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PEDAGOGICAL MODELING OF THE FORMATION OF ORGANIZATIONAL COMPETENCE IN FUTURE SPECIALISTS IN PHYSICAL CULTURE AND SPORTS OF THE ARMED FORCES OF UKRAINE

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A pedagogical model of the formation of organizational competence among future specialists in physical culture and sports of the Armed Forces of Ukraine with the disclosure of the content of all its components: goals and tasks, organizational and pedagogical conditions, content, methods, forms of formation, criteria and indicators for diagnosing the results of formation is proposed. Approaches to understanding the concept of "pedagogical modeling" are defined. All components of the model are interdependent and only in symbiosis ensure the formation of organizational competence in future specialists in physical culture and sports of the AF of Ukraine.

The model consists of the following blocks: target-methodological, theoretical, subject-subject, methodical, control-corrective and result: the target-methodological block reflects the target and task of forming organizational competence among future specialists in physical culture and sports of the AF of Ukraine, taking into account their professional knowledge, skills and abilities, professional and ethical standards, values and experience in the chosen profession; the theoretical block – the structure of their organizational competence and contains important requirements for its formation; the subject-subject block ensures the interaction of at least two subjects – a teacher and a cadet, the methodological basis of which is the subject-activity approach to the formation of the organizational competence of the latter; the methodological block – its gradual formation among respondents, which is implemented in a certain sequence; the control and correction unit provides for the implementation of such functions as diagnostic, regulatory and predictive, which in turn provide an opportunity to evaluate and control the acquired theoretical and practical knowledge by the respondents; the result block includes the result of the formation of organizational competence in future officers – specialists in physical culture and sports and the clarification of the levels of its formation using the criteria and indicators we have determined

Keywords: *pedagogical modeling, model, organizational competence, future specialist in physical culture and sports, formation*

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1. Introduction

After the full-scale invasion by the Russian Federation and in connection with the use of new forms, means and methods of conducting hostilities on the territory of Ukraine, the improvement of the use of new types of weapons and military equipment, the importance of the human factor in military affairs and, accordingly, the requirements for the management functions of officers have significantly increased. In the context of our research, it should be noted, that the state of affairs indicates the presence of contradictions between the need for future officers – specialists in physical culture and sports of the Armed Forces of Ukraine (hereinafter – future officers) and the lack of a sufficient number of trained officer personnel; high requirements for psychological and pedagogical preparation and the lack of specially developed technology and methods of forming their organizational competence; the need to ensure the continuous formation of organizational competence among

future specialist officers and the lack of a systematic approach to its formation.

In turn, the future specialist in physical culture and sports of the Armed Forces of Ukraine is an officer of the Armed Forces of Ukraine who, according to his/her job duties, ensures the organization, control, and planning of physical training in military units and structural units. We will assume that the organizational competence of future specialists in physical culture and sports of the Armed Forces of Ukraine is a set of certain components of professional activity that characterize the optimal level of organizational preparedness, ability and readiness to implement their job competencies as a manager of physical education and sports in a military unit, that is, the content of this competence should be correlated with their main organizational functions in the military unit regarding the organization of physical training and sports with personnel. In this regard, pedagogical modeling of the formation of their organizational compe-

tence is a necessary pedagogical measure for the improvement of future military professional and special training in the Armed Forces (hereinafter - AFU). In the educational environment, there is a need more than ever to build pedagogical models that provide an opportunity to simulate the appropriate educational process, taking into account innovative paradigms of scientific vision, including directly future officers - specialists in physical culture and sports of the AF of Ukraine.

2. Literature review

Modeling in pedagogical theory and practice is a powerful research method and is used at various stages of pedagogical research. Thus, in the philosophical dictionary, modeling is "an indirect, mediated method of scientific research of objects of knowledge (the direct study of which for certain reasons is impossible, complicated or impractical) by studying their models" [1].

In turn, the analysis of sources and dissertations shows that great attention is paid to the development of pedagogical models, namely: the model of the educational process in vocational and technical educational institutions [2], modeling the learning process in the advanced training system [3], modeling in professional education [4], modeling as a mechanism of strategic development of the university [5], polysystem modeling of the content of technologies for teaching general engineering disciplines [6], modeling of pedagogical systems and processes [7], theoretical and methodological principles of modeling pedagogical processes [8], modeling in professional training future teachers [9], mathematical modeling of a teacher's professional activity [10], pedagogical modeling of the development of professional competence [11], modeling of the activity of a future engineer-pedagogue [12], etc.

