

## **1.2. Methodology and organization of scientific researches in the field of social-humanitarian sciences**

*Relevance of research.* One of the key means to ensure success in the training of competitive professionals is the qualitatively new mastery of students in social, humanitarian and behavioural disciplines. And this is impossible without mastering the fundamental principles of the methodology of scientific research. For the researcher, it is important not only to establish new facts and the ability to give them an explanation, to disclose their cognitive, theoretical and practical significance. The accumulation of scientific facts in the process of research of social-humanitarian and behavioural sciences is a creative process based on the idea of a scientist, an idea as a product of thinking, a form of reflection of reality, an object of study, an awareness of the purpose, the prospect of knowledge and the practical transformation of reality. The results of new ideas may diverge from the generally accepted provisions of science – paradigms. The acquisition of new knowledge takes place according to the scheme: paradigm – paradox – a new paradigm. The development of science is a change in paradigms, methods, stereotypes of thinking, which is based on the methodology and needs its development [1].

Methodology – a set of methods and techniques aimed at studying contemporary society. Distinguish fundamental, general scientific principles, which are their own methodology, the specific scientific principles underlying the theory of a discipline or scientific field, and the system of specific methods and techniques used to solve special research tasks. The methodology performs the following functions: defines methods for acquiring scientific knowledge that reflect dynamic processes and phenomena; directs, envisages a special way on which a certain scientific research goal is achieved; provides comprehensive information about the process or phenomenon being studied; Helps to introduce new information into the science of science fund; provides clarification, enrichment, systematization of terms and concepts in science; creates a system of scientific information, which is based on objective facts, and is a logical-analytical tool for scientific knowledge [2].

Method (gr. Methodos) – a way of knowing, studying the phenomena of nature and social life of social-humanitarian and behavioural sciences; it is a collection of techniques or operations of practical or theoretical development of reality, subordinated to the solution of a specific task. The difference between the method and the theory has a functional character: formed as the theoretical result of the previous study, the method serves as the starting point and condition for future research. In the most general sense, the method is a way, a way of achieving the goal and objectives of the study. It answers the question: how to know. The concept of "method" is defined as a set of united single research technology principles that are used in solving specific research tasks. The method and technology are closely interrelated [3]. The method

gives a general direction, the general principle of the organization of the study procedure, while the technology is a set of separate operations that provide the implementation of research tasks. Strategic methodological provisions find their practical implementation in research methods.

The method of scientific research is a set of united by a single general principle of the investigated technologies, which are used to solve specific research problems. The method is the way a phenomenon, phenomenon or process is investigated in any field of activity. The choice of the method of research is entirely determined by the content of the problem under study, which is a contradiction between the knowledge and the unidentified in the structure of scientific knowledge. Unidentified cannot be represented by consciousness because of the knowledge that is not yet available and which still needs to be known, which one is an indication that the existing knowledge should be supplemented, developed and modified [4].

In order to cover the sphere unknown to any previous knowledge, various scientific assumptions are made, scientific hypotheses are formed. The scientific hypothesis is a scientifically substantiated proposition that asks for the direction of scientific research, the search for questions on previously asked questions that arose during the analysis and comprehension of the problem under study. Scientific hypothesis or a set of some scientific hypotheses is an intermediate link between knowledge and ignorance [5]. The precise formulation of the scientific hypothesis preceded any scientific research, the choice of method, which primarily involves the possibility of solving the problem, answering the questions posed.

The method, therefore, appears to us as the main working tool, designed to ensure the partial or complete acceptance of the hypotheses initiated at the beginning of the study. The study of the problem ultimately and exclusively from the formulation, verification or rejection of hypotheses and their transformation into new knowledge, directly depends on the methodology chosen and the specific method. The right choice of a scientific method is an important, but, at times, decisive stage of any scientific research, including managerial. The method is a theoretically meaningful and logically justified method of cognitive activity in order to obtain reliable knowledge about the object of study; totality, or rather – a system of theoretical generalizations, rules (principles) and methods of scientific and cognitive activity, which provides the emergence of new reliable knowledge, and is the actual methodology [6].

In the theoretical and methodological aspect of the study of contemporary society, it was decided to distinguish between the concept of "approach", "method", "methodology", "technology", "methodics". Approach – 1) informational – based on the information principle, according to which virtually all phenomena and processes have an information basis and are interrelated information nature; 2) cultural (axiological) as a component of the process of formation of information culture; 3) a synergistic approach associated with the self-organization of the information society.

