко С., Деркач Л., Кіричевська Е., Касинець М.Психологія когнітивних процсів: науковий посібник / Національна академія педагогічних наук України, Інститут психології імені Г.С. Костюка. Київ: «Видавнцтво Людмила» 2022. 420 с.
- 32. Maksymenko S.D., Viktor Burlaka , Oleksii Serdiuk, Jun Sung Hong , Lisa A. O'Donnell, Vitalii Panok and others. Child Internalizing

Problems in Ukraine: The Role of Prosocial and Antisocial Friends and Generalized Self-Efficacy/ Societies 2022, 12, 144.

- 33. Максименко С.Д., Ірхін Ю.Б., Деркач Л.М., Марусинець М.М., Касинець М.М. Психологічна організація модульного формування когнітивних здібностей: генетико-креативний підхід: навчальний посібник. Том 1. Київ: «Видавництво Людмила», 2023. 384 с.
- 34. Максименко С.Д., Ірхін Ю.Б., Деркач Л.М., Марусинець М.М., Касинець М.М. Психологічна організація модульного формування когнітивних здібностей: генетико-креативний підхід: навчальний посібник. Том 2. Київ: «Видавництво Людмила», 2023. 356 с.
- 35. Максименко С.Д.Медична психологія: підручник / за редакцією академіка С. Д.Максименка. Том І. Київ: «Видавництво Людмила», 2023. 458 с.
- 36. Максименко С.Д.Медична психологія: підручник / за редакцією академіка С. Д.Максименка. Том 2. Київ: «Видавництво Людмила», 2023. 520 с.
- 37. Maksymenko S.D., Lunov, Vitalii, Matiash, Mykhailo and Subbota, Spartak and Tolstoukhov, Anatolii, Ukrainian Syndrome: How Ukrainian Youth Understands the New Norm of Life and Relates to Leraing in face to 2022- Full-Scale Russian/ SSRN. −2023–№1(January 15, 2023). –P. 1-10
- 38. Максименко С.Д., Ірхін Ю.Б., Деркач Л.М., Марусинець М.М., Касинець М.М. Психологічна організація модульного формування когнітивних здібностей: генетико-креативний підхід: навчальний посібник. Том 1. Київ: «Видавництво Людмила», 2023. 384 с.
- 39. Максименко С.Д., Ірхін Ю.Б., Деркач Л.М., Марусинець М.М., Касинець М.М. Психологічна організація модульного формування когнітивних здібностей: генетико-креативний підхід: навчальний посібник. Том 2. Київ: «Видавництво Людмила», 2023. 356 с.
- 40. Maksymenko S.D., Maksymenko K.S., Svitlana Yalanska, Nina Atamanchuk, Valeriy Zhamardiy, Vikoriia Donchenko Psychophysiological unloading with compliance taking into accounr: aeroapiphythotherapy resource. Acta Balneologica. − 2023. − № LXV (2), P.98-104
- 41. Максименко С.Д., Деркач Л.М., Розуміння сучасної когнітивної війни в глобальному вимірі, її генезис в українському контексті: огляд та напрямки майбутніх досліджень. Оборона і

