

## THEORETICAL ESSENCE AND PRACTICE OF IMPLEMENTATION OF THE SYSTEM APPROACH IN FORMATION OF PROFESSIONAL RELIABILITY OF FUTURE OFFICERS IN THE ARMED FORCES OF UKRAINE

*The article describes the practice of using a systematic approach in the educational process in a military educational institution. The basic principles of behavior of pedagogical system are analyzed. These principles are defined by the system itself as a coherent organized set of military training. They contribute to the study of the processes of management of the educational process, taking into account the specific training of military personnel. This ensures a stable behavior. The system achieves effective training for future officers.*

*The basic pedagogical systems (types of training) are used in modeling the systematic approach in the educational process of a military educational institution. They are involved in shaping the professional reliability of the future Ukrainian Armed Forces officer. Each pedagogical system has its purpose and objectives, specific content, means and methods. A peculiarity of a systematic approach in military education is the ordering of the various elements into a single educational system to achieve a focused result.*

*The elements are part of the system for the sole reason: the degree of freedom at which they could be required to obtain the result of the system. The elements included in the system are ordered according to the defined parameters. The main tool for streamlining the interaction of system elements is the results that stabilize the organization of the system.*

*The professional training of future officers of the Armed Forces of Ukraine represents the integration process of the formation of four basic systems: theoretical, psychological-physical, pedagogical-educational, practical combat training. Consequently, the specific goals and objectives of professional training in higher education should, of course, change the content, organizational and procedural didactic principles, methods of formation of professional qualities, methods of pedagogical assessment of the professional readiness of an officer of the Armed Forces of Ukraine to perform functional duties.*

**Keywords:** systematic approach, professional training, educational process of military educational establishment, pedagogical systems, professional reliability of the officer.

**Introduction.** The development of theoretical and methodological foundations for the integration of military education, accordingly, requires systematic. Because the system provides an opportunity to combine all the components of the professional training of modern officers. They are also part of the system of vocational training in a military higher education institution. The program for implementing such a research position on building a system of vocational military education has been developed over the decades.

**Analysis of research and publications.** The researches of M. Neshchadim [5], O. Prokhorov, I. Tolok, V. Yagupov and many others are devoted to various problems of military education and strategy of its development. The definition of the term "system" is devoted to a considerable number of scientific works: P. Anokhin, I. Blauberg, L. Petrushenko, V. Ryzhikov, V. Sadovsky, B. Yudin and many others. Domestic researchers in the field of systemic research methodology (I. Blauberg [3], V. Sadovsky, B. Yudin [9], etc.) note that the noticeable spread of systemic research was due to at least three reasons. First, most scientific disciplines are psychology, sociology, logic, and etc. - substantially transformed the objects of their research. Second, new means of accumulating, storing and broadcasting information based on the use of modern computer technology have led to the emergence of management systems as the main subject of modern technical design and construction. They, by their structure and process of creation, act as typical examples of system objects. And finally, thirdly, the awareness of the fact of widespread introduction to modern science and technology of systems research has increased attention to the problems of general systems theory.

**The purpose of this article** is to consider the problem of applying a systematic approach in the organization of

educational process in a higher military educational establishment. The elements of the organization of the educational process of training of servicemen, as well as the possibility of using a systematic approach in the period of modernization of higher military education taking into account the conditions of the operation of the joint forces, introduction of standards of training of servicemen in NATO countries are considered.

**Main part.** The terms "system" and "systematic approach" are some of the most commonly used terms in scientific circulation. The concept of "systematic approach" began to function in the 30's of the twentieth century as an important methodological tool for scientific knowledge. This is a systematic reach, a systematic view, a systematic organization of object research, with subsequent optimization of their structure and functions. This focus of the issue requires a comprehensive consideration of the problem, often involving the participation of experts in various fields of knowledge. That is why the European integration of Ukrainian education, the civilizational transformations of modern society, make the application of a systematic approach in higher education institutions (including the military ones) more effective in approaching European standards more effectively to the requirements of the Bologna process.

Renowned Austrian biologist-theorist L. von Bertalanffy has played an important role in the formation and development of systematic research in the twentieth century. He argued the methodological community of "biological, behavioral and sociological fields" of scientific knowledge. He considered that systemic thinking "opens up new perspectives not only in theory but also in practice - in relation to problems of psycho-hygiene, education and society in general" [8, p. 176].

L. Petrushenko thought "going beyond the realm of infantile seizure of the possibilities opened by the

systematic approach, misunderstanding of the specifics of this theory and the relative truth of its conclusions" [6].

In the construction of vocational training in military training institutions, the most appropriate, in our view, can be considered the definition of P. Anokhin's "system": "System - is a complex of inventively involved components, where interaction and interconnection acquire the character of interaction of components to obtain a focal result" [1; 2].

Such a definition of the system fully satisfies the analysis and synthesis of "artificial systems" in such a field of human activity as military pedagogy.

According to P. Anokhin's observation, the use of a systematic approach is for the result to be truly productive. The task of the scientist is to fill the gulf that separates in many sciences the level of the whole and the level of the personal. "Naturally, - says the scientist, - it is impossible to fill this gap with words and definitions: effective working principles in this direction are necessary" [2].

