



# ADAPTATION OF CONTENT AND LANGUAGE INTEGRATED LEARNING (CLIL) METHODOLOGY TO THE SPECIFICS OF TRAINING FUTURE OFFICERS

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## Abstract

*Relevance:* The growing role of foreign-language professional communication in the activities of officers under the conditions of Ukraine's Euro-Atlantic integration, the expansion of international military cooperation, and the implementation of NATO standards in the military education system determine increased requirements for the level of language training of future officers. At the same time, traditional models of language training do not adequately combine linguistic knowledge with professional content, which necessitates adapting modern teaching methods to the specifics of higher military education.

*Objective:* The theoretical substantiation of adapting the Content and Language Integrated Learning (CLIL) methodology to the training of future officers.

*Methods:* Theoretical analysis – to study scientific sources on the integration of language and professional training and to identify modern approaches to implementing CLIL; synthesis – to generalize various theoretical positions and form a holistic view of the possibilities of integrating language and professional training of future officers; generalization – to systematize the results of previous research and determine the main trends in applying CLIL in higher education; comparative analysis – to compare approaches to implementing CLIL in civilian and military education, identifying specific requirements for cadets' professional training; forecasting – to determine effective models of integrating language and professional components and outline their potential for developing key professional competencies in the context of international military cooperation.

*Results:* The peculiarities of applying CLIL methodology in the system of higher military education have been analyzed, and the factors determining its adaptation have been outlined, including the regulated nature of the educational process, the professionally oriented character of the learning content, and the high requirements for accuracy in foreign-language communication in the military sphere; the expediency of using content- and language-oriented CLIL models, as well as digital technologies, simulations, and interdisciplinary projects for integrating language and professional training of cadets, has been established.

*Conclusions:* The main features of adapting CLIL methodology to the conditions of higher military education have been identified (application of content- and language-oriented models, integration of language training into professional disciplines, use of digital technologies and interdisciplinary tasks); the potential of CLIL methodology for developing cognitive competencies (ability to analyze, synthesize, and make decisions under complex conditions), communicative competencies (accuracy and functionality of foreign-language professional communication), and intercultural competencies (ability to interact effectively in multinational military formats) has been determined; the peculiarities of military education that define the specifics of CLIL implementation have been clarified (strict regulation of the educational process, high requirements for accuracy in foreign-language communication, focus on applied tasks, and the need to prepare for activity under stressful conditions); gaps in methodological support have been revealed

(limited number of adapted teaching materials, insufficient teacher training for using CLIL in the military context, and the need to create a system of professional development for educators in integrated learning).

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**Keywords:** *Content and Language Integrated Learning, higher military school, professional language competence, “4C” model.*

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**Introduction.** The transformation of the security environment and strengthening role of multinational military formats significantly change the requirements for the professional training of officers. A modern military specialist is increasingly involved in joint exercises, staff procedures, interaction with foreign colleagues, as well as working with technical documentation and standards of foreign origin. Under these conditions, a foreign language functions not as a separate educational component but as a working tool of management, coordination, and decision-making in the professional environment.

At the same time, the practice of language training in institutions of higher military education is characterized by a gap between language learning and professional disciplines. The acquisition of foreign-language vocabulary and grammatical structures mostly takes place outside the context of future service activities, which complicates the transfer of linguistic knowledge into real professional situations. Such fragmentation of the educational process reduces students' motivation and limits the possibilities of forming an integrated professional-language competence necessary for effective interaction in the international military environment.

In the scientific and pedagogical discourse, interest in integrated approaches aimed at overcoming this contradiction is growing. In particular, Content and Language Integrated Learning (CLIL) is considered as a concept capable of ensuring the combination of language training with the acquisition of professional content. At the same time, most scientific studies focus on the civilian sector of higher education, whereas the specifics of military training – regulated educational process, high level of responsibility, dominance of applied tasks, and stressful conditions of activity – require separate theoretical and methodological reflection on the possibilities and limits of applying integrated learning models.

The problem lies in the absence of a systemic vision of how CLIL can be adapted to the conditions

of higher military education without losing the depth of professional training and taking into account the requirements for operational interoperability and professional accuracy. The optimal models of integrating language and subject components, the role of the teacher in such a learning process, as well as the didactic conditions that ensure the effective formation of foreign-language competence combined with the development of professional thinking of future officers remain undefined.