- стратегія. університет оборони БРНО. Випуск: Том 23, №1 (червень 2023).С.126-148
- 42. Maksymenko S.D. The Historical Sense of Psychological Crisis: Modern Understanding of Genetical-Psychological and Integrative Approach. SSRN. –2023–Nº 3 (May 9, 2023). –P. 1-10
- 43. Максименко С.Д., Носенко Е.Л., Експериментальна психологія: Підручник для студентів. К.: Центр учбової літератури, 2023. 360 с.
- 44. Максименко С.Д., Загальна психологія. Навч. посібник для студентів вищих навч. закладів. –Вид. 2-е, перероб. та доп. К.: Центр навч. літератури, 2023. 272 с.
- 45. Maksymenko, S., Ivashkevych, E., Kharchenko, Y., Tarnavska, O., & Sinjavska, N. Semantic and Pragmatic Meaning of Discursive Units in the Process of Communication of a Psychotherapist with a Client. PSYCHOLINGUISTICS, 34(1)2023, 129-172.
- 46. Максименко С.Д., Л.М. Деркач, Ю.Б. Ірхін. Диференційна психологія. Видання 2-ге, перероблене і доповнене: підручник/ за загальною редакцією академіка С.Д. Максименка. Київ: «Видавництво Людмила», 2024. 572 с.
- 47. Maksymenko, Serhii, Orthobiosis in Human Development: A Genetic Psychological Perspective on Personality Traits and Their Pathologization (January 29, 2024).
- 48. Генеза сучасної інформаційно-когнітивної (гібридної) війни в українському контексті та глобальному вимірі: наукове дослідження/ С.Д. Максименко, Л.М. Деркач. Київ: «Видавництво Людмила», 2024. 128 с.
- 49. Максименко С.Д. Методологічні принципи конструювання модульного психологічного супроводу і психічного здоров'я : навчальний посібник. Том. 1 / С.Д. Максименко. Київ: Видавництво Людмила, 2024. 718 с.
- 50. Максименко С.Д., Гришко О.Д., Психологічний супровід і психічне здоров'я: навчальний посібник. Том. 2 / С.Д. Максименко, О.Д. Гришко. Київ: Видавництво Людмила, 2024. 468 с.
  - 51. Маркова А.К. Формування мотивації навчання. К., 1990.
- 52. Можливості КМС по забезпеченню міжнародної академічної мобільності українських студентів. Довідник. Запоріжжя 2008.

- 53. Основні засади розвитку вищої освіти в Україні в контексті Болонського процесу (документи і матеріали 2003-2004) / За ред. В.Г. Кременя, М.Ф. Степко, Я.Я. Болюбаш, В.Д. Шинкарук та ін. К.-Тернопіль, 2004.
- 54. Падалка О.С., Нісімчук А.М., Смолюк І.О., Шпак О.Т. Педагогічні технології. К., 1995.
- 55. Пидаев А.В., Передерий В.Г. Болонский процесс в Европе. Одесса, 2004

# CHAPTER III THE THEORY OF UPBRINGING

# Part. 7. Essence and Content of the Process of Upbringing

# 7.1. Features and laws of Upbringing Process

In complete pedagogical process the important place occupies upbringing process.

**Upbringing** is the process of purposeful formation of the person. This specially organised, operated and controllable interaction of tutors and pupils, the final purpose having formation of the person necessary and useful society.

Upbringing process has a number of **features**.

First of all it is a *purposeful process*. Upbringing process differs by its duration and continuity.

It is a *complex process* (means unity of the purposes, problems, maintenances, forms and methods of upbringing process).

Upbringing process has *bilateral* character (its current occurs in two directions: from the tutor to the pupil and from the pupil to the tutor).

Upbringing process as a part of the more general pedagogical process submits to laws of the given process.

For practice of upbriging it is the most important to connect natural relations efficiency of upbriging process with those its components which make the greatest impact on quality of upbringing.

Efficiency of upbringing depends:

- 1. From the developed upbringing relations.
- 2. From conformity of the purpose and the organization of the actions helping to reach this purpose.
- 3. From conformity of social practice and character (direction, contents) upbringing influence on trainees.
  - 4. From action of objective and subjective factors.
  - 5. From intensity of upbringing and self-bringing.

- 6. From the activity of participants in pedagogical interaction.
- 7. From efficiency of developments and training.
- 8. From quality of upbringing influence.
- 9. It is brought up from intensity of influence on «internal sphere» (System of motives, requirements, emotions, intelligence)

10.From a combination of pedagogical influence and level development of verbal (verbal) processes of pupils.

11.From intensity and quality of mutual relations (dialogue) Between pupils.

As the **upbringing content** is understood as the system of knowledge, belief, skills, qualities of the person, long term habits of behaviour which pupils should master according to objective.

# 7.2. The purposes and problems of upbringing.

The **upbringing purpose** is to what upbringing aspires. The general and individual purposes of upbringing are allocated. The upbringing purpose acts as the general when it expresses qualities which should be generated at all people.

The upbringing purpose is defined by requirements of development of a society and depends on a way of manufacture, rates of the social and scientific and technical progress, the reached level of development of the pedagogical theory and practice, possibilities of a society, educational institutions, teachers and pupils.

