



MODERNIZATION OF TRAINING OF NAVAL SPECIALISTS AT HIGHER EDUCATIONAL INSTITUTIONS

Igor Poprotskyi¹, Viacheslav Sapiga²,

- 1 Captain of 2nd rank, Senior Lecturer Department of Ship Power Engineering and Power Systems Institute of Naval Forces National University "Odessa Maritime Academy"
<http://orcid.org/0000-0002-0260-5068>
e-mail: poprockiy_igor@ukr.net
- 2 PhD in Technicals, Associate Professor of the Department of Ship Power Engineering and Power Systems Institute of Naval Forces National University "Odessa Maritime Academy"
<http://orcid.org/0000-0002-2752-5152>
e-mail: sapiga.seb@gmail.com

Abstract. The article is devoted to the search for conceptual approaches to solving the problem of constructing a new model of training officer personnel for the fleet, adapted to the standards and principles of NATO. This article, based on the consideration of the training models of the naval specialist, where the external factor is the educational environment, which forms the request for content, quality and methodology of military education, determines the main factors that are the basis of a perspective model of training a military seaman. Using the method of comparing the study of the educational environment of the existing and prospective model of training a naval specialist testifies that consideration of this process is necessary from the standpoint of the system approach, considering that the future officer will have to act in the conditions of wars (military conflicts) of the fourth generation where the line between the troops and people erases intentionally, namely: the environment changes itself under the influence of social, political, cultural and historical factors. The main directions of modernization of educational environment are: generalization, systematization and comprehension of the experience of formation and development of the system of military education of the former member states of the Organization of Warsaw Pact; the study of the process of the transformation of theoretical and methodological approaches to create a modern system of military education, based on the best world and domestic educational traditions; the change of the mentality of all the subjects of the educational activity, rethinking of the need for changes in the educational process and the formation of strategic vision for the further development of the military education system in Ukraine.

Key words: *professional education, a naval specialist, system of military education, modernization of educational environment.*

Introduction. In the Strategy of the Naval Forces of the Armed Forces of Ukraine in 2035, presented in November last year by the Commander of the Naval Forces of the Armed Forces of Ukraine, a clear task has been set before educators and scientists to ensure the preparation of well-motivated, highly professional naval specialists who are determined to win.

The Armed Forces of Ukraine (hereinafter: AFU), in particular – the Naval Forces (hereinafter: NFU), stand on the verge of systemic educational transformations. It updates a number of tasks,

including: a thorough study of the experience of organizing military education in Ukraine and NATO countries; assessment of the state of modern domestic military education; definition of the prospects of the state in this area; formation of a new generation of highly skilled, proactive servicemen with advanced leadership qualities (Poltorak, 2018).

The purpose of modernizing the training of highly qualified personnel for the Navy Forces should be to create an educational environment with certain characteristics, among which dynamism and flexibility

(for the rapid adaptation of the educational process to the conditions of mobile information dissemination in the world of information technology) and security (prevention of new threats and challenges that have a hidden (hybrid) character) are becoming particularly important.

Materials. The problems of the formation and development of military education in Ukraine were studied by M. Dragomirov (1956), L. Yershova (2015), S. Lipkevich (2006), M. Neshchadim (2004), V. Telelim (2011), S. Poltorak (2016; 2018), O. Panfilov and L. Petrova (2016) and other authors. In particular, the transformation of the ideal of an officer in the nineteenth and early twentieth centuries is highlighted in the monograph by L. Yershova (2015, pp. 312-315), where attention was focused on the causes of the failure of military education institutions of the Russian Empire to form the ideal of "a noble military layer" declared by the state education system and formed by "loyal and conscious servants of the Throne and Fatherland". Problems of training troops in peacetime are presented in detail in the studies of M. Dragomyryov (1956, pp. 603-684). Researchers of the current state of military education consider its main features to be conservative and dogmatic (as a consequence of the Soviet period of development). The authors also agree that the controllability of the system of military education depends on the mechanism of regulation of relations between teachers, collaborates, heads of specialized (military) institutions of higher education (hereinafter: HEI), authorities of government management and the customer of educational services (in our case, this is the Command of Navy Forces of the Armed Forces of Ukraine). At the same time, the

researches devoted to the study of the peculiarities of the formation of the educational environment at the institutions of naval education in the leading countries of the world remain relevant.

