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## INTRODUCTION

Dear colleagues, authors and readers of the *Academia Polonica*  
(Scientific Journal of Polonia University, PNAP – *Periodyk Naukowy Akademii Polonijnej*)!  
Congratulation on the release of a new *Academia Polonica* 75 (2) (2026)!

The contemporary humanitarian and educational landscape is undergoing a profound transformation driven by globalisation, digitalisation, artificial intelligence, and intensified intercultural interaction. These processes reshape not only communication practices but also the methodological foundations of education, language instruction, professional training, and interdisciplinary research. The present issue of *Language, Culture, Communication* brings together scholarly contributions that explore the dynamic intersections between language, culture, technology, and pedagogy in the context of rapidly changing social realities.

The central focus of this volume is the role of intercultural communication in contemporary educational and professional environments. The contributors examine how linguistic competence, cultural awareness, and communicative flexibility are essential to successful interaction in multilingual and multicultural societies. In particular, the article “Intercultural Communication in the Era of Artificial Intelligence: Challenges and Perspectives” investigates how AI-mediated communication transforms cultural representation, discourse interpretation, and human interaction across digital platforms. The novelty of this research lies in its interdisciplinary synthesis of intercultural studies and artificial intelligence discourse, offering new methodological perspectives for analysing technologically mediated communication.

Another important thematic cluster concerns innovative approaches to language education and professional training. The article “*The CLIL Approach to Teaching a Foreign Language for Students in Economics Specialisations at Higher Education Institutions*” analyses the integration of content and language learning within professional education. Its scientific novelty lies in demonstrating how the CLIL methodology enhances professional communicative competence while fostering critical thinking and intercultural awareness among economics students. By combining linguistic and disciplinary knowledge, the study proposes a model of professionally oriented multilingual education adapted to contemporary labour market demands.

The issue also addresses current pedagogical and organisational challenges in higher education. The article “*Challenges of Team-Based Training for Educators*” examines collaborative pedagogical models and the difficulties of collective professional development in academic institutions. The study’s originality lies in its examination of team-based educational practices through the lens of digital transformation, emotional intelligence, and institutional adaptability, thereby offering practical strategies to improve educator collaboration and instructional effectiveness.

A significant contribution of this volume is its attention to integrating digital technologies and artificial intelligence into educational and research environments.

Several studies investigate adaptive learning systems, online communication platforms, digital discourse practices, and AI-assisted language instruction. The novelty of these investigations lies in their attempt to reconceptualise educational interaction in contexts where human cognitive activity increasingly intersects with algorithmic systems and automated communication tools.

The issue also features research on linguistic modelling, discourse coherence, terminology studies, and translation practices in professional communication. These articles collectively

deepen understanding of language as a multidimensional cultural, cognitive, and technological phenomenon shaped by historical, social, and digital transformations.

This Academia Polonica issue also highlights current problems in modern society. The final section highlights technological innovation and its practical implementation across various sectors. The second section examines evolving socio-political and legal landscapes, addressing leadership, governance, and global value systems.

Collectively, the contributions in this issue demonstrate the interdisciplinary nature of modern language and cultural studies. By integrating perspectives from linguistics, pedagogy, communication studies, educational technology, and digital humanities, the authors contribute to contemporary scholarly debates about the future of education, intercultural dialogue, and human communication in the twenty-first century.

We sincerely hope that this issue will stimulate further academic discussion, encourage innovative research initiatives, and provide valuable theoretical and practical insights for scholars, educators, researchers, and students worldwide.

We thank our authors who have already submitted their scientific articles to Academia Polonica, as well as those planning to submit their research findings to our journal. We also want to sincerely thank all members of the editorial board, reviewers, and everyone who graciously accepted our invitation to collaborate in developing Academia Polonica.

With respect and regards  
**Maciej Rudnicki**, Prof. PhD, Editor in Chief

## LANGUAGE, CULTURE, COMMUNICATION

INTEGRATION OF INTERCULTURAL COMMUNICATION SKILLS IN ESP  
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**Summary**

The article examines intercultural communication as a key component of modern professional and educational environments, particularly in the context of globalization and digital transformation. It emphasizes that communication processes have always accompanied human interaction but have gained special significance due to increased international cooperation and migration. Intercultural communication is presented as an interdisciplinary field studied across various sciences, including linguistics, sociology, psychology, and cultural studies.

Special attention is given to foreign language teaching as a tool for developing intercultural competence. Each language learning process is viewed as interaction with another culture, where the focus shifts from purely grammatical knowledge to functional and practical language use. The article highlights the importance of linguo-cultural and cross-cultural approaches, which contribute to a deeper understanding of discourse, pragmatics, and cultural differences.

Furthermore, the paper identifies key linguistic and communicative skills required in professional environments, particularly in the IT sphere, such as technical writing, effective digital communication, presentation skills, and cross-cultural awareness. It outlines common challenges, including language barriers, cultural differences, and misinterpretation of verbal and non-verbal signals, and suggests strategies to overcome them through training, practice, and the use of modern educational technologies.