Today the upbringing – overall objective to promote intellectual, moral, emotional and physical development of the person, to open its creative possibilities, to provide various conditions for revealing of individuality taking into account its age features.

**Results of educational process** are understood as the level of good upbringing reached by the person. It can correspond planned results of upbringing, and can be differ from them. To reveal conformity degree diagnostics helps.

# 7.3. Upbriging components

**Traditional components of upbringing** are: intellectual, physical, labour and polytechnical, moral, aesthetic.

*Intellectual (intellectual) education* enriches knowledge of bases of sciences trained by system. In a course and as a result mastering of scientific knowledge bases of scientific outlook are put. The outlook is a

frame of reference of the person on the nature, a society, work, knowledge. Conscious mastering of system of knowledge promotes development of logic thinking, memory, attention, imagination, mental faculties.

Problems of intellectual upbringing:

- Mastering of certain volume scientific knowledge,
- Formation of scientific outlook,
- Development of intellectual forces,
- Development of informative interests,
- Requirement development constantly to fill up knowledge, To raise level general education and special preparation.

**Physical training** also promotes development of the qualities necessary for successful intellectual and labour activity. Physical training problems:

- Health strengthening, correct physical development,
- Increase of intellectual and physical working capacity,
- Development and perfection of the natural impellent Qualities,
- Formation of hygienic skills,
- Upbringing will-power qualities (boldness, resoluteness, resistance, endurances, discipline, responsibility),
- Dvelopment of aspiration to be healthy.

**Labour education** covers those aspects of educational process where labour actions are formed, there are relations of production. Work in the course of educational acts as the leading factor of development of the person.

**Moral education** solves such problems as formation of moral concepts, judgements, feelings and belief, skills and the habits of behaviour corresponding to norms of a society. Morals (morals) – norms and rules of behaviour of the person, defining its relation to a society, work, people.

# Emotional (aesthetic) education.

**Problems:** 

• Upbringing of aesthetic culture,

- Mastering aesthetic and a cultural heritage of the past,
- Development of aesthetic senses,
- Aspiration formation to be fine in all.

From certain age upbringing is combined with self-upbringing. Correction negative a consequence of anyhow put upbringing is called as **re-education**.

# **Key Notions**

Features of upbringing process, Laws of process of upbringing, The purposes and problems of upbringing, Upbriging components, The content of process of upbringing, Diagnostics of upbringing.

## Questions and tasks for individual work:

- 1. What is the upbringing?
- 2.From the listed statements choose those that express features of upbringing process.
  - 1. Purposefulness. 6. A continuity.
  - 2.Respect for the person. 7, Complexity.
  - 3. Duration. 8. Mass character.
  - 4.Integrated approach.9. Profitability,
  - 5.Bilateral character. 10. Commonwealth with a family.
  - 6. Why there is a variety of purposes for upbriging?
  - 7. What is overall objective of upbringing?
  - 8. What is the intellectual education? What its problems?
  - 9. What is the physical training?
  - 10. What is labour education?
  - 11. What is the moral education? List problems.
- 12. What is the emotional (aesthetic) education? What are its main problems?
- 13. What structure of educational process? Specify group, in which the basic components of education are named.
  - 14. What is the content of upbringing process?
  - 15. What ideas underlie re-education?
  - 16. In what sense of diagnostics of good upbringing?

## **Used and suggested literature**

- 1. Л.П.Вовк., О.С.Падалка, Г.Д.Панченко. Виховання у цілісному педагогічному процесі. Навчально-методичний комплекс. К. 2008.
- 2. Галузинський В.М., Євтух М.З. Педагогіка (теорія та історія). К., 1995.
  - 3. Звєрєва І.Д., Коваль Л.Г. Практикум з педагогіки. К., 1996.
  - 4. Косьяненко М.Д. Педагогіка співробітництва. К., 1993.
  - 5. Люріна Т.І. Українська родина. К., 1998.
- 6. Падалка О. С, Нісімчук А. М. та ін. Педагогічні технології. К., 1995.
- 7. Постовой В.Г. Сім'я і діти: програма родинно-національного виховання. К., 1997.
- 8. Семиченко В.А., Заслуженюк В.С. Психологія та педагогіка сімейного спілкування. К., 1998.
- 9. Українська родина: Науково-методичний посібник. К., 1998.