The aim of the paper is to analyze the state and prospects of the formation of the educational environment at the naval institutions of higher education, adapted to the standards and principles of NATO.

Methods. To achieve the goal and solve the tasks, a number of theoretical methods were used: analysis and synthesis (for the identification of the scientific problem and the formulation of the research objectives), induction and deduction (for identifying the causative factors in the educational environment), comparison (for the study of transformation of educational environment in the Soviet and modern system of military specialists training for the fleet).

Results and discussion. Military education in the USSR was relatively well financed and provided with the necessary weapons and military equipment and other material and technical means and resources (Telelim, 2011; Lipkevich, 2006). This caused the formation of the training of military specialists (*Fig. 1*).

The world's system of that time was characterized by a military rivalry between the two superpowers (the USA and the USSR) that formed the corresponding foreign policy and two opposing models of development of society and economy: capitalist (market) and socialist (planned). The confrontation of the two military-political blocks took place in the form of the so-called "Cold War", which prompted rival countries to build up the continuous military potential

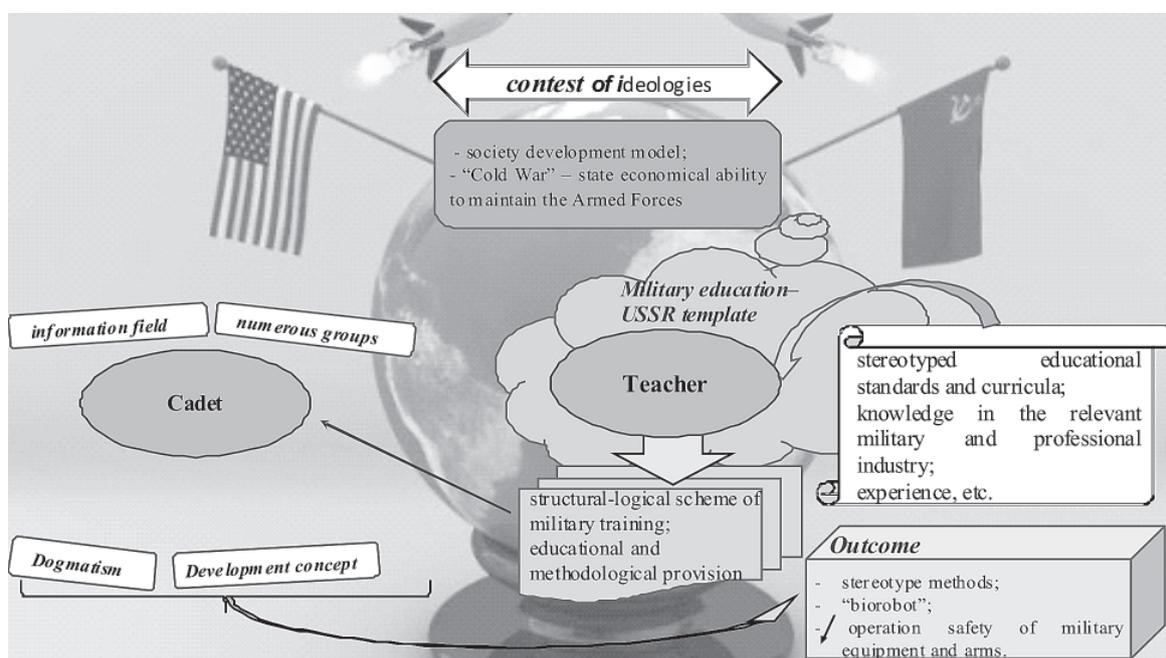


Fig. 1 Conditional scheme of educational environment at Soviet military educational institutions

and caused the devastating consequences of the arms races, which became a serious burden for the economies of their countries. It is known that during the defense planning, the USSR Government did not pay particular attention to balancing the needs of defense and the capacity of the country's economic potential. The distinctive feature of the Soviet system of naval education was the strict regulation and controllability of all its components. The main factors of Soviet-style military education, which determined the specifics of the professional training of a cadet, can be (Fig. 1): the information field formed by the funds of academic libraries and military-technical information bureau, educational films for a narrow circle of specialists; sufficiently numerous training groups; the dogmatic approach in education; lack of independence and autonomy in the educational environment; the program of development of armament and military equipment, and so on.