The method is a morphological way of studying the problems of the information society – digital divide, zombifying of society, information wars in business and politics, computer crime (cybercrime), information danger, adaptation of a person to life in an information society [7]. Methodology – a system of rules, the use of methods, techniques and operations associated with the formation of a global information society. The technique is the technology itself, which can be used differently and used in the study in accordance with relevant and developed techniques. If the method in its nature is conceptual, is the result of scientific research and is created as a special scientific achievement, so related to the new theoretical knowledge, corresponds to a certain understanding of the content and forms of research activities, then the technologies and techniques used in the study procedure are not serious theoretical and methodological load. Methodology (gr. Methodike) – a set of methods, methods of conducting scientific research, a system of rules for the use of methods, techniques and operations [8].

Technology is a set of previously learned operations that define a specific action (often with the use of social tools and instruments) to conduct research. Technology is the introduction of information technology as knowledge management and the formation of information competence of the individual in the context of modern social transformations. The method may consist of several sequentially arranged or parallel technologies that provide the result of the study. In this case, technologies do not represent once and for all the established order or sequence of procedures: with each new research technology is changing, enriched, adjusted. In scientific research, the method of critical analysis of scientific and methodological literature, practical experience, as required by the level of methodology and techniques of research is often used. In the same scientific field there can be several methods (sets of methods), which are constantly being improved during scientific work. The most complicated is the technique of experimental research, both laboratory and field. In different scientific fields, methods are used that coincide by name, for example, questioning, testing, scaling, but the goals and methods of their implementation are different [9].

The philosophical (fundamental) methodology is the higher level of the methodology of science, which determines the general stratum of the principles of knowledge of the peculiarities of phenomena, processes, spheres of activity.

The development of the methodology is one of the sides of the development of cognition in general. Initially, the methodology was based on knowledge that dictated geometry as a science, which contained normative guidance for studying the real world. Then the methodology appeared as a set of rules for studying the universe and went into the sphere of philosophy. Plato and Aristotle considered the methodology as a logical universal system, a means of true knowledge.

Different approaches and methodologies in scientific research have been found to be sufficiently reflected in modern scientific literature.

Methodological function allows finding out the specifics of different levels of generalizations in the spheres of general scientific and special-scientific knowledge, defines the nature of the relationship of general and special historical theories, fundamental and applied research in various fields of knowledge.

In science, there are three types of methods: 1) philosophical (basic); 2) general science; 3) special (specifically scientific) [10].

The philosophical (basic) methods include philosophical substantiation: empirical and theoretical, observation and experiment, selection and generalization, abstraction and concretization, analysis and synthesis, induction and deduction, formalization and actualization, historical and logical, reflective and axiomatical and a number others. These methods equally provide the productivity of research both in philosophy and in the field of other sciences: precise, natural, technical, and humanitarian. These methods are fundamental approaches to research in any field of knowledge. In accordance with the peculiarities of the problem and the content of the tasks, the choice of basic methods and their modifications in the course of one or another, including management research is carried out. In the context of culturological study, for example, in management, these methods are used in accordance with the objectives of the study, and, as a rule, the initial phase of the study involves the collection of empirical data, their generalization; however, another option based on philosophical reflection with the use of a logical or historical method in understanding the phenomenon of governance is possible. Undoubtedly, scientific research should use such methods as analysis and synthesis, induction and deduction, abstraction and updating. All basic methods equally provide the fundamental research, serve as an effective tool for all sciences, regardless of the fact that in the space of which subject areas they find their application. However, not only philosophical (basic) methods provide the emergence of new knowledge about the subject of research, but to a lesser extent, this is promoted by general scientific methods widely used in practice: descriptive, comparative, comparative-historical, which provides a comparison of processes, but not states, structural, typological, structural-typological, systemic, modelling, reconstructive, genetic. General scientific methods are a special group of scientific research technologies.