Scientists believe that "The modeling process involves the study of objects not directly, but indirectly through the study of relevant auxiliary objects (elements), and its results should be confirmed and become the basis for predicting the processes that take place in the object – the original, and in accordance with that, it is possible to emphasize the adequacy of the proposed model of the object (phenomenon) under investigation" [13].

The problem of pedagogical modeling of the professional competence of graduates of vocational educational institutions is revealed by a scientist [14], and the model of the formation of professional competence in the category under study by us – [15]. Thus, it is emphasized, that "Pedagogical modeling makes it possible to create a model of a specialist based on his/her competencies, to substantiate a model of professional competence, as well as to create a model of its formation in the process of acquiring professional education" [14].

And "The essence of the professional competence development model of the head of physical training and sports of a military unit is to establish relationships between the goal and its other components, to determine the sequence of development of mental neoplasms – special knowledge, skills, abilities, masteries, to promote the sequence of positive changes in the value-motivational, cognitive, praxeological and subjective spheres of the psyche during one or another period of time" [15].

According to a foreign scientist, the pedagogical model is a theoretical research tool, created to perfectly reproduce the process of education and upbringing. In particular, he claims that the pedagogical model is a formal theoretical construction that is scientifically and ideologically based on the pedagogical process, which contributes to the development, interpretation, design and correction of the pedagogical reality, which occurs at different levels and corresponds to a specific existing need [16].

Thus, pedagogical modeling is an important stage of the target-oriented activity of a teacher-researcher, because when carrying out pedagogical activities according to a certain plan (model), he/she has the opportunity to evaluate the results of his/her activity, compare the results of all subsequent steps, believing them not in reality, but on the model.

Modeling, as a method, makes it possible to achieve the following goals [17]:

- heuristic (classification, schematic notation, search for new laws and theories, interpretation of empirical data, etc.);
- computational (solving computational problems using the construction of algorithms, block diagrams, dependency graphs, etc.);
- experimental (empirical testing of the hypothesis using appropriate models).

Scientists also suggest using pedagogical modeling for the development of various types of competence of specialists in the military education system [13, 15, 18].

Despite the presence of a significant number of scientific studies on the problem we are investigating, the pedagogical modeling of the formation of organizational competence among future officers – specialists in physical culture and sports of the AF of Ukraine has remained out of the attention of scientists.

3. Research aim and tasks

The aim of the research is pedagogical substantiation of the model of formation of organizational competence among future specialists in physical culture and sports of the AF of Ukraine.

To achieve the aim, the following tasks were set:

1. To develop and substantiate a pedagogical model of organizational competence formation in future specialists in physical culture and sports and to determine its components.
2. To define "pedagogical modeling of the formation of organizational competence among future specialists in physical culture and sports of the AF of Ukraine" and reveal its essence.

4. Materials and methods

The main idea of modeling is to develop a model that will contribute to the active formation of organizational competence in future officers.

In our research, pedagogical modeling goes through certain stages.

1. Complete representation of the problem of building a model of the formation of organizational competence in future respondents, determining its place, role and functions in the system of their future military-professional training.

2. Respondents' structural awareness of organizational competence – highlighting its structure, content and determining the content and methodical sequence; development and substantiation of criteria and indicators for its diagnosis.

3. Isolation of the blocks of the pedagogical model of formation of organizational competence among the respondents – target-methodological, theoretical, subject-subject, methodical, control-corrective and result.

4. Model development:

– on the basis of theoretical and empirical research on the subject of research, information is established about the organizational competence of future officers (historical, methodological, methodical, empirical, experimental), scientific tasks are determined, including the specific subject of modeling that is the formation of organizational competence among future specialists in physical culture and sports in the AF of Ukraine;

– determination of the main pedagogical characteristics of the formation of their organizational competence, which is specified in its content, methods and technologies, means and main stages;

– establishment of cause-and-effect relationships of pedagogical modeling - the effect of introducing the model into the pedagogical process regarding the formation of organizational competence among future officers.