The use of a systematic approach in military education provides the following sequence of procedures:

- fixation of some set of elements regarding the pedagogical process separated from the rest;
- establishing and classifying the connections of this set: external (namely, plural relations with the rest of the world) and internal (namely, connections between plural elements);
- definition - based on the analysis of a set of external relations - principles of interaction of the system with the pedagogical environment;
- the selection of a number of internal bonds of their special type - system-forming, which provide, in particular, a certain ordering of the pedagogical system;
- finding out in the process of studying the ordering, structure and organization of the pedagogical system (the structure expresses the invariant aspect of the system, and the organization - the quantitative characterization and orientation of ordering);
- analysis of the basic principles of behavior of the pedagogical system, which are defined by the system as a whole organized set of military training;
- study of management processes that ensure a stable behavior and achieve a system of effective military education outcomes [7; 8].

The main point of a systematic approach in military education is that any detail of research and observation can be rooted in one of the conditional mechanisms of internal architectonics. Any scientific topic that claims to be true cannot be formulated outside a specific system. In addition, the interpretation of the scientific research obtained is undoubtedly of the greatest effect if systemic mechanisms are taken into account.

Elements of the system of vocational training in military universities are training facilities that are part of the system and perform certain functions. In terms of vocational training, each element is a subsystem, but in terms of internal structure, the element will be a system. Sub-elements will act as system elements (second order).

Elements of the system of vocational training in military universities are the means (their aspects) of training:

- practical combat training;
- theoretical training;
- psychological and physical training;
- pedagogical and educational training.

In terms of "self" each named element is a system.

In order to achieve the programmed result of the system - a high level of training of future officers in the

process of training in military universities it is necessary to carry out the system ordering on the basis of certain regularities (principles). They must influence so many different training tools that they will eventually form a defined highly organized, flexible complex of many possible integrative entities in response to environmental influences.

The professional reliability of an officer cannot be formed by any means of training, such as psychological and physical. But only the sum of all the training of future officers in military universities. In order to attract a programmed result, it is necessary to position the elements (means of preparation) of the system so that their interaction becomes "interaction" in order to obtain a "focused" result. One of the important features of the system is the inability of the element to exist outside the system and the destruction of the system when the element falls out [8].

Professional training at military higher education institutions can be a system only when each element of it cannot perform the functions of the whole system and at the same time cannot perform its own functions outside the system organization.

The inclusion of a specific tool (subsystem) for the training of a future Armed Forces of Ukraine officer in the system does not mean that the communication of this element with the environment will be interrupted. On the contrary, the systematic organization of vocational training in military universities should provide not only the substratum and the functional side, but also a structure that necessarily covers the interconnections of these subsystems. The system functions only on condition of unity of its elements, subsystems. The elements form the system only if the elimination or failure of any of them changes the program of activity of the whole system.

The results of studies carried out to improve the training of future officers of the Armed Forces of Ukraine, but without consideration of the entire structure, may not in that case be incorporated into the system in order to be of a coherent and integrative nature. As a result of interacting with other training tools, some effective tool may change or acquire new qualities that are not taken into account in a systematic study. This influences the obtained focused result of vocational training in a military school.

In order to specify the essence of the educational process in a military educational institution, the issue of interaction of other systems of formation of future officers of the Armed Forces of Ukraine providing their professional formation is an important factor. This need is caused by the current uncertainty in the structure of systems, in their interaction in order to obtain a single result. It should be noted that it is quite difficult to answer such questions within the analytical style of thinking. As we have already mentioned, four basic types of training are involved in the professional formation of the officer of the Armed Forces of Ukraine: theoretical, psychological-physical, pedagogical-educational training and practical combat training.

Figure 1 shows the main pedagogical systems (types of training) involved in the formation of the officer of the Armed Forces of Ukraine. Each has its own purpose and objectives, specific content, tools and methods. As the professional training of future officers of the Armed Forces of Ukraine is an integration process of formation of the same four basic systems (theoretical, psychological-physical, pedagogical-educational, practical combat training). Specific goals and objectives of training, of course, should change the content, organizational and

procedural didactic principles, methods of formation of professional qualities, methods of pedagogical study of the

assessment of professional readiness of the Armed Forces officer.



Figure 1. The main components of the educational process of a military school

Therefore, every basic system in the process of professional training of the officer of the Armed Forces of Ukraine should solve specific tasks of such training, which we call aspect. So, for example, psychophysical preparation, as R. Makarov notes, in solving its basic task (development of basic physical qualities, tempering of an organism, etc.) according to the purpose of vocational training can solve aspect tasks (formation of emotional stability, endurance at overloads, hardness of an organism, etc.) through a purposeful organization and functioning of the information process [4].

The integration of the eponymous aspects of the basic systems form the system of the educational process of a military educational institution. At the same time, the efforts of the pedagogical system in achieving a unified programmed result - professional training in military universities - should be focused by a purposeful organization, special didactic principles that allow to obtain high efficiency in various actions of individual information processes.