# Part. 8. Priciples, Forms and Methods of Upbringing Process

# 8.1. Specificity and characteristic of Upbringing Principles

**Principles of upbringingal process (upbringing principles)** – the general starting positions in which the basic requirements to the maintenance are expressed, to methods, the organisation of upbringingal process. Principles, on which is based upbringingal process, make the system. The modern domestic upbringingal system is guided by following principles:

- Public orientation of upbringing;
- Connection of upbringing with life, work;
- Accent on positive in upbringing;
- Upbringing humanisation;
- The personal approach;
- Unity of upbringinal influences.

The principle of public character of upbringing demands optimum conformity (parity) state, public and personal needs in upbringinal process.

The principle of connection of upbringing with life, work demands:

- Connections of upbringing with practical activities of people;
- Decisions of all upbringingal problems with a support on the real Life, labour activity of people;
- Participation of children and teenagers in the feasible productive work.

**Accent on positive in upbringing** demands to reveal in the pupil positive features, based on which, eradicate bad and develop insufficiently generated qualities.

**The principle of humane upbringing** is characterised by following signs:

- Respect of the rights and personal freedoms;
- A presentation of reasonable demands; Respect of a position of the pupil;
- Refusal of the punishments humiliating dignity of the person.

**The personal approach** obliges tutors to build upbringing process on the basis of the account of the main personal qualities and orientations of the person, its vital plans and valuable orientations to lean on age and specific features of pupils.

The essence of a principle of unity of upbringingal influences consists in the organisation of the upbringingal influence which are starting with uniform requirement, the co-ordinated actions of all participants of upbringinal process people involved in it, social institutes.

## 8.2. Forms, methods and upbringing receptions.

The **upbringing form** is an external expression of process of upbringing.

By quantity covered process of upbringing of people of the form of upbringing divides on **individual**, **microgroup**, **group** (collective) and mass.

It is established that efficiency of upbringing process for-insit from the form of its organisation. At increase in number of pupils quality of upbringing usually decreases. Therefore the preference is given to individual and microgroup forms of upbringing.

The majority of modern upbringinal systems are using group (collective) forms of the upbringing, different sufficient efficiency (under condition of the qualified pedagogical influence) and concerning low economic cost of pedagogical services.

**Method of upbringing** – it is a way of achievement of the set purpose of upbringing. Knowledge of methods and ways of upbringing, ability correctly to apply them is one of important characteristics of level of pedagogical skill. Such is an interconnection of methods and ways of upbringing.

The concept **of means of upbringing** is defined. Ways are understood as individual influence. For example, upbringing heapsmeans, but display, a work estimation, instructions on an error in work are ways. A word (in wide understanding) – means of upbringing, but a remark, the ironical remark, comparison – is way.

## 8.3. Choice and classification of upbringing.methods

In this connection sometimes a *method of upbringing* is define as a system of ways and the means used for achievement of an

object in view, as in structure of a methods and ways and means exist necessarily.

Let's consider the general reasons (factors, conditions), defining a choice of methods of upbringing.

The following first of all should be considered:

- The purposes and upbringing problems;
- The upbringing contents;
- Age features of pupils;
- Individual and personal features of pupils;
- Upbringing conditions;
- Upbringing means;
- Level pedagogical qualifications;
- Upbringing time;
- Expected consequences.

**Classification of methods** is the system of methods built on a certain sign.

On character of upbringing methods are divided into *exercise*, reward and punishment (N.I.Boldyrev, H. To – Goncharov, F.F.Korolev).

Nodern and convenient classification of methods of upbringing on the basis of an orientation (G.I.Schukin) is represented to the most objective. According to this characteristic it is distinguished three groups of methods of upbringing:

- Method of formations of consciousness of the person (methods of persuasion story, belief, lecture, explanation, conversation, example).
- Methods of the organisation of activity to experience formation Behaviour {methods of exercise, the requirement and schooling).
- Methods of stimulation of behaviour and activity (methods Encouragements, competitions and punishments).

# **Key Notions**

Specificity of principles of upbringing, The characteristic of principles of upbringing, Forms of upbringing, Methods and upbringing receptions, Choice of upbringing methods, Classification of methods of upbringing.