An analysis of the contemporary educational environment makes it possible to find out its characteristic features, namely:

- ✓ a template approach to the training of a military specialist (no alternative in the choice of forms, methods, disciplines, the idealization of the theoretical training of tactical level specialists, the lack of an individual approach to the development of the personal and professional career of the cadet, without taking into account his abilities and personal needs; low efficiency, which facilitated low percentage of competent military managers);

- ✓ preparation of so-called "biological robots" (creation of conditions for constant moral-psychological and ideological-propagandistic pressure on the consciousness of the future military specialist, restriction of his rights and freedoms, lack of proper conditions for the development of critical thinking, strict ideological direction of military training, the destruction of everything that could come into conflict with the dominant ideology);

- ✓ secondary priority of safety maintenance of the operation of armaments and military equipment (overload of cadets and junior officers with tasks not related to professional activities).

The collapse of totalitarian structures in Central and Eastern Europe allowed the countries of the former socialist camp to act more actively on the path of democratic transformations and, as noted by S. Lipkevich (2006), in these countries, a sense to distance themselves from the Soviet legacy appeared. On the other hand, the rapid development of events in the early 90's of the twentieth century led to the formation of a strategic vacuum, in particular, in the security sector, which could not but cause the worries in the leading countries of the world due to the

development of the situation in Central and Eastern Europe. The remarkable event of the NATO summit in London (1990) was the appeal of the Heads of State and Government of NATO member states to the governments of the countries of the socialist camp with a proposal to establish permanent diplomatic ties with the Alliance and work on new relationships on the basis of cooperation. NATO's demands for new members were (and still remain) largely political: candidate countries should create a stable democratic system, adhere to market reforms, subordinate the army to civilian control, respect the rights of their own ethnic minorities and the sovereignty of neighboring countries. In addition, according to the NATO leadership, future Allies had to overcome their backwardness and dependence on Western standards of defense capabilities.

Returning to the Armed Forces of Ukraine, we will not focus our attention on the stages of their reforming (this is the subject of a separate study). Let us clarify that the analysis of the Soviet system of military education in Ukraine is sufficiently detailed (Nashchadim, 2004). It should also be emphasized that during the years of Ukraine's independence, changes in the formation of the educational environment did not become systematic as a result of the absence of a clear paradigm of development of the state and its Armed Forces. However, in 2014, the hybrid war against Ukraine, the annexation of Crimea by Russia and the occupation of part of Donetsk and Lugansk regions have become a powerful impetus for the active modernization of the educational environment of the Ukrainian institutions of naval higher education. The main factors of modernization include:

- ✓ peculiarities of the development of the global community (globalization, informatization, exacerbation of civilizational and ethnic contradictions, economic growth of the states of the Asia-Pacific region and Latin America, increase of the significance and role of high technologies, intellectual and informational resources, double standards in solving international political, economic, ethnic, interconfessional, military and other crisis phenomena and conflicts, expansion of activities of extremist, terrorist organizations, etc.);

- ✓ peculiarities of the development of the maritime industry (the growth of world trade and the role of shipping in it, the emergence of the problem of providing free shipping by international maritime routes, the search for economic and environmental technologies and business decisions for the future fleet and its assets) by the maritime industry;

- ✓ definition of strategic tasks of the Naval Forces of the Armed Forces of Ukraine (for the period up to 2035) due to phased and balanced development of their

combat potential (consists of three components – physical, conceptual and moral);

✓ increased influence of digital technologies (use of combat modules, drones, digital weapons, the possibility of using artificial intelligence in combat systems, provision of cyber security weapons and military equipment) on the system of naval education.

All this changes the environment that affects the modern and perspective models of training a military (naval) specialist of the future (Fig. 2). The environment in which there are both a teacher and a cadet now, is characterized by the fact that they live in the century of information that is formed through: active introduction of the latest information technologies into the educational process, the creation of modern academic libraries and electronic funds, which operate in the format 365/7/24 with the access to their resources from anywhere in the world (for cadets of the mentioned HEI), the introduction of e-Learning Concept into the training of a military specialist.