This issue is directly related to the current tasks of modernizing Ukraine's military education system, oriented toward achieving interoperability with the armed forces of partner countries and implementing modern educational technologies. Theoretical reflection on the conceptual foundations of CLIL and analysis of the possibilities of its implementation in military institutions of higher education create the basis for updating curricula, improving methodological support, and enhancing the quality of officers' professional training in accordance with contemporary security challenges.

**Sources:** Theoretical analysis of the researched problem was carried out on the basis of scientific works devoted to the issues of integrating language and subject training in higher education, the development of professionally oriented foreign-language competence, and the modernization of foreign language teaching methods. The analysis of scientific publications shows that Content and Language Integrated Learning is the subject of active scholarly discussion in modern pedagogical science. The conceptual foundations of CLIL were formulated in the works of D. Marsh (2002), who introduced the term Content and Language Integrated Learning into academic discourse and defined it as an approach aimed at the simultaneous acquisition of professional content and a foreign language. Further development and theoretical substantiation of CLIL were provided in the studies of D. Coyle, P. Hood, and D. Marsh (2010), where the “4C” model (Content, Communication, Cognition, Culture) was presented as

the didactic basis of integrated learning. The principles of combining subject content and the language component were also outlined in the works of P. Ball and D. Lindsay (2010), as well as in subsequent studies by D. Marsh (2012). Terminological and conceptual aspects of CLIL methodology were analyzed in detail by D. Coyle (2005), who emphasized the interdisciplinary nature of integrated learning. The works of van E. Kampen, W. Admiraal, and A. Berry (2018) considered the use of narrative and genre forms as tools of learning in the context of subject-language integration. The research of H. Martínez-Soto and M. Prendes-Espinosa (2023) represents CLIL as a complex pedagogical technology aimed at achieving multidisciplinary outcomes in the process of foreign language learning. Practical aspects of implementing the methodology were highlighted in the works of A. Cendoya and V. Adibin (2012), who focused on the use of learning tasks and various genres as effective means of applying CLIL. At the same time, despite considerable scholarly attention to the implementation of CLIL in the educational process, the issue of using this methodology in the training of future military specialists remains insufficiently studied. A systematic analysis is required to determine how the integration of language and professional training can contribute to the development of competencies necessary for the professional activity of military specialists in the context of international cooperation and modern requirements for their training.

**Purpose of the article** is to substantiate the peculiarities of adapting the methodology of Content and Language Integrated Learning (CLIL) to the specifics of training future officers.

**Research methods.** The study employed a set of theoretical methods that ensured a comprehensive analysis of the problem of adapting CLIL to the training of future officers in institutions of higher military education. In particular, the method of analysis was used to study scientific sources on the integration of language and professional training and to identify modern approaches to implementing CLIL; synthesis – to generalize various theoretical positions and form a holistic view of the possibilities of integrating language and professional training of future officers; generalization – to systematize the results of previous research and determine the main trends in applying CLIL in higher education; comparative analysis – to compare approaches to

implementing CLIL in civilian and military education, identifying specific requirements for cadets' professional training; forecasting – to determine effective models of integrating language and professional components and to outline their potential for developing key professional competencies in the context of international military cooperation.

**Results and Discussion.** The methodology of Content and Language Integrated Learning is considered a key tool for the modernization of military education, as it ensures the organic combination of language learning with the acquisition of professional content. This allows for the formation of an integrated system of professional and linguistic competencies that meet modern requirements for officers capable of operating in conditions of international cooperation and multinational operations (Nikula et al., 2016). Compared to traditional methods of foreign language teaching, CLIL is not limited to mastering grammar or vocabulary but is aimed at the simultaneous acquisition of professional knowledge and language skills, which increases learners' motivation, fosters critical thinking, high-level cognitive skills, and intercultural competence.

Theoretically, CLIL methodology is based on the "4C" model (Content, Communication, Cognition, Culture) introduced by D. Coyle (2005), which views learning as the synergy of four interrelated components. The content component involves mastering professionally oriented knowledge and practical skills necessary for performing specific tasks in the military sphere. For example, within the course "Automotive Studies," cadets learn the structure and principles of operation of engines, transmissions, armored vehicle control systems, technical specifications of weaponry, and maintenance protocols. Language in this context becomes a tool for accessing authentic sources of information, including technical manuals, regulatory documents, and NATO standards. This ensures not only the acquisition of knowledge but also the practical orientation of learning, enhances its motivational value, and develops cadets' professional competencies.

The communicative component of CLIL develops the ability to convey technical information in real professional situations. Language is regarded as both "language for learning" and "language through learning" (Coyle, 2007). For instance, during the study of automotive technology, cadets practice giving

commands during vehicle evacuation, writing reports on malfunctions, and coordinating unit actions in English. Special attention is paid to the functional effectiveness of communication: the correctness of terminology is more important than formal linguistic accuracy, which is critical in stressful combat conditions.