## Questions and tasks for individual work:

- 1. What are the main upbringing principles?
- 2.From resulted concept choose as what you consider Upbringing principles.
  - a) Moral education and development.
  - b) Public orientation of upbringing,
  - c) Upbringing and development,
  - d) Connection between life and work.
  - e) Support on positive in upbringing.
  - f) The complex approach in upbringing.
  - g) Upbringing humanisation.
  - h) Evidence of upbringing influences.
  - i) Self-upbringing and re-upbringing.
  - j) The Personal approach.
  - 3. What does the public orientation of upbringing mean?
- 4. What are the rules of realisation of a principle public on direction of upbringing?
  - 5.In what essence of a principle of a support on the positive?
  - 6.In what essence of a principle of a humanisation of upbringing?
  - 7.In what essence of the personal approach to upbringing?
  - 8. In what essence of a principle of unity of upbringingal influences?
  - 9. Name advantages of individual forms of upbringing.
  - 10. What are the methods of upbringing?

# Used and suggested literature

- 1. Л.П.Вовк., О.С.Падалка, Г.Д.Панченко. Виховання у цілісному педагогічному процесі. Навчально-методичний комплекс. К, 2008.
- 2. Галузинський В.М., Євтух М.З. Педагогіка (теорія та історія). К., 1995.
  - 3. Звєрєва І.Д., Коваль Л.Г. Практикум з педагогіки. К., 1996.
  - 4. Касьяненко М. Д. Педагогіка співробітництва. К., 1993.
  - 5. Косьяненко М.Д. Педагогіка співробітництва. К., 1993.
  - 6. Люріна Т.І. Українська родина. К., 1998.
- 7. Максименко С.Д., Назар М.М. Построение проукраинских ментальных карт для обеспечения информационной безопасности граждан Украины (Часть первая). Fundamental and applied researches in practice of leading scientific schools. Issue: 4

- (10): Psychology. Economics / Ed. by S. Maksymenko, V. Lunov, A. Hall. Co-pub. Publishing office: Accent Graphics Communications Hamilton, ON, 2015. P. 88-108.
- 8. Максименко С.Д. Теорія і практика психолого-педагогічного дослідження. К.: КДІП, 1990. 240 с.
- 9. Максименко С.Д. Основи генетичної психології. К., 1998. 218 с.
- 10. аксименко С.Д. Общая психология. М. К.: Рефл-бук, Ваклер, 1999. 528 с.
- 11. Максименко С.Д. Загальна психологія. К.: Форум, 2000. 543 с.
- 12. Максименко С. Д., Соловієнко В. О. Загальна психологія: навч. посібн. 2-ге вид., стереотип. Київ: МАУП, 2001. 256 с.
- 13. Максименко, С. Д. (2002). Розвиток психіки в онтогенезі: Теоретико-методологічні проблеми генетичної психології (Т. 1). Київ: Ваклер.
- 14. Максименко.С.Д. Загальна психологія. Вінниця: Нова книга, 2004. 701 с.
- 15. URL: https://psycholing-journal.com/index.php/journal/part/view/715
- 16. Максименко С. Д., Максименко К. С., Папуча М. В. Психологія особистості: підручник. Київ: ТОВ «КММ», 2007. 296 с.
- 17. Sergiy D. Maksymenko, Mykola B.Yevtukh, Yaroslav V.Tskekhmister, Kseniia S.Maksymenko, Olena O.Lazurenko. Psychology and Pedagogics: Text-book.- K.: Publishing house 'Slovo', 2012.-520 p.
- 18. Maksymenko S.D. (2015). Genesis of Personality Existence: monography. Montreal: Accent Graphics Communication
- 19. Максименко С.Д., Орап M. Psycholinguistic Predictors of Health (Психологічні предикатори здоров`я) // Psycholinguistics. 2018. №24(1) –P. 252-268.
- 20. Максименко С., Ткач Б., Литвинчук Л., Онуфрієва Л. (2019). Нейропсихолінгвістичне дослідження політичних гасел із зовнішньої реклами. Психолінгвістика. Психолингвистика. Psycholinguistics, 26 (1), 246–264. DOI 10.31470/2309-1797-2019-26-1-246-264.