They are developed and formed in social sciences and behavioural sciences and can be involved in other sciences. However, in the conditions of attraction, the rules of their application are adjusted according to the specifics of scientific discipline. The main difference between the general scientific methods from the philosophical (basic) is that the general scientific methods are more specific, more capable of taking into account the specifics of the subject. General scientific methods provide a more detailed analysis of problems, examine the subject of research from different sides and study newer data due to their perception in new perspectives and in new aspects. Today, the general scientific methods of research occupy a dominant position in

social-humanitarian and behavioural sciences, and in recent years they will determine its meaningful development. However, the effectiveness of their use depends directly on how well the general scientific methods have been adjusted in line with the specifics of these sciences [11].

On the basis of general scientific methods, special (concrete-scientific) methods are gradually formed, which, as a rule, are used mainly only within a certain domain of knowledge. Methods developed directly in the subject field of social humanitarian and behavioural sciences are as follows: 1) methods of space reconstruction; 2) method of modelling administrative objects; 3) socio-cultural and historical-genetic method; 4) the method of mosaic reconstruction; 5) method of socio-cultural observations; 6) the method of sociopsychological and socio-cultural inversions, etc. Special methods are limited by the feature of a particular subject of study, in this case, the object and subject of their study.

General scientific methodology is used in the overwhelming majority of social humanitarian and behavioural sciences, since any scientific discovery has not only substantive but also methodological content, entails a critical review of the conceptual apparatus adopted, the factors, preconditions and approaches to the interpretation of the material being studied [12].

The methodology of the study should include the method of ascending from abstract to concrete, consisting in the general form of the movement of scientific knowledge, the law of reflection of reality and thinking [13].

The idealization method is the designing of objects that are not in reality or which are practically impossible to implement. The purpose of idealization: to deprive the real objects of some inherent properties and to assign these objects with certain unrealistic and hypothetical properties. Consequently, the methods of scientific research provide an opportunity to penetrate more deeply into the essence of the object of research, conduct a structural and genetic analysis, to deepen the study of causal relationships. The approach sets the direction, and cognitive techniques and means form its semantic nodes. Different approaches in scientific knowledge may be modified, specified and specialized through the operation of the principles and procedures of the method. The use of the cognitive approach opens up additional opportunities for finding out the dynamics of modern society. A cognitive approach should be a compulsory tool in the study of objective and subjective factors of the development of contemporary society, influencing the dynamics of the development of modern society, accelerating and stimulating the deployment of this process [14]. The approach serves as the cornerstones of peculiar cognitive series, initiated by the relevant categories. For example, the category "historical in the development of modern societies" begins the cognitive series: the historical (the idea of historical) – the principle of historicism – the historical approach – the system of historical knowledge – the historical method (methodology). The system approach can be

reduced to the following: when determining the social formation of investment activity as a system, an analysis of its elements is considered taking into account its place in general; the study of public investment education as a system is inseparable from the study of its interconnections with the external environment, since the object of investment is studied as a subsystem of a larger system, formed by the association of the object of investment with the environment [15]. Between the components of social humanitarian and behavioural sciences there is a relationship of interdependence and freedom, which is expressed in the fact that the modification or modulation of one of these components (elements) predetermine certain changes of all others; in the investment system one can distinguish the regular type of connection that forms its structure, which, in turn, ensures the stability of the system and changes which lead to a radical transformation of it. The system approach to the analysis of problems of social, humanitarian and behavioural sciences is aimed at the analysis of any part of being with the connections of the environment; It is expedient to introduce a hierarchy of components (subsystems) and their ranking; analysis of the system and as a whole, and as a set of constituents; system analysis as dominant and subsystem as independent components; taking into account uncertainties and randomness in the socio-economic system; identification of the laws of the association of parts in the whole, laws that determine the nature of the structure, functioning and connection with the conditions and environment of functioning, boundary characteristics of the systems [16].

*Conclusions.* Thus, the foundation of the methodology of social, humanitarian and behavioural sciences determines the general strategy of knowledge (phenomena, processes, spheres of activity). General scientific and specific scientific methodologies cause a critical view of the conceptual apparatus, factors of preconditions and approaches to the interpretation of scientific material. Sometimes, the methods of social humanitarian and behavioural sciences are divided into groups according to their functional capabilities: staged, that is, associated with certain stages of research, and universal, which are used at all stages. The first group includes observation, an experiment, and the second one – abstraction, generalization, deduction, induction, and others. Fundamental or philosophical methodology is based on generalizing philosophical positions that reflect the most essential properties of objective reality and consciousness, taking into account the experience gained in the process of cognitive activity. General scientific and specific scientific methodology of social humanitarian and behavioural sciences is a system of scientific principles that ensure the systematic orientation of scientific research and practical knowledge of an object.