The cognitive component involves the development of both lower- and higher-order thinking processes according to Bloom's taxonomy (Bloom et al., 1956). Cadets not only reproduce terms but also analyze causes of breakdowns, evaluate the efficiency of different types of fuel, synthesize logistical plans, and make decisions under conditions of limited information. This approach fosters critical thinking and cognitive flexibility necessary for operational planning and unit management.

The cultural component is aimed at developing intercultural competence and awareness of professional interaction in an international environment (Rodríguez, 2025). It includes knowledge of NATO standards, ethics of interaction with representatives of foreign armed forces, and understanding of Ukraine's role in the system of collective security. Learning language through the prism of culture enables future officers to integrate into the international environment during joint training, ensuring interoperability in operations and peacekeeping missions.

An important aspect is the adaptation of the methodology to the specifics of military education. The application of CLIL is accompanied by challenges: high requirements for teachers' linguistic and methodological competence, limited teaching resources, and the need to adapt content to cadets' professional needs. The methodology allows for the integration of language training into the study of general military disciplines (tactics, strategy, logistics, military management, international humanitarian law) and specialized subjects, creating conditions for effective professional communication.

The modern CLIL paradigm in military higher education institutions provides for variability of models depending on the dominance of the language or subject component (Coyle, Hood & Marsh, 2010). The content-driven CLIL model emphasizes subject content, where English is used as a tool for acquiring technical knowledge. The language-driven CLIL model uses professional content to develop language

competence, reducing cognitive load and focusing on terminological accuracy (Lorenzo & Moore, 2007). Project-based and interdisciplinary models combine disciplines into complex tasks that stimulate all "4C" components and prepare cadets for work in multinational units (Cenoz et al., 2014).

International experience demonstrates a high level of institutionalization of CLIL. In Scandinavia and the Netherlands, the methodology is a standard of technical education, where language is used as the natural medium of professional communication (van Kampen, Admiraal & Berry, 2018). In Spain, CLIL has been successfully adapted in humanities and natural sciences, increasing the "linguistic capital" of graduates (Lasagabaster & de Zarobe, 2010). In Ukraine, the methodology is being implemented in pilot projects and faces specific challenges: the gap between NATO's high standards and the actual level of language training of cadets and teachers, insufficient methodological support, and limited material resources.

The Hetman Petro Sahaidachnyi National Army Academy demonstrates a systematic approach to CLIL, using both content- and language-driven models depending on the stage of training and cadets' level of competence. The concept follows O. Meyer's "CLIL planning pyramid" (2010) and includes 4 levels: content, communicative, cognitive, and cultural. An example is the study of the topic "Principles of operation and structure of the OSHKOSH system": analytical stage (Content) with authentic diagrams; cognitive stage (Cognition) with the development of principles of unit operation; communicative stage (Communication and Culture) with presentations and discussions; role-playing games to model professional activity.

Technological support of CLIL in military higher education institutions includes multimedia presentations, interactive platforms, VR simulations, training devices, and AI tools. This enables cadets to work with authentic documents and simulate real combat and technical scenarios in a foreign language, simultaneously developing linguistic, professional, and digital competence.

Assessment in CLIL is transformed: dual assessment includes subject competencies and language skills; dynamic assessment and peer-assessment allow progress to be analyzed in real time (de Boer et al., 2020). Checklists based on NATO

STANAG 6001 standards develop skills of objective analysis of subordinates' and colleagues' actions in a foreign language (NATO, 2014).

The integration of practical tasks within CLIL transforms the study of professional disciplines from passive knowledge acquisition into an active process of forming the officer's professional identity. Designing tasks that take into account cognitive and linguistic requirements, and using active methods (discussions, debates, case studies, role-playing games) stimulate the development of critical thinking, teamwork, and decision-making skills.