From the point of view on the modern educational environment and the system of work of the commander (chief), it can be stated that the concept of their relationship (aimed at effective work to achieve the best results of the military team, that is, work for victory) is changing. In terms of training a military specialist, this is a creative approach in the military education system, which should create a comfortable working environment for the teacher (eliminating his excessive overload of teaching disciplines during the academic year) and his work surrounded by like-minded people. A creative approach is necessary for

organizing the training of the cadet himself, creating conditions for the effective acquisition of his knowledge, skills and abilities, as well as the comfortable environment in which he is during training. An important aspect is the low motivation of the students (listeners) on the background of unresolved issues of social and domestic maintenance of the future officer. On the other hand, due to low pay of the teacher work, the readiness for self-development as an educator and future scientist is not sufficiently motivated. The low pay of the teacher work leads to the outflow of young prospective cadets.

Another determinant of the formation of the educational environment can be called a slightly formal attitude of the state to the issues of combining the educational process with the conduct of scientific research. This is mainly due either to an outdated research and experimental base, or even to its absence, as well as to a certain financial independence of the HEI for the provision of this process. The creation of the Commission on issues of cooperation in the educational, scientific, technical and defense-industrial spheres, which involves the interaction between the Ministry of Education and Science, the Ministry of Defense and the State concern "Ukroboronprom", can be considered as a manifestation of the existence of something systematic. However, in practice, this interaction has never been realized.

Therefore, when creating a new model of training a naval specialist, being capable in a professional high-level to solve the tasks assigned to the Naval Forces of the Armed Forces of Ukraine in the conditions of the formation of a multipolar model of the world order,

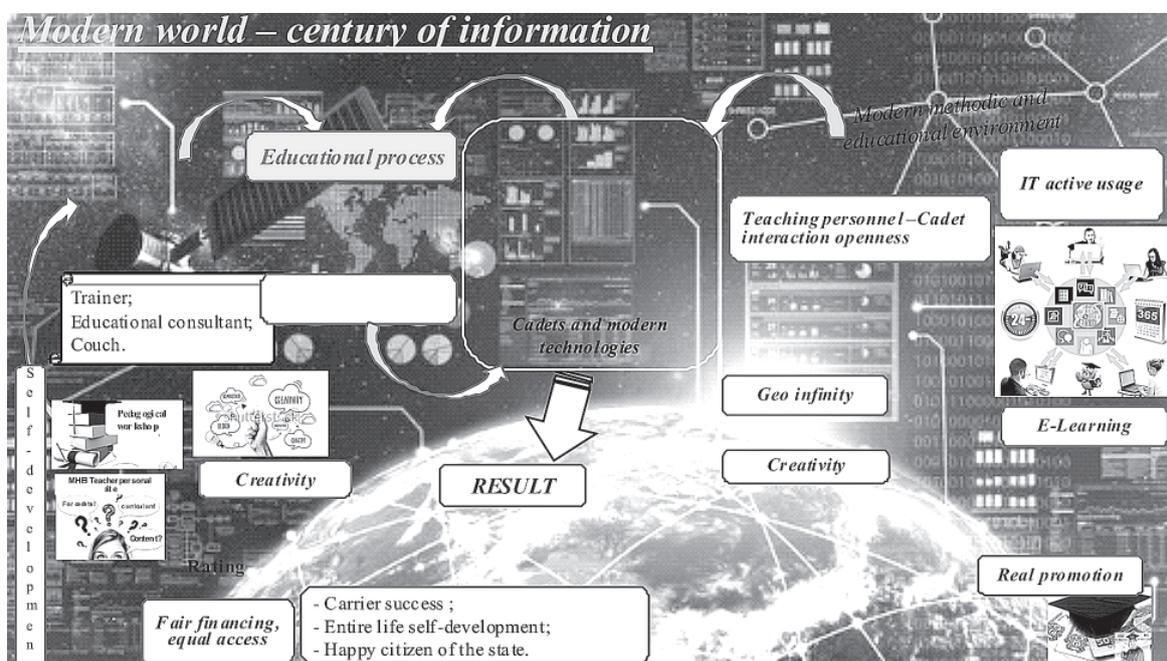


Fig. 2. The view of the authors on the modern environment that forms the military (naval) specialist of the future

strengthening of the influence of new centers of power, increase of the role of the financial and economic sphere in international relations, the resolution of unresolved conflicts near the state border, there is an urgent need to consider this process from the standpoint of a systematic approach. Application of the systematic approach to training a naval specialist will make it possible to adapt the military education system to the realities of today and future needs, implement the latest educational technologies, create conditions for the development of a person with developed leadership qualities, thereby enhancing the attractiveness of naval professions. One of the main results of the systematic approach to training a highly skilled specialist for the Navy Forces should be the competitiveness of the profession of military specialist in the Ukrainian labor market and his motivation.