In the research, the pedagogical modeling of the formation of organizational competence among future officers – specialists in physical culture and sports is understood as a holistic, pedagogically grounded system, the content of which includes interconnected structural components in the form of separate blocks (target-methodological, theoretical, subject-subject, methodical, control-corrective, result"), which are aimed at the military-professional formation of the future specialist as an organizer of physical training and sports in a military unit in the process of acquiring military-professional education at the MHEI i.e. at exerting a targeted influence on the process of forming their organizational competence. Accordingly, a feature of pedagogical modeling is that as a result, a conceptual model of the pedagogical process (phenomenon, object) is created, which can be used to predict its formation, etc.

5. Research results and their discussion

On the basis of the conducted theoretical exploration of the scientific literature and on the basis of taking into account the leading ideas and provisions of systemic, competence, contextual and subject-activity methodological approaches to the professional training of future specialists, as well as the specifics of the job assignment of the respondents, we offer the following contextual model, which includes a target-methodological, theoretical, subject-subject, methodical, control-corrective and result blocks of forming organizational competence in future officers.

The target-methodological block of the model reflects the target, methodological foundations and tasks of forming organizational competence in future officers, taking into account their future military-professional, special and organizational knowledge, skills and abilities,

professional and ethical norms, values and experience of activities in the chosen profession field.

The target is to increase the level of formation of their organizational competence. The tasks include the formation of the components of their organizational competence – value-motivational, knowledge, managerial, control-corrective and reflective-evaluative, which are determined, taking into account the requirements of the following methodological approaches: system, competence, androgogical, acmeological, cultural, contextual and subject-activity. Together, they make it possible to take into account their age, service, military-professional, special features, including the most important – organizational activity in the troops.

Principles: scientificity, systematicity and consistency of teaching, accessibility and feasibility of teaching, consciousness and activity, visibility and modeling, contextuality and applied orientation.

The theoretical block of the model reflects the structure of organizational competence in future officers and contains important requirements for its formation. In addition, the content of training should take into account modern achievements in the fields of education, information technology, health care and military sciences. We believe that the content of future military professional training should also be directly aimed at forming the components of their organizational competence - value-motivational, knowledge-based, managerial, control-corrective and reflective-evaluative.

The model, proposed by us, makes it possible to distinguish, taking into account the opinions of scientists [7], the following functions of the process of forming organizational competence among future officers in the process of their professional training:

value-motivational (encourages to acquire new knowledge, ways of knowing, treat the learning process consciously, to be active in educational activities);

cognitive (aimed at the development of the system of organizational knowledge, abilities and skills);

communicative (develops the ability to communicate, both in the military team and in everyday life as an organizer of physical culture and sports);

adaptive (develops the ability to receive, select, store, reproduce and transmit information in the process of implementing an organizational function);

normative (develops an idea of social and moral norms, values, standards of behavior in the process of implementing an organizational function);

innovative (develops the ability to solve professional tasks of a new level, promotes the development of professional mobility and adaptation to changing conditions of organizational activity);

evaluative (develops the ability to self-evaluate, self-control, compare one's own achievements with the achievements of others).

The formation of organizational competence in future officers takes place sequentially in three stages:

– diagnostic and motivational (aimed at determining the initial level of organizational competence formation in future officers, problems and difficulties, encountered by cadets in the educational process, as well as at the formation of values and positive motivation for

learning and further self-development as an organizer of physical culture and sports;

– operational (implies certain actions to create favorable conditions for the formation of their organizational competence, activation of self-educational activities and individual work);

– result (aimed at determining the final level of formation of their organizational competence).

The subject-subject block ensures the interaction of at least two subjects – a teacher and a cadet, the methodological basis of which is the subject-activity approach to the formation of the organizational competence of the subjects. Accordingly, the following should be considered:

– clearly form for cadets what they need to form - organizational competence;

– it is necessary to make the cadet him/herself the subject of educational activity in the learning process (autonomous, independent, responsible for the result of his/her work);

– provide the cadet with the necessary educational material that he/she must master;

– clearly organize and promote joint educational activities of cadets in the process of learning.

In this regard, clear and consistent implementation of all the above conditions will ensure a positive result of training cadets in the training process – the formation of organizational competence. In addition, the subject must fully master the structure of his/her educational activity, in which he/she participates, taking into account his/her motives and goals for obtaining the result, the ability to evaluate, reflect and correct it. Therefore, it singles out the main qualities of the subject: self-awareness; self-regulation; autonomy; the ability to bear responsibility for one's actions (deeds) and the probable result of one's actions.

