CURRENT ISSUES IN THE EDUCATION AND TRAINING OF OFFICER CADETS AND MILITARY STUDENTS AT HIGHER MILITARY EDUCATIONAL INSTITUTIONS OF THE CIS MEMBER STATES

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СОВРЕМЕННЫЕ ПРОБЛЕМЫ ОБУЧЕНИЯ СЛУШАТЕЛЕЙ И КУРСАНТОВ В ВЫСШИХ ВОЕННЫХ ОБРАЗОВАТЕЛЬНЫХ УЧРЕЖДЕНИЯХ ГОСУДАРСТВ — УЧАСТНИКОВ СНГ

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Abstract: *This article examines current issues in the education and training of officer cadets and military students at higher military educational institutions of the member states of the Commonwealth of Independent States (CIS). Using a comparative and analytical approach, the study examines the specific features of military education systems, the content of educational programmes, traditional and innovative teaching methods, and opportunities for the digital transformation of the educational process. It proposes ways to improve the training of military specialists based on competency-based, practice-oriented, and systemic activity-based approaches.*

Annotatsiya: *Maqolada Mustaqil Davlatlar Hamdo'stligi (MDH) ishtirokchi davlatlarining oliy harbiy ta'lim muassasalarida tinglovchilar va kursantlarni o'qitishning zamonaviy muammolari ko'rib chiqiladi. Qiyosiy-tahliliy yondashuv asosida harbiy ta'limni tashkil etish xususiyatlari, ta'lim dasturlarining mazmuni, an'anaviy va innovatsion o'qitish metodikalari, shuningdek, o'quv jarayonini raqamli transformatsiya qilish imkoniyatlari tahlil etiladi. Kompetensiyaviy, amaliyotga yo'naltirilgan hamda tizimli-faoliyat yondashuvlari asosida harbiy mutaxassislarni tayyorlashni takomillashtirish yo'nalishlari taklif etiladi.*

Аннотация: *В статье рассматриваются современные проблемы обучения слушателей и курсантов в высших военных образовательных учреждениях государств — участников Содружества Независимых Государств (СНГ). На основе сравнительно-аналитического подхода рассматриваются особенности организации военного образования, содержание образовательных программ, традиционные и инновационные методики преподавания, а также возможности цифровой трансформации учебного процесса. Предлагаются направления совершенствования подготовки военных специалистов на основе компетентностного, практико-ориентированного и системно-деятельностного подходов.*

Keywords: *military education, higher military educational institution, officer cadets, military students, professional competencies, educational programmes, pedagogical*

technologies, digitalization, artificial intelligence, practice-oriented learning, CIS member states.

Kalit so‘zlar: *harbiy ta’lim, oliy harbiy ta’lim muassasasi, kursantlar, tinglovchilar, kasbiy kompetensiyalar, ta’lim dasturlari, pedagogik texnologiyalar, raqamlashtirish, sun’iy intellekt, amaliyotga yo‘naltirilgan ta’lim, MDH davlatlari.*

Ключевые слова: *военное образование, высшее военное учебное заведение, курсанты, слушатели, профессиональные компетенции, образовательные программы, педагогические технологии, цифровизация, искусственный интеллект, практико-ориентированное обучение, государства СНГ.*

Introduction

The modern military education system operates in an environment characterized by significant changes in the requirements for the professional training of officer personnel. Advances in warfare technologies, digital command and control systems, unmanned aerial vehicles, electronic warfare technologies, and cybersecurity capabilities are increasing the demands placed not only on the technical knowledge of military personnel but also on their ability to analyse complex situations, make well-founded decisions, organize cooperation between military units, and operate effectively under conditions of uncertainty.

In this regard, higher military educational institutions of the CIS member states face the need to revise the content of academic disciplines, improve teaching methods, and expand opportunities for practical training. Particular importance is attached to developing a comprehensive set of professional, managerial, information-related, communication, and research competencies among officer cadets and military students.

The relevance of this issue is confirmed by military education reforms being implemented in individual Commonwealth countries. In the Republic of Kazakhstan, the military education system includes higher and postgraduate educational institutions, including the National Defence University and military institutes. Official materials published by the Ministry of Defence of Kazakhstan also indicate the development of academic mobility and dual-degree educational programmes [1; 2].