Conclusions. The modern educational environment needs to be changed not only as a role of the teacher in the system of military education: from a classical teacher – to a kind of mentor, an educational consultant

(in some cases, a coach), which helps the cadet to acquire new knowledge and get used to the changes of the educational process itself and the attitude of the cadet to it, that is, creating a peculiar basis for the future successful career (a happy citizen of the country) and self-development throughout his life.

Areas of further research of the modern educational environment for the training a naval specialist include: studying the experience of transforming military education systems of the countries of the former socialist camp into the implementation of European values and NATO standards; search for effective mechanisms for the implementation of tasks for the training future leaders-officers for the Naval Forces of the Armed Forces of Ukraine, motivated for professional success and continuous self-development; introduction of an effective system of recruiting into modern naval educational institutions; change of the mentality of scientific and pedagogical workers and modernization of the educational process.

List of references

- Драгомиров, М.И., 1956. *Избранные труды. Вопросы воспитания и обучения войск*. М: Военное изд-во Министерства обороны СССР.
- Єршова, Л., 2015. *Трансформація виховного ідеалу в Україні (XIX – початок XX століття)*. Київський, Одеський, Харківський навчальні округи: монографія. Житомир: Видавець Євенко О.О.
- Ліпкевич, С.Я., 2006. Військове будівництво республіки Польща на шляху інтеграції в НАТО. Вісник Національного університету "Львівська політехніка", 572, с. 193-200.
- Нещадим, М.І., 2004. *Військова освіта України: історія, теорія, методологія, практика: автореферат*. Доктор наук. Інститут педагогіки і психології професійної освіти Академії педагогічних наук України.
- Панфілов, О.Ю. та Петрова, Л.О., 2016. Система військової освіти України як рамкова умова формування особистості військового керівника. *Збірник наукових праць Харківського національного університету Повітряних Сил*, 3(48), с. 201-204.
- Полторацький, С.Т., 2016. Розвиток системи вищої військової освіти України та за кордоном: державноуправлінські аспекти. *Інвестиції: практика та досвід*, 3, с. 70-73.
- Полторацький, С.Т., 2018. Трансформація системи вищої військової освіти України на шляху до досягнення стандартів НАТО. *Наука і оборона*, 2, с. 3-10.
- Телелим, В.М., 2011. Інноваційний розвиток військової освіти в Україні: становлення, проблеми, перспективи. *Проблеми інноваційно-інвестиційного розвитку*, 2, с. 177-186.
- Vuzlib.com, 2011. Науменко, М.І. *Концептуальні засади і напрями сучасного етапу розвитку військової освіти і науки*. [online] Доступно: <<http://vuzlib.com/content/view/1101/23/>> [Дата звернення 31 Березень 2018].

Translated & Transliterated

- Dragomirov, M.I., 1956. *Izbrannyye trudy. Voprosy vospitaniya i obucheniya voysk [Selected Works. Questions of education and training of troops]*. M: Voennoe izd-vo Ministerstva obronyi SSSR, [in Russian].
- Yershova, L., 2015. *Transformatsiia vykhovnoho idealu v Ukraini (XIX – pochatok XX stolittia). Kyivskiy, Odeskiy, Kharkivskiy navchalni okruhy: monohrafiia [Transformation of the educational ideal in Ukraine (XIX – early XX century). Kyiv, Odessa, Kharkiv educational districts: monograph]*. Zhytomyr: Vydavets Yevenok O.O., [in Ukrainian].
- Lipkeych, S.Ia., 2006. *Viiskove budivnytstvo respubliky Polshcha na shliakhu intehratsii v NATO [Military construction of Republic of Poland on the way to the integration into NATO]*. Visnyk Natsionalnoho universytetu "Lvivska politekhnika" [Visnyk of the National University "Lviv Polytechnic".], 572, s. 193-200, [in Ukrainian].
- Neshchadym, M.I., 2004. *Viiskova osvita Ukrainy: istoriia, teoriia, metodolohiia, praktyka: avtoreferat [Military education of Ukraine: history, theory, methodology, practice: the author's abstract]*. Doktor nauk. Instytut pedahohiky i psykolohii profesiinoi osvity Akademii pedahohichnykh nauk Ukrainy [Doctor of sciences. Institute of Pedagogy and Psychology of Professional Education of the Academy of Pedagogical Sciences of Ukraine], [in Ukrainian].
- Panfilov, O.Iu. ta Petrova, L.O., 2016. *Systema viiskovoi osvity Ukrainy yak ramkova umova formuvannia osobystosti viiskovoho kerivnyka [The system of military education of Ukraine as a framework condition for the formation of the personality of the military leader]*. *Zbirnyk naukovykh prats Kharkivskoho natsionalnoho universytetu Povitrianykh Syl [Collection of scientific works of Kharkiv National University of Air Forces]*, 3(48), s. 201-204, [in Ukrainian].