The article sums up that integrating linguistic and intercultural competencies into education is essential for preparing competitive specialists capable of effective communication in a global professional environment.

**Key words:** cross(inter)cultural communication; foreign language teaching; linguistic competence; professional communication; IT communication; language pedagogy; globalization; communication barriers; intercultural competence.

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## 1. Introduction

The study of communicative processes is one of the most relevant issues for humanity at the present stage of societal development. Intercultural (or cross-cultural) communication as a phenomenon has accompanied humanity throughout its entire history (trade, marriage relations, diplomacy, conflicts, etc.). This phenomenon has gained particular importance due to globalization, digitalization and intensive migration processes. In the United States, a professional association called the Society for Intercultural Communication Training and Research was established in the 1960s; later, similar organizations appeared in Europe, and specialized academic journals began to be published. In the 1980s and 1990s, the linguo-cultural approach to foreign language teaching actively developed (*Hall, 1966*), (*Hall, 1976*), (*Bennet, 1993*). In applied linguistics and language pedagogy, such concepts as cross-cultural discourse studies, cross-cultural pragmatics, comparative cultural studies, and cultural lexicography emerged. Intercultural communication characterizes not only interaction in the fields of art, tourism, and everyday life, but most importantly – which is the main focus in non-philological education – communication at a specific professional level (*Hofstede, 2001*), (*Piller, 2010*), (*Bennet, 2008*), (*Byram et al., 2018*).

Intercultural communication can be defined as a process of interaction between representatives of different cultural communities, in which participants are aware of cultural differences and take them into account in the course of communication. It involves the exchange of information, emotions, and ideas among individuals with diverse cultural backgrounds. In the modern educational context, particularly in higher education, the issue of intercultural communication has gained special significance, as it is directly related to the development of professional communicative competence in future specialists. The key objectives of this field comprise preventing communication breakdowns caused by cultural differences and to develop effective strategies for overcoming them.

One of the main tasks of language pedagogy today is the development of an effective model for teaching foreign languages in the context of intercultural communication, since every foreign language lesson represents practical interaction with another culture through its primary carrier – language. The main emphasis is placed on teaching the functional aspects of language and on the more practical application of foreign language skills.

Intercultural communication is studied within various academic disciplines, including cultural studies, linguistics, ethnology, sociology, psychology, anthropology, cybernetics, and folklore studies, as well as at an interdisciplinary level, which makes it possible to comprehensively analyze its nature, mechanisms, and consequences (*Manakin, 2012*), (*Cambridge, 2013*), (*Spencer-Oatey, 2008*).

It should be emphasized that even when a common language is used, communication participants do not always interpret the meaning of messages in the same way, which may lead to misunderstandings (*Maltseva, 2002*). Such difficulties become more pronounced in intercultural settings, where differences in values, social norms, and communication styles act as sources of communication barriers. This highlights the need for a deeper study of the mechanisms underlying effective intercultural interaction and the development of relevant competencies.

**The aim of this study** is to analyze effective methods of developing intercultural communication in the process of learning a foreign language (English). The aim of this article is to generalize the pedagogical experience of teachers working with IT students in the context of developing intercultural communicative competence. To achieve this aim, the following *objectives* have been defined:

1. To analyze the features of intercultural communication and its phenomenon.
2. To identify the main difficulties faced by students in the process of intercultural interaction.
3. To substantiate and propose effective methods for developing intercultural communication and overcoming intercultural stress.

**The object of the study** is the process of developing intercultural communicative competence in foreign language education.

**The subject of the study** includes methods, approaches, and pedagogical conditions for fostering intercultural communication in the educational environment.

**Methods:** The study employs general scientific methods of analysis, synthesis, and generalization, which made it possible to examine and systematize scholarly works devoted to the study of intercultural communication. In the course of the study, contemporary scholarly sources dealing with the development and dissemination of intercultural communication in the educational environment, particularly in higher education institutions, were viewed. An important component of the research was the authors' own practical experience in teaching ESP to students of technical major, as well as organizing and conducting extracurricular cultural and educational activities, and also, which is crucial, personal experience of working with foreign companies.

## 2. Development of Intercultural Communication in the Global Digital Environment

The development of intercultural communication in the context of the global digital environment is characterized by a rapid transformation of communication forms, channels, and dynamics, where digital technologies serve as a key instrument of interaction. Digitalization eliminates geographical boundaries, making intercultural interaction a routine practice in business, education, and social life.

The concept of "intercultural communication" in its narrow scientific sense emerged, as it was mentioned, in the second half of the XX century, when researchers began to focus on analyzing communication breakdowns and their consequences in interactions between representatives of different cultures. Over time, the scope of this concept has significantly expanded to include such fields as translation studies, foreign language teaching methodology, comparative cultural studies, and other related disciplines. Contemporary research in intercultural communication focuses on patterns of human behavior in situations shaped by culturally determined differences in language use, as well as on the impact of these differences on the communication process.