In the Republic of Uzbekistan, proposals were presented in 2025 to establish the University of Military Security and Defence and improve the military personnel training system. The areas identified included integrating theoretical education with practical training, developing digital competencies, providing advanced instruction in information technology and artificial intelligence, and updating programmes for the training of command personnel [3]. These areas reflect an effort to adapt military education to changing professional requirements.

The Russian Federation has an extensive system of higher military educational institutions, comprising institutions specializing in command, engineering, aviation, naval, and other professional fields. The list of relevant institutions is established by regulatory legal acts [4]. The diversity of specializations necessitates combining general pedagogical principles with teaching methods that take into account the specific characteristics of individual military professions.

At the same time, the modernization of military education cannot be limited to upgrading technical equipment and introducing new disciplines into curricula. Of considerable

importance are the pedagogical conditions under which knowledge is transformed into stable professional skills, while acquired action procedures are complemented by the ability to analyse situations and select appropriate solutions.

The research problem lies in identifying the common and specific challenges associated with military training and substantiating the pedagogical conditions that can improve its practical effectiveness.

The aim of the study is to identify the main current issues in the education and training of officer cadets and military students at higher military educational institutions of the CIS member states and to determine ways to improve the content, methods, and technologies of instruction.

The main research question is formulated as follows: Which pedagogical, organizational, and technological factors should be given the greatest consideration when improving the training of officer cadets and military students at higher military educational institutions of the CIS member states?

The working hypothesis is that improving the quality of military education depends not so much on the isolated introduction of digital tools as on the integrated application of a competency-based approach, practice-oriented learning, systematic feedback, the development of instructors' pedagogical competencies, and objective assessment of professional outcomes.

The hypothesis is theoretical in nature and is not considered statistically validated within the framework of this analytical study.

The *object of the study* is the system of professional training of military students and officer cadets at higher military educational institutions of the CIS member states.

The *subject of the study* comprises the content of educational programmes, teaching methods and technologies, organizational and pedagogical conditions of instruction, and issues related to assessing the development of professional competencies.

The Russian Federation, the Republic of Kazakhstan, and the Republic of Uzbekistan are used as the main comparative examples. Their selection is based on the availability of publicly accessible official materials that make it possible to characterize the structure of military education, specific areas of training, and ongoing reforms.

Materials concerning other CIS member states may be included in an expanded stage of the study, provided that comparable information is available. The selected countries are not regarded as a representative sample of all Commonwealth member states; rather, they serve as analytical examples for identifying common challenges and differences.

The sources used include official webpages of the Ministry of Defence of the Republic of Kazakhstan, regulatory documents and publicly available materials concerning military educational institutions of the Russian Federation, publications issued by official bodies of the Republic of Uzbekistan, and materials from international military education development programmes.

A comparative analysis of official materials makes it possible to identify several organizational characteristics of military education.

In the Russian Federation, military educational institutions operate in various specialized fields, focusing on the training of command, engineering, aviation, naval, and other specialists.

The existence of specialized educational institutions necessitates aligning general professional training requirements with the specific characteristics of individual military occupations [4].

In the Republic of Kazakhstan, the military education system includes the National Defence University, military institutes, and military colleges. According to official information published by the Ministry of Defence of Kazakhstan, training encompasses higher and postgraduate education, as well as professional training at other levels [1; 2]. This structure creates the prerequisites for providing systematic professional training and further professional development for military personnel.

In the Republic of Uzbekistan, areas for centralizing the management of military education and improving personnel training were identified in 2025. Official materials highlight the development of specialized training, advanced instruction in information technology and artificial intelligence, the revision of qualification requirements, and stronger links between education and the practical needs of the armed forces [3; 6].

The comparison demonstrates that, despite differences in institutional structures, the systems under consideration face a common challenge: adapting professional training to changes in the military sphere. At the same time, publicly available information does not make it possible to claim that educational programmes, teaching methods, or actual learning outcomes across all institutions comply with a single uniform standard.

Main Areas of Training and the Content of Educational Programmes

The content of training at higher military educational institutions is determined by the institution's profile, the level of education, qualification requirements, and the expected official duties of graduates.

In general terms, educational programmes can be represented as a combination of five interrelated components:

1. *General professional training:* fundamental academic disciplines, information literacy, foreign languages, research fundamentals, and professional communication.
2. *Specialized training:* academic disciplines corresponding to the military specialization and professional tasks of graduates.
3. *Management training:* organization of military unit activities, leadership, teamwork, and decision-making.
4. *Practical training:* instructional sessions, exercises, practical classes, simulator-based training, and internships within the framework of approved programmes.
5. *Educational and personal-professional development:* responsibility, discipline, ethical conduct, psychological resilience, and the ability to work effectively in a team.