Poltorak, S.T., 2016. Rozvytok systemy vyshchoi viiskovoi osvity Ukrainy ta za kordonom: derzhavnoupravlinski aspekty [Development of the system of higher military education in Ukraine and abroad: state-management aspects]. *Investytsii: praktyka ta dosvid* [Investments: Practice and Experience], 3, s. 70-73, [in Ukrainian].

Poltorak, S.T., 2018. Transformatsiia systemy vyshchoi viiskovoi osvity Ukrainy na shliakhu do dosiahnennia standartiv NATO [Transformation of the system of higher military education of Ukraine on the way to achieving NATO standards]. *Nauka i oborona* [Science and Defense], 2, s. 3-10, [in Ukrainian].

Telemetry, V.M., 2011. Innovatsiinyi rozvytok viiskovoi osvity v Ukrainy: stanovlennia, problemy, perspektyvy [Innovative development of military education in Ukraine: formation, problems, perspectives]. *Problemy innovatsiino-investytsiinoho rozvytku* [Problems of innovation and investment development], 2, s. 177-186, [in Ukrainian].

Vuzlib.com, 2011. Naumenko, M.I. *Kontseptualni zasady i napriamy suchasnoho etapu rozvytku viiskovoi osvity i nauky* [Conceptual principles and directions of the modern stage of development of military education and science]. [online] Dostupno: <<http://vuzlib.com/content/view/1101/23/>> [Data zvernennia 31 Berezen 2018], [in Ukrainian].

УДК 355.231.4-048.35

Модернізація підготовки військово-морських спеціалістів у закладах вищої освіти

Ігор Попоцький¹, Вячеслав Сапіга²,

1 капітан 2 рангу, старший викладач кафедри корабельної енергетики та електроенергетичних систем Інституту Військово-Морських Сил Національного університету "Одеська морська академія"

2 кандидат технічних наук, доцент кафедри корабельної енергетики та електроенергетичних систем Інституту Військово-Морських Сил Національного університету "Одеська морська академія"

Реферат. Стаття присвячена пошуку концептуальних підходів до вирішення проблеми модернізації професійної підготовки офіцерських кадрів для флоту, адаптованої до стандартів і принципів НАТО. Проаналізовано значення освітнього середовища в підготовці військово-морських спеціалістів у закладах вищої освіти. Процес модернізації професійної підготовки майбутніх військово-морських спеціалістів пропонується розглядати з позицій історико-педагогічного, соціокультурного та системного підходів. Наголошується на необхідності врахування того, що випускникам сучасних військово-морських закладів доведеться діяти в умовах військових конфліктів четвертого покоління, де навмисно стирається межа між військом і народом, а саме: освітнє середовище постійно трансформується під дією історико-культурних, соціокультурних та соціально-політичних чинників. Визначено основні напрями модернізації освітнього середовища підготовки військово-морських спеціалістів: узагальнення, систематизація та переосмислення досвіду становлення й розвитку системи військової освіти колишніх країн-членів Організації Варшавського договору; дослідження процесу трансформації теоретико-методологічних підходів до створення в Україні сучасної системи військової освіти з опорою на найкращі світові й вітчизняні освітні традиції; зміна ментальності всіх суб'єктів освітньої діяльності; переосмислення необхідності змін освітнього процесу; формування стратегії подальшого розвитку системи військової освіти в Україні.

Ключові слова: професійна освіта, система військової освіти, модернізація освітнього середовища, військово-морський спеціаліст.

Received: 16 April 2019

Accepted: 11 June 2019