*Foreign language teaching and intercultural communication* are closely interconnected, as language serves not only as a means of information exchange but also as a tool for understanding the world, shaping thought, expressing emotions, and fulfilling communicative needs. The ability to engage in intercultural dialogue is an essential component of the professional training of modern specialists, since effective communication requires overcoming not only linguistic but also cultural barriers. (Prus et al., 2025), (Prykhodko, 2016)

The process of socialization cannot be considered outside the linguistic environment, as it is through language that individuals acquire the values, norms, and behavioral patterns characteristic of a particular culture. Thus, learning a foreign language involves not only mastering lexical and grammatical structures but also engaging with a different cultural worldview. Each foreign language lesson can be viewed as a practical implementation of intercultural

communication, where linguistic units reflect culturally determined meanings and national perspectives. (Byram et al., 2002), (Bakum et al., 2018).

Within the higher education system, the implementation of the dialogue of cultures is achieved through the integration of the intercultural component into the teaching of the discipline “Foreign Language” in general sense. It may be either an ESP course (English for Special Purposes) or Business English, or General English. This approach not only contributes to the development of students’ understanding of cultural differences but also fosters a tolerant attitude toward representatives of other cultures. At the same time, it encourages awareness of the value of one’s own national identity, culture, and traditions. The intercultural aspect of language training shapes students’ perception of the dialogue of cultures as a fundamental model of coexistence in a modern multicultural society, based on the principles of mutual respect, openness, and tolerance. (Kostiuk et al., 2019), (Trompenaars et al., 2012), (Halytska, 2014).

From a practical perspective, the effective integration of the *intercultural component* into foreign language teaching promotes a positive attitude toward cultural diversity and develops readiness for constructive interaction, cooperation, and peaceful conflict resolution. At the *macro level*, intercultural communication enables the understanding of other cultures through their literature, art, and other forms of cultural expression, thereby contributing to mutual enrichment. At the *micro level*, it is realized through the interpretation of social, ethnic, religious, and other cultural knowledge and practices in the process of direct interaction.

It should also be noted that in the context of intercultural interaction, particularly in international business communication, participants’ behavior is often shaped by their own experience and intuitive perceptions of appropriate conduct. In the absence of adequate intercultural training, communication participants tend to rely on the norms of their own culture without considering the specific cultural context of their partners, which may lead to misunderstandings and reduced effectiveness of cooperation.

### 3. Key challenges of intercultural communication

Thus, among the key challenges of intercultural communication, the following can be identified:

*Language barriers.* Despite the widespread use of English as a global lingua franca, linguistic difficulties remain a significant obstacle to effective interaction. Differences in language proficiency, as well as culturally specific features of language use, such as metaphors, idioms, and regional variations, may lead to misunderstandings even when participants possess formal linguistic competence. For example, one of the problems is polysemy and contextual meanings. Many English terms have multiple meanings depending on the context: the word “drive” can mean both a physical device (for example, a hard drive) and a process (“drive the project”). When translating computer terms, it is important to correctly determine the context and choose the appropriate translation option. Choosing the wrong meaning can significantly change the meaning and cause confusion. It is worth mentioning that different levels of language and their corresponding units possess varying degrees of cultural richness and cultural conditioning.

*Crosscultural differences.* Divergent values, traditions, communication styles, and social norms can become sources of conflict and misunderstanding in intercultural interaction. For instance, differences in attitudes toward hierarchy, gender roles, perceptions of time, and emotional expression can significantly influence decision-making processes, negotiation strategies, and business operations;

*Stereotypes and prejudices.* Cultural stereotypes may considerably complicate intercultural communication, as they tend to oversimplify perceptions of individuals and groups and do not always reflect reality. Both negative and positive stereotypes can shape biased attitudes toward interlocutors, hindering mutual understanding and reducing the effectiveness of cooperation;

*Non-verbal communication.* Differences in non-verbal elements, such as gestures, facial expressions, eye contact, interpersonal distance, and other physical cues, may result in misinterpretation of intentions or emotions. These differences are particularly significant in intercultural business and diplomatic contexts, where non-verbal signals play a crucial role in building trust and conducting successful negotiations. It is important to consider that the interpretation of non-verbal means of communication is culturally determined and may vary significantly depending on the national context (Burgoon et al., 2016). For example, in Germany, students may express their approval of a lecture by tapping their knuckles on the table, whereas in the United States this is more commonly expressed through applause. At the same time, the “OK” gesture, which carries a positive meaning in American culture, may be perceived as inappropriate or even offensive in certain European countries, including Germany. This highlights the necessity of developing intercultural awareness in order to prevent communication misunderstandings. Such physical contacts as handshake and touch are common form of greeting in Europe and USA, while in the Middle East there is a limited contact, especially between genders. Smile in the USA and Europe shows friendliness and positivity while in Japan it may mask embarrassment or disagreement.

