

SECTION 11

MILITARY SCIENCES, NATIONAL SECURITY, STATE BORDER SECURITY

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**MODERNIZATION OF THE EDUCATIONAL PROCESS IN SECURITY
DISCIPLINES IN THE CONTEXT OF MILITARY CHALLENGES**

Educational disciplines aimed at forming a culture of life safety play a key role in strengthening Ukraine's national security. Their significance extends beyond the mere assimilation of safe behavior rules, as they ensure the development of a holistic knowledge-value system encompassing knowledge, skills, and values, enabling society to effectively respond to internal and external challenges. The imposition of martial law has significantly transformed approaches to the formation of security competencies in higher education institutions.

The events of February 24, 2022, associated with the onset of the full-scale aggression by the Russian Federation against Ukraine, marked a critical turning point in the transformation of higher education, including security-profile disciplines. Martial law not only restricted traditional educational formats but also facilitated a dynamic revision of methodological foundations in teaching. The primary directions of these changes included the transition to distance learning, adaptation of programs to meet current wartime needs, expansion of psychological-pedagogical support, and modernization of the evaluation system.

Analysis of the experience in teaching security disciplines under wartime conditions in Ukraine reveals profound transformations that lay the groundwork for strategic recommendations regarding further reforms in the higher education system [1]. At the same time, these changes already demonstrate a structural character and encompass three key directions: the content of curricula, teaching methodology, and staff training.

The first strategic change should be regarded as the transformation of educational content. The war has actualized the need for a profound review of educational content, which for an extended period was primarily oriented toward technogenic risks and the safety of production processes. Presently, educational programs must encompass issues related to the security of military activities, civil-military interaction, the formation of psychological resilience, and the development of skills for actions in crisis situations. This change is the most substantial, as it not only updates the educational content but also rethinks the very purpose of higher education – preparing not merely competent specialists, but conscious and responsible citizens capable of defending the state and society under conditions of threats.

The second strategic change in the teaching of security disciplines is the paradigmatic shift from a knowledge-based to a competency-based learning model, adapted to the realities of wartime. As evidenced by the results of contemporary studies [2], the educational process in the field of security is gradually transforming from

the transmission of theoretical knowledge into a process of developing key competencies, among which are resilience, self-control, adaptability, and effective performance under conditions of uncertainty.

This transformation implies that higher education institutions must evolve into centers for competency formation, where education encompasses not only the theoretical assimilation of safety principles but also practical preparation for actions in crisis and hazardous situations. Such an approach necessitates the development and implementation of new educational models oriented toward practical experience – particularly through field training, internships in real conditions, the use of modern simulators, and digital simulations.

Innovative learning technologies, such as virtual (VR) and augmented (AR) reality, play a particular role in this process, enabling the modeling of emergency situations that approximate real combat or crisis scenarios. Thus, the teaching of security disciplines acquires new meaning – from formal assimilation of knowledge to practice-oriented formation of the ability to act in conditions of danger.

The third strategic change has been the integration of the security dimension into the entire system of higher education. The experience of war has demonstrated that security is not a separate field of knowledge, but a nationwide, interdisciplinary process that must be an integral component of every educational direction. If in the previous decade (the 2010s) there was a tendency to combine such courses as "Life Safety," "Occupational Safety," and "Civil Defense," then now the task is for much broader integration – the creation of comprehensive interdisciplinary programs that cover issues of human rights in wartime conditions, ethics of military service, psychological support, crisis management, and national resilience.

In this context, the discipline "Life Safety" ceases to be merely a normative educational course and transforms into a fundamental component of the educational process, which forms the basic values, worldview, and competencies of the future specialist. It becomes a key element in the formation of a culture of societal security, uniting various fields of knowledge in a common aspiration to protect people, the state, and the environment.

The fourth strategic change is the realization by higher education of its social mission in the process of national reconstruction. In modern conditions, universities are transforming from traditional centers of academic knowledge into institutions of societal development, which play a leading role in the formation of national consciousness, civic responsibility, and the preparation of specialists for all sectors of the economy and society. One of the key directions is the development of educational programs for broad segments of the population, as well as the creation of a system for training pedagogical staff capable of teaching younger generations the fundamentals of safety and resilience.

Such a strategy has a long-term character and reflects the societal demand for building a state that not only knows how to defend itself but is also capable of effective reconstruction and self-recovery. Consequently, higher education becomes one of the key factors in shaping a resilient and secure future for Ukraine.

The conducted analysis of the transformation of security disciplines in Ukraine's higher education system under wartime conditions provides grounds for formulating a series of strategic recommendations aimed at further development and enhancement of the educational process's effectiveness.

This new social role requires higher education institutions not only to update the content of educational programs but also to engage in systematic educational outreach activities aimed at popularizing the principles of civil defense, developing a culture of safety, and increasing citizens' awareness of actions in emergency situations. One of the key directions is the development of educational programs for broad segments of

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The conducted analysis of the transformation of security disciplines in Ukraine's higher education system under wartime conditions provides grounds for formulating a series of strategic recommendations aimed at further development and enhancement of the educational process's effectiveness.

1. Creation of comprehensive, crisis-oriented educational programs. It is necessary to develop integrated courses that systematically cover physical, psychological, ecological, and social aspects of security. Such programs must be mandatory for all students regardless of specialty, as they form the general culture of safety, resilience, and citizens' readiness for actions in crisis situations.

2. Mass implementation of hybrid learning formats. Modern educational programs must provide for a combination of distance and practical learning. Theoretical material can be mastered through online platforms, while practical skills should be practiced in a hybrid format: on training grounds, in training centers, and using digital simulations. This approach will ensure the safety of participants in the educational process during peacetime and enhance readiness for actions in crisis conditions.

3. Formation of professional competencies among instructors. Instructors of security disciplines must be prepared not only as subject matter experts but also as crisis situation managers, psychological consultants, and specialists in the use of digital technologies. To this end, advanced training programs should be developed, oriented toward teaching in emergency situations, providing psychological support to learners, and effectively managing the educational process under stressful circumstances.

4. Development of a network of experts and partnerships. An important direction is the establishment of a national and international network of cooperation among higher education institutions, state structures, medical establishments, security forces, and public organizations.

Thus, strategic recommendations and changes must be directed toward creating a flexible, practice-oriented, technology-focused, and psychologically stable system of higher education. It should be capable not only of addressing internal institutional crises but also of shaping a society prepared for future challenges. The implementation of these recommendations represents a fundamental restructuring that will define the character of higher education in Ukraine for decades.

References

1. Данченко, Ю. Формування безпекових компетентностей у здобувачів вищої освіти в галузі національної безпеки / Ю. Данченко, В. Андронов // Тези доповідей II Міжнародної наукової конференції «Технології та суспільство: взаємодія, вплив, трансформація» (26 липня 2024). – Львів, Україна, 2024. – С. 84–87. <https://doi.org/10.62731/mcnd.26.07.2024.003>

2. Луцук, Ю. Орієнтування в безпечному навчальному просторі в українській вищій освіті у умовах війни: визначення проблем і пошук рішень / Ю. Луцук, Г. Циганок // Вища освіта України у контексті інтеграції до європейського освітнього простору. – 2024. Том 92. – № 1(2). – С. 89-101. <https://doi.org/10.38014/osvita.2023.92.08>