- 21. Maksimenko S.D., Serdiuk L. Psychological Potential of personal self-realization. Social Welfare. Interdisciplinary Approach, 6(1), 93-100
- 22. Maksymenko, O. Lysenko Modern methods of diagnosing virtual addiction among adolescents: relevance and prospects. Монографія/ за ред. Аніти янковської, Riga, Latviaa,: IZDEVNICIBA BALTIJA PUBLISHING, 2019.C.-394-410
- 23. Maksimenko S.D. Principles of website design for professional psychological diagnosis in different specialities. Information Technologies and Learning Tools / Institute of Information Technologies and Learning Tools of NAES of Ukraine. -2019. Vol. 73.,  $N^{\circ}$  5. P. 284-294.
- 24. Максименко С.Д., Костюк О.В., Максименко К.С., Немеш О.М., Луньов В.Є.Мультилінгвістичний дискурс невротизації майбутніх лікарів: монографія. Київ: "Видавництво Людмила", 2020. 171 с
- 25. Максименко С.Д. Психологічні особливості розуміння студентами Інтернет-текстів, Psicholinguistics.–2020. Vol. 28(1),– P. 95-105.
- 26. Maksymenko, S.D.(2021) Genetic principles of creative personality confident as a propulsion of mental development. Ottawa: Accent Graphics Communications and Publishing. Glasgow: Society for the support of publishing initiatives and scientific mobility Limited.-615 p.
- 27. Максименко С.Д., Я.В. Руденко, А.М. Кушнєрьова, В.М. Невмержицький. Психічне здоров'я особистості: посібник для вищих навчальних закладів. Київ: "Видавництво Людмила", 2021. 438 с.
- 28. Максименко С.Д., Яланська С.П. Генетико-креативний підхід: діяльнісне опосередкування особистісного розвитку: монографія. Київ: "Видавництво Людмила", 2021. 508 с.
- 29. Максименко С.Д., Піроженко Т.О., Пророк Н.В., Папуча М.В. Психологічний портрет особистості дитини:вікові періоди Київ: "Видавництво Людмила", 2021. 104 с.
- 30. Maksimenko S.D. Features of the components of students' psychophysiological readiness to work as teachers, Idōkan Poland Association "IDO MOVEMENT FOR CULTURE. Journal of Martial Arts Anthropology", Vol. 21, no. 2 (2021), pp. 11–18

- 31. Максименко С.Д., Руденко Я.В. Мультипсихологінчий дискурс вокалотерапії психосоматичних розладів особистості: монографія / С.Д. Максименко, Я.В. Руденко. Київ: «Видавництво Людмила», 2021.904 с.
- 32. Максименко С., Деркач Л., Кіричевська Е., Касинець М.Психологія когнітивних процсів: науковий посібник / Національна академія педагогічних наук України, Інститут психології імені Г.С. Костюка. Київ: «Видавнцтво Людмила» 2022. 420 с.
- 33. Maksymenko S.D., Viktor Burlaka, Oleksii Serdiuk, Jun Sung Hong, Lisa A. O'Donnell, Vitalii Panok and others. Child Internalizing Problems in Ukraine: The Role of Prosocial and Antisocial Friends and Generalized Self-Efficacy/ Societies 2022, 12, 144.
- 34. Максименко С.Д., Ірхін Ю.Б., Деркач Л.М., Марусинець М.М., Касинець М.М. Психологічна організація модульного формування когнітивних здібностей: генетико-креативний підхід: навчальний посібник. Том 1. Київ: «Видавництво Людмила», 2023. 384 с.
- 35. Максименко С.Д., Ірхін Ю.Б., Деркач Л.М., Марусинець М.М., Касинець М.М. Психологічна організація модульного формування когнітивних здібностей: генетико-креативний підхід: навчальний посібник. Том 2. Київ: «Видавництво Людмила», 2023. 356 с.
- 36. Максименко С.Д.Медична психологія: підручник / за редакцією академіка С. Д.Максименка. Том І. Київ: «Видавництво Людмила», 2023. 458 с.
- 37. Максименко С.Д.Медична психологія: підручник / за редакцією академіка С. Д.Максименка. Том 2. Київ: «Видавництво Людмила», 2023. 520 с.
- 38. Maksymenko S.D., Lunov, Vitalii, Matiash, Mykhailo and Subbota, Spartak and Tolstoukhov, Anatolii, Ukrainian Syndrome: How Ukrainian Youth Understands the New Norm of Life and Relates to Leraing in face to 2022- Full-Scale Russian/ SSRN. −2023–№1(January 15, 2023). –P. 1-10
- 39. Максименко С.Д., Ірхін Ю.Б., Деркач Л.М., Марусинець М.М., Касинець М.М. Психологічна організація модульного формування когнітивних здібностей: генетико-креативний підхід: навчальний посібник. Том 1. Київ: «Видавництво Людмила», 2023. 384 с.
- 40. Максименко С.Д., Ірхін Ю.Б., Деркач Л.М., Марусинець М.М., Касинець М.М. Психологічна організація модульного формування