*Psychological barriers and stress.* Participants in intercultural communication may experience stress or psychological discomfort due to cultural adaptation and the need to modify habitual patterns of behavior. This can lead to decreased interaction effectiveness or even conflict, especially if one party feels pressure or uncertainty caused by cultural differences.

*Information asymmetry.* In the context of globalization, differences in access to information, education, and technology may create asymmetry in communication between cultures. Variations in the level of technological development or access to global networks can result in one party being less informed or having limited opportunities to participate fully in communication processes;

*Ethical differences.* Divergences in ethical principles, moral values, and legal norms across cultures may lead to significant discrepancies in approaches to business practices, conflict resolution, or service provision. Different perceptions of honesty, fairness, or equality can hinder the achievement of consensus or the conclusion of agreements;

*Digital barriers and online etiquette.* Although digital technologies facilitate the development of intercultural communication, their use also introduces new challenges, particularly those related to adapting communication strategies to the online environment. Online communication has its own specific rules and barriers associated with the absence of physical presence, which may complicate the transmission of subtle non-verbal cues and create additional difficulties for mutual understanding .

As it is seen, intercultural communication is a complex and multifaceted process that encompasses not only linguistic and cultural barriers but also psychological, social, and technological aspects that must be taken into account to ensure effective international cooperation.

#### 4. Non-verbal barriers

As for non-verbal barriers, here the difficulties of communication participants may arise when transferring symbols, their incorrect understanding by one of the partners, after which problems arise with their meaning. At the same time, it should be remembered that each nation has its own interpretation of non-verbal means of communication.

Non-verbal communication barriers usually include:

*visual barriers* (physical features, gait, facial expression, posture and changing postures, gestures, visual contact, psychological distance). In Japanese culture, avoiding direct eye contact is considered important, as prolonged eye contact may be interpreted as a sign of aggression or disrespect, whereas in Western cultures it is often associated with openness and sincerity. In France, considerable attention is given to facial expressions and emotional expressiveness, which may be misinterpreted by representatives of more reserved cultures. In Middle Eastern countries, personal distance and gender-specific norms of interaction play a significant role; for instance, physical contact between individuals of different genders in public may be considered inappropriate. Furthermore, gestures that are neutral in one culture may carry negative or even offensive meanings in another;

*acoustic barriers* (intonation, timbre, volume, pitch, speech pauses, etc.) which may be of utmost importance during online communication; Pause in conversation in the USA may cause discomfort but in Japan it is a natural part of communication, sign of respect.

Last two types of barriers, *tactile sensitivity* (handshakes, pats, kisses, etc.) and *olfactory barriers* (smells), are significant in offline communication.

So, taking into account the cultural specificity of non-verbal communication, it is a necessary condition for effective intercultural interaction, as it helps to avoid misunderstandings and contributes to building mutual trust among communication participants.

#### 5. Intercultural Communication in the IT Sphere: Challenges, Strategies, and Practical Cases

Intercultural communication in the IT sphere refers to the process of professional interaction between specialists belonging to different national, linguistic, and cultural communities. In the context of globalization and digital transformation, it has gained particular importance, as it directly affects the efficiency of international projects and the performance of multicultural teams. Such communication involves not only verbal interaction but also adaptation to different models of professional behavior, management styles, decision-making approaches, and the use of specialized IT terminology.

Among the key challenges of intercultural communication are cultural barriers manifested in differences in business practices, values, and professional norms. Various communication styles also play a significant role: some cultures tend to prefer direct expression of opinions, while others rely on indirect communication, which may complicate mutual understanding and feedback exchange. Professional IT vocabulary is another essential factor, as it ensures accuracy and clarity of information transfer but requires an appropriate level of language proficiency. Additionally, localization and content adaptation are crucial when entering new markets, as they require consideration of linguistic, cultural, and social characteristics of the target audience.

### 6.1. Key trends and features of digitally mediated communication

*Transformation of formats:* A shift from traditional face-to-face verbal communication to digitally mediated interaction through social networks, video conferencing platforms, and messaging applications.

*Active participation:* The digital environment promotes an activity-based approach (collaborative projects, commenting, virtual exchanges), transforming communication and learning from reproductive to reflective processes.

*Increased speed:* The pace of information exchange has significantly accelerated, requiring immediate responses and rapid adaptation to the cultural characteristics of communication partners.

*Impact on the business sphere:* Digital technologies play a crucial role in cross-cultural management, enhancing interaction efficiency and reducing the significance of national borders.

### 6.2. Challenges of digitalization in intercultural communication:

– *Risk of semantic distortions:* Due to the absence of non-verbal cues (facial expressions, gestures) and the use of automated translation tools, the risk of misinterpretation of messages increases.