*References:*

1. Білогур В.С. Формування концепції цілісної особистості: теоретико-методологічні виміри // Гуманітарний вісник Запорізької державної інженерної академії. 2014. – Випуск 59. – С.192-203.

2. Воронкова В.Г. Формування синергетично-рефлексивної моделі самоуправлінського суспільства: цивілізаційний контекст // Гуманітарний вісник Запорізької державної інженерної академії. 2012. – Вип. 49. – С.17-28.
3. Воронкова В.Г. Формування антропологічної парадигми політичного менеджменту в умовах глобалізації // Гуманітарний вісник Запорізької державної інженерної академії. 2008. – Вип. 34. – С.24-42.
4. Valentina Voronkova, Marina Maksimenyuk, Vitalina Nikitenko. Humanistic management in the context of phylosopic anthropology: human dimension // Нова парадигма: Національний педагогічний університет імені МП Драгоманова, Нова парадигма, творче об'єднання. 2016. – Вип. 129. – С.64-76.
5. Воронкова В.Г., Нікітенко В.О. Сучасна геокультура як соціокультурний феномен культурної глобалізації // К: «Видавництво «Гілея», 2013. – Вип. 72. – С.487-492.
6. Кивлюк О.П. Глобалізація та інформатизація освіти в предметному полі філософії освіти // Гуманітарний вісник Запорізької державної інженерної академії. 2014. – Вип.57. – С.192-200.
7. Мельник В.В. Культура буття людини як соціокультурний феномен// Гуманітарний вісник Запорізької державної інженерної академії: [зб. наук. пр.] Запоріжжя: Вид-во ЗДІА, 2015. – Вип. 60. – С.253-268.
8. Мельник В.В. Бытие культуры как пространство для самореализации личности: теоретико-методические основания // Гуманітарний вісник Запорізької державної інженерної академії: [зб.наук.пр.] Запоріжжя: Вид-во ЗДІА, 2014. – Вип. 59. – С.139-149.
9. Максименюк М.Ю., Нікітенко В.О. Інформаційно-комунікативне суспільство як різновид складної соціальної системи і взаємодії // Гуманітарний вісник Запорізької державної інженерної академії: [зб.наук.пр.] Запоріжжя: Вид-во ЗДІА, 2016. – Вип. 66. – С. 266-278.
10. Nikitenko Vitalina. Cultural and social competence creation in the process of English language study: information society aspect // Gumanitarnyj visnyk Zaporiz'koi' derzhavnoi' inzhenernoi' akademii': [zb. nauk. pr.]. Zaporizhzhja: Vyd-vo ZDIA. 2016. – С. 251-257.
11. Олексенко Р. І. Вплив комунікацій на ціннісні орієнтири особистості // Гуманітарний вісник Запорізької державної інженерної академії. 2015. – Вип. 62. – С.65-73.
12. Олексенко Р. И. Философия образования как неотъемлемый фактор экономического развития общества // Социосфера. 2013. – № 3. – С. 19- 26.
13. Переломова О.С. Інтертекстуальність як системотвірна текстово-дискурсивна категорія Гуманітарний вісник Запорізької державної інженерної академії. 2008. – Вип. 34. – С.87-95.
14. Пожув В.І. Осмислення місця і ролі інформації у сучасному суспільстві // Гуманітарний вісник Запорізької державної інженерної академії: [зб.наук.пр.] Запоріжжя: Вид-во ЗДІА, 2010. – Вип. 42. – С. 4-13.
15. Пунченко О.П., Лазаревич А.А. Інформатизація як засіб репрезентації інформаційних ресурсів суспільства // Гуманітарний вісник Запорізької державної інженерної академії: [зб. наук. пр.] Запоріжжя: Вид-во ЗДІА, 2015. – Вип. 63. – С. 21-30.
16. Утюж І.Г. Цивілізаційна парадигма освіти: теоретико-методологічний аспект // Гуманітарний вісник Запорізької державної інженерної академії: [зб. наук. пр.] Запоріжжя: Вид-во ЗДІА, 2009. – Вип. 38. – С. 60-66.