**Conclusions.** The basic systems of vocational training in higher education institutions is closed in the article have a conditional level of involvement in the educational process. However, the basis of the schematic is the integrity of all systems in the training of the future officer of the Armed Forces of Ukraine. The interchangeability or absence of any one system of training leads to irreparable consequences, the result of which is not fully formed the readiness of the officer of the Armed Forces of Ukraine for professional activity. Theoretically, readiness for professional activity can be formed, that is, knowledge, skills and abilities acquired in full, but the important point remains whether the psychological readiness for professional action during an extreme situation. Therefore, the training of the officer of the Armed Forces of Ukraine in military universities is systematic. Such a conclusion is made in view of the material outlined above.

The result of the systematic functioning in the educational process of a military educational institution is a high level of readiness of cadets (future officers) for practical activity. This level can be reached only by ordering the system on the basis of certain principles to which we are assigned: the principle of objectivity, completeness, specific-historical (genetic) approach, systematic nature, contradictions of pedagogical experience. This provides an opportunity to purposefully organize the specific functioning of all future officers' training subsystems and their effective interaction in accordance with their specific and overall goals and objectives.

#### References:

1. Anokhin P.K. Selected Works: Philosophical Aspects of Functional System Theory / P.K.Anokhin. - M.: Science, 1978. - 400 p.
2. Anokhin P.K. General principles of the theory of functional system / P.K. Anokhin - M.: Nauka, 1980. - 112 p.
3. Blaberg I.V. System approach in modern science. Problems of methodology of systematic research / I.V. Blauberg, V.N. Sadovsky, E.G. Yudin. - M.: Mysl, 1970. - 455 p.
4. Makarov R.N. Theory and practice of constructing target models of operators of particularly complex control systems: [monograph] / R.N. Makarov, L.V. Gerasimenko. - M.: Edit. International Academy of Human Problems in Aviation and Aeronautics, 1997. - 450 p.
5. Neshchadym M.I. Military education in Ukraine: history, theory, methodology, practice: [monograph] / M.I. Neshchadym. - K.: Kyiv Universities Center, 2003. - 852 p.
6. Petrushenko L.A. The unity of systematicity, organization and self-movement / L.A. Petrushenko. - M.: Mysl, 1975. - 286 p.
7. Ryzhikov V.S. Theory and practice of designing target models (professiograms) and the process of professional training of future lawyers / V. Ryzhikov // Monograph. - Kherson, LLC "Island", 2010. - 280 p.
8. Ryzhikov V.S. Theory and practice of a systematic approach in the training of future officers in the context of reforming military education today Bulletin of the Cherkasy University. Pedagogical Sciences Series. - 2018. - Ed. 18. - P.81-89.
9. Yudin B.G. Some features of the development of a systematic approach / B.G. Yudin // System studies. Yearbook. 1980. - M.: Nauka, 1980. - 424 p.

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## **ТЕОРЕТИЧНІ ДОСЛІДЖЕННЯ І ПРАКТИКА ВПРОВАДЖЕННЯ СИСТЕМНОГО ПІДХОДУ У ФОРМУВАННІ ПРОФЕСІЙНОЇ НАДІЙНОСТІ МАЙБУТНІХ ОФІЦЕРІВ У ЗБРОЙНИХ СИЛАХ УКРАЇНИ**

У статті описана практика використання системного підходу у освітньому процесі військового навчального закладу. Проаналізовано основні принципи педагогічної системи. Ці принципи визначаються самою системою як цілісний організований набір самої військової підготовки. Вони сприяють вивченню процесів управління навчальним процесом з урахуванням специфічної підготовки військовослужбовців. Це забезпечує стабільну поведінку. Система забезпечує ефективну підготовку майбутніх офіцерів.

Основні педагогічні системи (види навчання) використовуються при моделюванні системного підходу в навчальному процесі військового навчального закладу. Вони беруть участь у формуванні професійної надійності майбутнього офіцера Збройних Сил України. Кожна педагогічна система має своє призначення та завдання, конкретний зміст, засоби та методи. Особливістю системного підходу у військовій освіті є впорядкування різних елементів у єдину освітню систему для досягнення цілеспрямованого результату.

Елементи є частиною системи, а саме: ступінь свободи, при якій вони сфокусовані для отримання результату системи. Елементи, що входять до системи, упорядковуються відповідно до визначених параметрів. Основним інструментом упорядкування взаємодії елементів системи є результати, що стабілізують організацію системи.

Професійна підготовка майбутніх офіцерів Збройних Сил України являє собою інтеграційний процес формування чотирьох основних систем: теоретичної, психолого-фізичної, педагогично-виховної, практичної бойової підготовки. Отже, конкретні цілі та завдання професійної підготовки у вищій школі, безумовно, повинні змінювати зміст, організаційні та процедурні дидактичні принципи, методи формування професійних якостей, методи педагогічної оцінки професійної готовності офіцера Збройних Сил України виконувати функціональні обов'язки.

**Ключові слова:** системний підхід, професійна підготовка, навчально-виховний процес військового навчального закладу, педагогічні системи, професійна надійність офіцера.