– *Linguistic and sociocultural barriers:* Despite technological advancements, differences in digital etiquette and cultural norms remain significant obstacles.

– *Context reduction effect:* Online communication often lacks deeper cultural context, replacing it with simplified and standardized patterns.

Overcoming these challenges is possible through the systematic development of intercultural competence, which includes familiarization with cross-cultural communication principles and the formation of effective communication skills. Another important factor is the implementation of unified communication standards and approaches, as well as the improvement of participants' language proficiency in professional interaction.

Effective intercultural communication contributes to strengthening the position of Ukrainian IT companies in the international market by ensuring open dialogue, mutual understanding, and the reduction of stereotypes. In cooperation with foreign partners, it is essential to consider linguistic environments, business etiquette, and cultural expectations. In some regions, for example, English is widely used alongside the state language as a medium of international communication, while formal communication norms and personal relationships remain highly valued. Moreover, differences in mentality may influence the pace of communication, decision-making processes, and workflow organization, requiring flexibility and adaptability from all participants

## 7. Practical Aspects of Intercultural Communication in IT: Examples and Case Studies

The practice of international IT companies demonstrates that the effectiveness of intercultural communication directly influences project success. For example, in global teams at Google, significant attention is paid to creating an open communication environment that encourages clear expression of ideas and constructive feedback, which helps minimize misunderstandings among representatives of different cultures.

Another relevant example is Microsoft, where training programs on intercultural interaction are actively implemented for employees. These programs teach staff to take into account differences in communication styles across cultures, particularly the distinction between direct and indirect expression, which is crucial for effective teamwork.

In the IT outsourcing sector, such as at EPAM Systems, situations often arise where Ukrainian developers collaborate with clients from the USA, Europe, or Asia. One common issue is the different understanding of deadlines and expectations regarding deliverables. For instance, Western cultures typically emphasize strict adherence to deadlines, while in other cultural contexts time may be perceived more flexibly. This necessitates clear agreement on cooperation terms and the use of standardized project management tools.

One of the examples is international startups, where teams are often distributed across multiple countries. In such environments, a common working language (usually English) and digital communication platforms are essential. However, even with a shared language, difficulties may arise due to differences in terminology interpretation and communication styles, highlighting the importance of developing intercultural competence.

Thus, the presented examples demonstrate that intercultural communication is not merely a theoretical concept but also a practical tool that determines the effectiveness of interaction in the modern IT industry. Successful companies place significant emphasis on developing relevant skills among their employees, which helps to reduce communication barriers and improve the quality of collaborative work.

In addition to linguistic and etiquette-related factors, cross-cultural characteristics of educational and professional environments significantly influence the effectiveness of intercultural interaction. Differences in the perception of teacher and student roles are particularly important, as in some cultures they are expressed through a more hierarchical model of interaction and a higher level of respect for authority. Cultural factors of motivation also play a significant role, influencing attitudes toward learning, levels of independence, and student engagement. Additional difficulties arise due to different learning and communication styles, which may complicate the development of effective dialogue in the educational process.

An important instrument is communication localisation, including the adaptation of linguistic and terminological resources in educational and marketing materials. The implementation of modern instructional design approaches and the development of e-learning courses tailored to the cultural characteristics and digital competence level of the target audience also play a crucial role. The combination of these measures increases the effectiveness of intercultural interaction and improves the quality of educational products.

So, in the context of globalisation and digital transformation, intercultural communication has become a decisive factor in the professional activity of IT specialists. It is no less important than technical knowledge, as it ensures effective interaction in international teams, reduces the risk of misunderstandings, and supports the successful implementation of projects. It has been established that the *main challenges include language barriers, the complexity of professional terminology, and cross-cultural differences in communication and learning styles.*

Consequently, improving the quality of professional training for future IT specialists requires the *integration of linguistic and intercultural components into the educational process, the use of modern digital technologies, and the adaptation of curricula to the demands of the global labor market.* The implementation of these approaches will contribute to the development of competitive professionals capable of working effectively in an international environment and successfully interacting with representatives of different cultures.

## 8. Conclusions

A defining feature of contemporary society is the active interaction of cultures, manifested not only in dialogue but also in processes of cultural interpenetration. This contributes to the formation of a global sociocultural space in which the ability of an individual to adapt to diverse cultural environments becomes particularly important. In this context, language plays a key role as a means of socialization, professional development, and integration into society.

To overcome communicative barriers at the professional level, various *training programs* should be conducted and diverse *teaching methodologies* ought to be developed. The development of *professional discourse courses* with an emphasis on sociocultural aspects should be an integral part of the educational program. Actually, this very article is an attempt to consider the problem in an interdisciplinary manner and find acceptable options for its solution.

Intercultural communication in the digital space functions as an essential tool for the development of international relations, business, science, and education, necessitating a higher level of cross-cultural competence among professionals.