The methodical block provides respondents with a gradual formation of organizational competence, which is realized by the sequence of its formation, determined by us. This block is represented by a set of various forms, methods and means of training, which are necessary to achieve the required level of formation of their organizational competence. The main teaching methods include oral presentation of the material, demonstration, discussion of the material being studied, practical classes, independent work, control, and the types of educational classes include lectures, seminars and practical classes, individual and independent work, educational practice, exams, and storytelling, explanation, conversation, discussion, business and role-playing games, conducting round tables, solving situational tasks, writing abstracts, searching for information on the Internet, preparing multimedia presentations, practical implementation of exercises, game design, self-examination and diagnosis, exchange of experience, meeting with outstanding athletes and coaches, the means include textbooks, training aids, physical exercises, forces of nature and hygiene factors, test tasks, multimedia teaching aids, sports equipment and tools.

The control-correction block provides for the implementation of such functions as diagnostic, regulatory and predictive, which in turn provide an opportunity to evaluate and control the acquired theoretical and practical knowledge by the respondents. The content of the

block demonstrates our justified criteria and indicators for diagnosing the formation of organizational competence in future officers – specialists in physical culture and sports and for finding out the levels of its formation [19].

The result block includes the result of the formation of organizational competence in future officers as specialists in physical culture and sports and the clarification of the levels of formation of its structural components using the criteria and indicators we have determined. Scientists actually consider the formation of "professional subjectivity, a subject of military-professional activity, and in our study – a subject of organizational activity "as an integral result of the professional training of officers" [20].

The main function of this block is ascertaining – ascertaining the actual dynamics and levels of formation (low, medium, high) of organizational competence (according to the following components: value-motivational, knowledge-based, managerial, control-corrective, reflective-evaluative) using the developed methodology diagnosis. On the basis of established levels of formation of organizational competence, information is analyzed to make changes to its formation. This process takes place by adjusting tasks, the content of the educational process, forms and methods of forming organizational competence in future specialists in physical culture and sports during military-professional training.

The general population of the studied category is 43 cadets (future specialists in physical culture and sports of the AF of Ukraine), accordingly, the sample population will be small. 26 cadets of the 3rd and 4th courses of the educational and scientific institute of physical culture and sports and health technologies of the National Defense University of Ukraine named after Ivan Chernyakhovsky will take part in the diagnosis. And if the research sample is relatively small – no less than 5 people and no more than 50, then all of them are subject to research – continuous diagnosis. Taking into account these characteristics of the sample, a consistent pedagogical experiment will be conducted. After its implementation, the presence of statistical differences in the levels of formation of organizational competence of EG before and after the formative experiment will be established.

We see the prospects for further scientific research in this direction in the development of the author's methodology for the formation of organizational competence among future specialists in physical culture and sports of the AF of Ukraine.

6. Conclusions

Therefore, pedagogical modeling is an actual scientific and pedagogical problem, the solution of which is being worked on by a large number of scientists.

According to the set task, we can draw the following conclusions:

1. A pedagogical model for the formation of organizational competence among future specialists in physical culture and sports has been developed and substantiated, and its structural components have been determined.

2. It has been determined, that under the pedagogical modeling of the formation of organizational compe-

tence in future officers - specialists in physical culture and sports, we understand a holistic, pedagogically grounded system, the content of which includes interconnected structural components in the form of separate blocks (target-methodological, theoretical, subject-subject, methodical, control-corrective, result), which are aimed at the military-professional development of the future specialist, as an organizer of physical training and sports in a military unit in the process of acquiring a military-professional education at the MHEI, i.e. at the implementation of a targeted influence on the process of forming their organizational competence. Accordingly, a feature of pedagogical modeling is that as a result, a conceptual model of the pedagogical process (phenomenon, object) is created, which can be used to predict its formation.

The pedagogical model of the formation of organizational competence among future specialists in physical culture and sports of the AF of Ukraine with the disclosure of the content of all its components: goals and tasks, organizational and pedagogical conditions, content, methods, forms of formation, criteria and indicators for diagnosing the results of formation is proposed. All components of the model are interdependent and only in symbiosis ensure the formation of organizational competence in future specialists in physical culture and sports of the AF of Ukraine.

Conflict of interest

The authors declare that they have no conflict of interest in relation to this study, including financial, personal, authorship, or any other, that could affect the study and its results, presented in this article.

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