This classification represents an analytical model rather than a verbatim reproduction of the curricula of specific military universities.

One of the challenges in developing educational content is the need to regularly update teaching materials without compromising the fundamental nature of professional training. Excessive emphasis on current technological solutions may cause certain educational modules to become outdated rapidly. At the same time, an overly theoretical curriculum may limit students' ability to apply their knowledge in professional situations.

Therefore, an educational programme should ensure a balance between fundamental knowledge, specialized competencies, practical activities, and the ability to independently master new technologies.

Teaching Methods and Modern Educational Technologies

Traditional and innovative teaching methods can be combined in higher military education. Their selection should be determined by the objectives of a particular academic discipline and the expected learning outcomes.

The analysis demonstrates that the key issue is not the number of technologies employed but their relevance to educational objectives. For example, lectures are appropriate when complex theoretical material needs to be presented systematically, whereas the development of situation-analysis skills requires practical assignments, discussion of alternatives, and evaluation of the soundness of decisions.

Computer modelling and simulators make it possible to reproduce certain professional situations in a controlled environment. However, their pedagogical value depends on how closely the training scenarios correspond to the established objectives, whether feedback is provided, and whether students' ability to transfer acquired knowledge to new tasks is assessed.

The application of artificial intelligence may be regarded as a promising area for supporting the learning process. It can be used to prepare supplementary educational materials, explain theoretical concepts, generate practice questions, and facilitate independent study. At the same time, the outputs generated by such tools must be verified by instructors, while access to data and the use of these technologies must comply with established information security requirements.

Main Current Issues in the Education and Training of Officer Cadets and Military Students

Based on a comparison of institutional materials with pedagogical requirements for professional training, six interrelated issues have been identified.

The first issue is the gap between theoretical and practical training.

Mastering theoretical concepts does not always ensure the ability to apply them in complex professional situations. Overcoming this gap requires linking the study of academic disciplines with practical assignments that involve analysing conditions, justifying decisions, and subsequently evaluating their outcomes.

The second issue is the predominance of reproductive forms of learning.

When the educational process is primarily focused on reproducing ready-made information, students may have insufficient opportunities to develop independence, critical thinking, and the ability to deal with ambiguous tasks. Therefore, it is advisable to expand the use of problem-based questions, situational assignments, discussions, and research projects.

The third issue is the need to develop instructors' pedagogical competencies.

An instructor at a military university requires not only subject-specific and professional competence but also proficiency in modern teaching methods, objective assessment tools, digital technologies, and techniques for organizing independent learning. International materials on military education development also identify the improvement of instructor training as an independent area of educational reform [5].

The fourth issue is the uneven integration of digital technologies.

The use of digital platforms, simulators, and modelling tools depends on technical infrastructure, instructors' methodological preparedness, the quality of educational content, and information security requirements. Consequently, digitalization should be regarded as a comprehensive transformation of the educational process rather than simply equipping classrooms with technical devices.

The fifth issue is the assessment of professional competencies.

Traditional examinations and tests make it possible to assess individual areas of knowledge; however, they do not always reflect a student's ability to solve professional tasks comprehensively. A more complete assessment requires combining theoretical knowledge testing with practical assignments, observation of performance during training activities, and the application of consistent assessment criteria.

The sixth issue is the insufficient comparability of training outcomes.

Differences in educational programmes, training profiles, and assessment criteria make it difficult to compare outcomes across institutions and countries. One possible solution is to develop common analytical indicators that do not replace national requirements or the specific characteristics of military specializations.

A Conceptual Model for Improving Professional Training

The synthesis of the findings makes it possible to propose a model for improving military education that incorporates five interrelated components:

1. *Target component:* defining the professional competencies expected of graduates in accordance with qualification requirements.
2. *Content component:* aligning theoretical disciplines, specialized training, and practical assignments.
3. *Technological component:* combining traditional teaching, problem-based learning, modelling, simulators, and digital educational resources.
4. *Assessment component:* applying criteria that make it possible to evaluate knowledge, professional skills, and the ability to justify decisions.
5. *Corrective component:* using assessment results to revise educational materials, teaching methods, and individual learning pathways.