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## COGNITIVE ASPECTS OF CROSS-CULTURAL RESEARCH: THE ROLE OF ARTIFICIAL INTELLIGENCE IN HUMAN PROFESSIONAL ACTIVITY

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### Summary

The article is devoted to the analysis of cognitive aspects of the use of artificial intelligence (AI) in education, medicine, and the military domain. Based on an analysis of 22 scientific publications by American, Polish, and Ukrainian researchers (2022–2026), key cognitive risks have been identified, including the phenomenon of overreliance on automated systems (automation bias), the loss of critical thinking skills, and the problem of algorithmic opacity («black box»). Particular attention is paid to country-specific aspects, including the concept of moral injury in U.S. military medicine, the integration of European regulatory requirements and the phenomenon of «zanikanie krytycznego myślenia» in Poland, as well as the adaptation of AI to conditions of martial law, the development of the «method from the opposite», and cognitive offloading systems in Ukraine. The concept of the «cultural cognition gap» is proposed to explain differences in the perception and implementation of AI across national contexts. The need for further harmonization of research approaches among countries, taking into account their unique experience, is substantiated. The results of the study may be used for the development of national AI implementation strategies that consider cognitive risks and cross-cultural differences.

**Key words:** artificial intelligence, cognitive aspects, critical thinking, black box, cultural cognition gap.

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### 1. Introduction

The current stage of development of artificial intelligence technologies is characterized by the rapid penetration of AI into all spheres of human professional activity, from education and medicine to the military domain. However, alongside the undeniable advantages of automation and process optimization, a number of issues arise related to the impact of AI on human cognitive abilities, including the capacity for critical thinking, independent decision-making, and understanding the limits of one's own competence. These issues become particularly relevant in a cross-cultural context, as different countries demonstrate distinct approaches to the regulation, implementation, and risk assessment of AI. The aim of this study is to identify key cognitive aspects of AI application in education, medicine, and the military sector in the United States, Poland, and Ukraine, as well as to outline the concept of the «cultural cognition gap» as an analytical tool for comparing national approaches. The methodological basis of the study is a comparative analysis of 22 scientific publications by American, Polish, and Ukrainian researchers published between 2022 and 2026. The article consists of three main sections: an analysis of the cognitive risks of overreliance on AI, a review of unique cognitive aspects in each country, and a cross-cultural synthesis culminating in conclusions.

## 2. Cognitive Risks of Overreliance on AI

The most universal cognitive risk identified in studies across all three countries is the phenomenon of human overreliance on automated systems. American researchers (*Janumapally et al., 2025*) define this phenomenon as «automation bias» a cognitive bias in which individuals tend to place excessive trust in automated systems even when their recommendations contradict personal experience or common sense. In the context of postgraduate medical education, this bias creates a risk of loss of critical thinking skills, as medical students may uncritically accept diagnostic recommendations generated by large language models. In Polish academic discourse, a similar phenomenon is referred to as «zanikanie krytycznego myślenia» (*Więciwicz-Modrzewska, 2024*). The researcher emphasizes that students who systematically use ChatGPT to complete assignments lose their ability to analyze, synthesize, and draw independent conclusions. Of particular concern is the fact that generated responses are often plausible but not necessarily accurate, creating an illusion of competence. The author stresses the need to develop AI literacy as a form of digital criticality that enables students to distinguish reliable information from potentially biased content. Ukrainian researchers, in particular Cherevatiuk (*Cherevatiuk, 2024*), describe a similar risk as a «cognitive trap» into which students fall when they perceive persuasive but not always reliable AI-generated responses as ultimate truth. Iliichuk (*Iliichuk, 2024*) and Nikolaieva et al. (*Nikolaieva et al., 2026*) emphasize that excessive reliance on AI in the educational process leads to a decrease in independence and critical thinking, which is especially dangerous in the context of developing professional competencies in future specialists. In the military domain, this risk becomes particularly acute. The Polish researcher Zdrojewski (*Zdrojewski, 2026*) introduces the concept of «nadmierne poleganie na automatyzacji» to describe situations in which military operators blindly trust AI system recommendations even when they contradict their experience and situational awareness. A similar issue is described by Prus (*Prus, 2024*), who provides the example of the Israeli Lavender system, which automatically identifies targets with an accuracy of 90 percent, creating a risk of misidentification and unjustified civilian casualties. American researchers Leone et al. (*Leone et al., 2024*) directly link this risk to the «black box» problem and the lack of algorithmic transparency, which prevents operators from understanding the logic behind system decisions.