**Conclusions.** The peculiarities of adapting CLIL methodology to the conditions of higher military education have been identified: the use of content- and language-driven CLIL models depending on the stage of training and cadets' level of language competence; integration of language training into the study of general military and specialized disciplines (tactics, logistics, military management, technical courses); application of digital technologies, VR simulations, multimedia platforms, and interactive training devices to model professional situations in a foreign language; implementation of project-based and interdisciplinary tasks that stimulate the development of all components of the "4C" model (Content, Communication, Cognition, Culture); use of dual assessment (language and subject competencies) and checklists based on NATO STANAG 6001 standards to develop skills of

objective analysis. The potential of CLIL methodology for developing key professional competencies of future officers has been determined: cognitive (analysis, synthesis, decision-making under complex conditions); communicative (accuracy and functionality of foreign-language professional communication); intercultural (readiness for interaction in multinational military formats, knowledge of NATO standards and ethics of international cooperation). The peculiarities of applying CLIL in military education have been clarified, which include the regulated nature of the educational process, high requirements for accuracy in foreign-language communication, the dominance of applied tasks, and stressful conditions of activity. Gaps in methodological support and teacher training requiring further development have been revealed.

Prospects for further research involve conducting experimental studies on the effectiveness of different CLIL models in military education, developing standards of integrated learning for various types of military training, as well as creating digital platforms of authentic teaching materials and enhancing methodological support for systematic CLIL implementation. Such studies will allow for a scientific substantiation of the potential pedagogical effect of integrating subject and language learning in the professional training of future officers.

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## **АДАПТАЦІЯ МЕТОДИКИ ПРЕДМЕТНО-МОВНОГО ІНТЕГРОВАНОГО НАВЧАННЯ (CLIL) ДО СПЕЦИФІКИ ПІДГОТОВКИ МАЙБУТНІХ ОФІЦЕРІВ**

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### Реферат:

*Актуальність:* зростання ролі іншомовної професійної комунікації у діяльності офіцерського складу в умовах євроатлантичної інтеграції України, розширення міжнародного військового співробітництва та впровадження стандартів НАТО у систему військової освіти зумовлює підвищені вимоги до рівня мовної підготовки майбутніх офіцерів. Водночас традиційні моделі мовної підготовки не забезпечують належного поєднання мовних знань із фаховим змістом, що зумовлює потребу адаптації сучасних методик навчання до специфіки вищої військової школи.

*Мета:* обґрунтувати особливості адаптації методики предметно-мовного інтегрованого навчання (CLIL) до специфіки підготовки майбутніх офіцерів.

*Методи:* аналізу – для вивчення наукових джерел з проблем інтеграції мовного та фахового навчання та визначення сучасних підходів до реалізації CLIL; синтезу – для узагальнення різних теоретичних положень і формування цілісного уявлення про можливості інтеграції мовної та професійної підготовки майбутніх офіцерів; узагальнення – для систематизації результатів попередніх досліджень і визначення основних тенденції застосування CLIL у вищій освіті; порівняльний аналіз – для зіставлення підходів до впровадження CLIL у цивільній та військовій освіті, виявлення специфічних вимог до професійної підготовки курсантів; прогнозування – для визначення ефективних моделей інтеграції мовної та фахової складових та окреслення їхнього потенціалу для розвитку ключових професійних компетентностей у контексті міжнародного військового співробітництва.

*Результати:* проаналізовано особливості застосування методики CLIL у системі вищої військової освіти та **окреслено особливості, що зумовлюють її адаптацію**, зокрема регламентованість освітнього процесу, професійно орієнтований характер навчального змісту та високі вимоги до точності іншомовної комунікації у військовій сфері; встановлено доцільність використання змістово та мовно орієнтованих моделей CLIL, а також цифрових технологій, симуляцій і міждисциплінарних проєктів для інтеграції мовної та фахової підготовки курсантів.

*Висновки:* з'ясовано основні особливості адаптації методики CLIL до умов вищої військової освіти (застосування змістово та мовно орієнтованих моделей, інтеграція мовної підготовки у професійні дисципліни, використання цифрових технологій та міждисциплінарних завдань); визначено потенціал методики CLIL для розвитку когнітивних компетентностей (здатність аналізувати, синтезувати та приймати рішення у складних умовах), комунікативних компетентностей (точність і функціональність іншомовної професійної комунікації) та міжкультурних компетентностей (уміння ефективно взаємодіяти у багатонаціональних військових форматах); з'ясовано особливості військової освіти, що визначають специфіку впровадження CLIL (жорстка регламентованість освітнього процесу, високі вимоги до точності іншомовної комунікації, орієнтація на прикладні завдання та необхідність підготовки до діяльності у стресових умовах); виявлено прогалини у методичному забезпеченні (обмежена кількість адаптованих навчально-методичних матеріалів, недостатня підготовка викладачів до використання CLIL у військовому контексті та потреба у створенні системи професійного розвитку педагогів для інтегрованого навчання).

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**Ключові слова:** предметно-мовне інтегроване навчання, вища військова школа, професійно-мовна компетентність, модель «4С».

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