The proposed logic of the model can be expressed as the following sequence:

Professional requirements → planned competencies → educational content → practical activities → assessment → adjustment of training.

The model is conceptual in nature. Its effectiveness should be evaluated through pilot implementation and subsequent comparison of educational outcomes.

The findings make it possible to consider current issues in military education not as isolated shortcomings of individual teaching methods but as interconnected elements of a unified pedagogical system.

In particular, insufficient practical orientation may be caused not only by instructors' teaching methods but also by curriculum design, the availability of simulators, the organization of practical training, and final assessment criteria. Similarly, the use of digital technologies does not ensure improved training quality without corresponding changes to educational assignments and assessment procedures.

The scientific significance of the proposed approach lies in integrating the organizational, content-related, technological, and assessment aspects of military education into a unified analytical model.

At the same time, it should be noted that the analysis identifies pedagogically justified areas for improvement but does not make it possible to determine the statistical strength of each factor's influence on learning outcomes.

The working hypothesis assumed that improvements in professional training are determined by the integrated interaction of pedagogical approaches, practical assignments, digital tools, instructors' competencies, and objective assessment.

The results of the documentary and conceptual analysis make it possible to regard this hypothesis as theoretically substantiated but not empirically tested. The materials examined confirm the relevance of the identified areas; however, they do not contain a sufficient body of comparable data to establish causal relationships between the application of specific teaching methods and the quality of graduate training.

Statistical verification would require data on learning outcomes, comparisons of comparable student groups, and consideration of factors affecting educational achievement.

The main limitation of the study is its reliance on publicly available documents rather than direct empirical data concerning the educational process. Consequently, it is impossible to reliably determine the prevalence of each identified issue at individual institutions.

Furthermore, the three countries examined do not constitute an exhaustive sample of CIS member states. Differences in the structure of military education and the availability of information limit the possibilities for direct comparison.

Finally, the proposed performance indicators require operationalization, pilot testing, and reliability assessment. Therefore, the conclusions should be interpreted as an analytical basis for further research rather than a definitive assessment of the quality of military education across the Commonwealth countries.

Conclusion

The comparative and analytical study has made it possible to examine current issues in the education and training of officer cadets and military students at higher military educational institutions of the CIS member states and identify the main areas for improving the educational process.

It has been established that military education is developing in an environment characterized by changing professional requirements for military personnel, the expansion of digital technologies, and the need to strengthen the practical orientation of training. The official materials examined from the Russian Federation, the Republic of Kazakhstan, and the Republic of Uzbekistan demonstrate the diversity of organizational models and the existence of various approaches to modernizing educational programmes.

The main issues identified include the gap between theoretical and practical training; limited opportunities for developing independent and critical thinking under predominantly reproductive forms of instruction; the need to develop instructors' pedagogical competencies; the uneven integration of digital technologies; the insufficiently comprehensive assessment of professional outcomes; and the limited comparability of educational indicators.

The study demonstrates that improving military education should be based on an integrated approach combining a competency-based training model, practice-oriented assignments, modern pedagogical technologies, digital educational resources, and systematic assessment of professional skills.

A conceptual model comprising target, content, technological, assessment, and corrective components has been proposed. Its practical implementation involves aligning educational programmes with qualification requirements, applying consistent assessment criteria within specific programmes, and regularly revising educational materials based on the results obtained.

The research objective has been achieved at the analytical level: the main issues have been systematized, selected national models have been examined, and recommendations have been formulated. Nevertheless, the hypothesis concerning the influence of an integrated combination of pedagogical and technological factors on training quality requires further empirical verification.

Further research should focus on conducting an empirical comparative analysis of educational programmes at military universities in the CIS member states, examining instructors' pedagogical practices, and assessing the impact of digital technologies on learning outcomes.

Of particular importance is the development and testing of a system of indicators incorporating theoretical examination results, the performance of practical assignments, expert assessment of professional competencies, and data on graduates' readiness to perform their official duties.

A promising area of research is the implementation of a pilot pedagogical experiment in which traditional instructional arrangements are compared with a programme supplemented by practice-oriented assignments and structured feedback. Such a research design would make it possible to move from conceptual assumptions to empirical verification of the effectiveness of the proposed pedagogical solutions.

Thus, the further development of military education in the CIS member states requires not only the modernization of educational programmes and technical infrastructure but also the systematic improvement of pedagogical approaches, assessment methods, and mechanisms for managing the quality of professional training.

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