## 3. Unique Cognitive Aspects of AI Application in the United States, Poland, and Ukraine

Unique Cognitive Aspects of AI Application in the United States, Poland, and Ukraine Despite the universality of the risks described above, each of the three countries demonstrates unique cognitive aspects shaped by the specifics of national research programs as well as socio-cultural and regulatory contexts. In American scientific literature, one of the most innovative concepts is «moral injury» proposed by researchers in military medicine (*Leone et al., 2024*). This phenomenon arises when an AI system provides recommendations that contradict deeply rooted moral beliefs of a medical professional, for example suggesting that dozens of wounded individuals be classified as beyond recovery during mass casualty situations. Unlike typical cognitive bias, moral injury has not only a cognitive but also a profound emotional and ethical dimension that requires separate study. Another distinguishing feature of the American approach is the active implementation of immersive learning technologies. Krajcer (*Krajcer, 2022*) describes the use of holography for teaching anatomy, which has been shown to be more effective than traditional cadaver dissection. Holographic images allow students to examine

organs from different angles, overlay tissue layers, and develop spatial cognitive perception that cannot be achieved through textbooks. In addition, American researchers Kumar et al. (Kumar et al., 2024) introduce the concept of «cognitive partnership» viewing AI not as a substitute but as a partner in brainstorming that expands the cognitive capabilities of instructional designers. The Polish research school is distinguished by the most detailed development of the concept of Explainable AI (Ex AI) as a means of overcoming the problem of algorithmic opacity (Brawańska et al., 2025). Researchers emphasize that a physician cannot make a well-founded clinical decision based on a «black box» recommendation without understanding and verifying its underlying logic. The development of Ex AI methods that make algorithmic decision-making processes transparent to humans is seen as a necessary condition for the ethical and safe use of AI in medicine. Furthermore, Polish researchers actively integrate the European regulatory framework, including the AI Act and GDPR, into their studies. Patrzyk and Woźniacka (Patrzyk and Woźniacka, 2022) draw a historical parallel with Semmelweis, who demonstrated the effectiveness of handwashing but faced resistance from the medical community due to distrust of «invisible microorganisms». This analogy illustrates that even clear clinical advantages of AI may not be immediately accepted, and overcoming cognitive resistance requires not only technical solutions but also shifts in cultural attitudes. Ukrainian research is distinguished by the unique context of a full-scale war, which has become a catalyst for the accelerated implementation of AI in medicine and the military domain. Shostakowych-Koretska (Shostakowych-Koretska, 2025) analyzes the use of AI in clinical practice for the cognitive off-loading of physicians under conditions of limited time, resources, and personnel. Nikolaieva et al. (Nikolaieva et al., 2026) propose an original «method from the opposite» which develops students' intercultural competence through the analysis of errors and biases demonstrated by AI systems. This method not only fosters critical thinking but also prepares future professionals to work in environments where AI is not a perfect tool. Trofymenko et al. (Trofymenko et al., 2024) describe the Air-Guardian system, which monitors a pilot's eye movements to generate saliency maps for early risk detection, representing an example of direct cognitive augmentation of human capabilities. It is also worth noting the Ukrainian Griselda system for intelligence data collection (Trofymenko et al., 2024), which demonstrates the effective integration of AI with operational needs in conditions of real combat.

#### 4. Cultural Cognition Gap: A Cross-Cultural Analysis

The conducted analysis indicates that the cognitive aspects of AI application are not universal but vary significantly depending on cultural, regulatory, and historical contexts. To describe this phenomenon, the concept of the «cultural cognition gap» is proposed, defined as a set of differences in cognitive approaches, ethical priorities, and regulatory frameworks that influence the perception, implementation, and risk assessment of AI across countries. The American approach is characterized by technological optimism and a focus on innovation, driven by active private sector involvement and significant investment in research. At the same time, the regulatory system, including FDA and HIPAA, as well as ethical frameworks such as the Executive Order on AI, attempt to balance technological progress with the protection of citizens' rights. The key cognitive risk in this context is automation bias, while a unique contribution lies in addressing the «black box» problem through XAI and conceptualizing moral injury as a specific risk in military medicine. The Polish approach, in contrast, is more cautious and regulation-oriented, shaped by Poland's membership in the European Union

and the implementation of the AI Act, GDPR, and MDR. Researchers focus on ethical issues, data protection, and accountability. Characteristic phenomena include «zanikanie krytycznego myślenia» in education and «nadmierne poleganie na automatyzacji» in the military domain. A unique contribution is the integration of European regulatory requirements directly into the research discourse and the active development of Ex AI. Moreover, Polish researchers actively study the Ukrainian experience, particularly the use of the Griselda system, indicating an effort to adapt successful practices from a neighboring country. The Ukrainian approach is shaped under the unique conditions of martial law, making it the most practice-oriented and adaptive. The primary focus is on cognitive offloading of professionals, including physicians and military personnel, and on the development of critical thinking through the «method from the opposite». Unlike the United States and Poland, where regulatory systems are relatively well developed, Ukraine is still in the process of forming national AI standards, as reflected in the Concept for the Development of Artificial Intelligence in Ukraine (2020). Ukrainian research is characterized by a high degree of interdisciplinarity and the integration of theoretical developments with concrete applied solutions such as Griselda and Air-Guardian.