когнітивних здібностей: генетико-креативний підхід: навчальний посібник. Том 2. Київ: «Видавництво Людмила», 2023. 356 с.

- 41. Maksymenko S.D., Maksymenko K.S., Svitlana Yalanska, Nina Atamanchuk, Valeriy Zhamardiy, Vikoriia Donchenko Psychophysiological unloading with compliance taking into accounr: aeroapiphythotherapy resource. Acta Balneologica. − 2023. − № LXV (2), P.98-104
- 42. Максименко С.Д., Деркач Л.М., Розуміння сучасної когнітивної війни в глобальному вимірі, її генезис в українському контексті: огляд та напрямки майбутніх досліджень. Оборона і стратегія. університет оборони БРНО. Випуск: Том 23, №1 (червень 2023).С.126-148
- 43. Maksymenko S.D. The Historical Sense of Psychological Crisis: Modern Understanding of Genetical-Psychological and Integrative Approach. SSRN. −2023−№ 3 (May 9, 2023). −P. 1-10
- 44. Максименко С.Д., Носенко Е.Л., Експериментальна психологія: Підручник для студентів. К.: Центр учбової літератури, 2023. 360 с.
- 45. Максименко С.Д., Загальна психологія. Навч. посібник для студентів вищих навч. закладів. –Вид. 2-е, перероб. та доп. К.: Центр навч. літератури, 2023. 272 с.
- 46. Maksymenko, S., Ivashkevych, E., Kharchenko, Y., Tarnavska, O., & Sinjavska, N. Semantic and Pragmatic Meaning of Discursive Units in the Process of Communication of a Psychotherapist with a Client. PSYCHOLINGUISTICS, 34(1)2023, 129-172.
- 47. Максименко С.Д., Л.М. Деркач, Ю.Б. Ірхін. Диференційна психологія. Видання 2-ге, перероблене і доповнене: підручник/ за загальною редакцією академіка С.Д. Максименка. Київ: «Видавництво Людмила», 2024. 572 с.
- 48. Maksymenko, Serhii, Orthobiosis in Human Development: A Genetic Psychological Perspective on Personality Traits and Their Pathologization (January 29, 2024).
- 49. Генеза сучасної інформаційно-когнітивної (гібридної) війни в українському контексті та глобальному вимірі: наукове дослідження/ С.Д. Максименко, Л.М. Деркач. Київ: «Видавництво Людмила», 2024. 128 с.
- 50. Максименко С.Д. Методологічні принципи конструювання модульного психологічного супроводу і психічного здоров'я :

- навчальний посібник. Том. 1 / С.Д. Максименко. Київ: Видавництво Людмила, 2024. 718 с.
- 51. Максименко С.Д., Гришко О.Д., Психологічний супровід і психічне здоров'я: навчальний посібник. Том. 2 / С.Д. Максименко, О.Д. Гришко. Київ: Видавництво Людмила, 2024. 468 с.
- 52. Падалка О. С, Нісімчук А. М. та ін. Педагогічні технології. К., 1995.
- 53. Постовой В.Г. Сім'я і діти: програма родинно-національного виховання. К., 1997.
- 54. Семиченко В.А., Заслуженюк В.С. Психологія та педагогіка сімейного спілкування. К., 1998.
- 55. Українська родина: Науково-методичний посібник. К., 1998.

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