## 5. Conclusions

The analysis of 22 scientific sources from three countries allows several generalized conclusions to be drawn. First, all three countries identify universal cognitive risks associated with AI application, including overreliance on automated systems (automation bias, nadmierne poleganie, cognitive trap), loss of critical thinking skills, and the problem of algorithmic opacity («black box»). These risks are most extensively studied in the educational domain but are equally relevant to medicine and the military sphere. Second, each country demonstrates unique cognitive aspects determined by the specifics of national research programs and sociocultural contexts. The United States is distinguished by the conceptualization of moral injury in military medicine and the development of Ex AI methods; Poland by the active integration of European regulatory requirements and a focus on «zanikanie krytycznego myślenia»; and Ukraine by adaptation to wartime conditions, the development of the «method from the opposite» and the combination of theoretical approaches with concrete applied systems. Third, the proposed concept of the cultural cognition gap provides a systematic framework for describing differences in cognitive approaches, ethical priorities, and regulatory environments in the United States, Poland, and Ukraine. This gap manifests in differing emphases: the United States on innovation and the private sector, Poland on regulation and ethics, and Ukraine on adaptability and practical solutions. Prospects for further research include a more detailed examination of mechanisms for bridging the cultural cognition gap, particularly through the exchange of successful practices between countries, for example the adaptation of Ukrainian military medical experience in NATO countries or the implementation of elements of Polish AI literacy in Ukrainian education. Another important direction is the study of the long-term impact of systematic AI use on the cognitive development of professionals in different cultural contexts.

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## THE DEVELOPMENT OF EDUCATION 5.0 AT THE AGE OF INNOVATION

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### Summary

This article examines the development of Education 5.0 in the age of innovation as a new paradigm for the modernisation of education systems within the context of society's digital transformation. The relevance of the study stems from the need to train specialists capable of operating effectively in conditions of rapid technological change, uncertainty and global challenges, which requires a rethinking of the content, forms and methods of teaching. The paper analyses the theoretical and conceptual foundations of Education 5.0 and identifies its key characteristics, including human-centredness, the integration of innovative technologies, personalised learning and the development of 21st-century competences. Particular attention is paid to the role of innovation as a determining factor in the transformation of the educational process, specifically the use of artificial intelligence, digital platforms, data analytics and virtual learning environments. It is argued that Education 5.0 is aimed at fostering critical thinking, creativity, digital literacy and the capacity for lifelong learning. The study concludes that the effective development of Education 5.0 is possible provided that technological innovations are combined with humanistic values and equal access to educational resources is ensured.

**Key words:** innovation; digital transformation; personalised learning; competences; educational process; human-centred approach.

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### 1. Introduction

The current stage of societal development is characterised by rapid innovation, digital transformation and the challenges of globalisation, which have a significant impact on all areas of life, including the education system. In these circumstances, there is a growing need to rethink traditional approaches to organising the educational process and to develop a new educational paradigm focused on the harmonious integration of technological progress and humanistic values. The concept of Education 5.0 is precisely such an innovative approach, based on the ideas of personalised learning, the integration of digital technologies and the development of creative and critical thinking among learners. Education 5.0 is seen as a response to the challenges of today's innovative society, where artificial intelligence, big data, the Internet of Things, and virtual and augmented reality play a leading role (Rossokha V., Cheremisina S., 2023). At the same

time, it is not limited to the technological aspect alone, but involves the development of socially responsible, emotionally mature and creatively active individuals capable of self-development and adaptation in conditions of constant change. In this context, education acts not merely as a tool for the transfer of knowledge, but as an environment for the formation of a new culture of thinking and interaction. The implementation of Education 5.0 principles is becoming particularly relevant in higher education institutions, where future professionals for the innovation-driven economy are being trained. This involves the integration of digital platforms, the use of interactive teaching methods, the development of interdisciplinarity, and the cultivation of key competencies such as critical thinking, communication, collaboration and creativity. At the same time, it is important to strike a balance between the technologicalisation of the educational process and the preservation of the humanistic foundations of education.

A significant contribution to the development of the theoretical and methodological foundations of the competence-based approach was made by such Ukrainian scholars as O. Spirin, L. Kartashova, L. Cherednyk, V. Bykov, I. Smyrnova and others, who substantiated the role of digital technologies, the information and educational environment, and innovative pedagogical methods in the development of key and professional competences among learners. At the same time, the concept of 'Education 5.0' is receiving particular attention in contemporary research, reflecting a new stage in the development of educational systems within the context of the global digitalisation and intellectualisation of society. The theoretical and applied aspects of this concept are explored in the works of Yu. Romanyshyn, P. Saukha, L. Kononenko, I. Utyuzha, O. Luchaninova, N. Tkachenko and other scholars. Their research emphasises the need to combine technological innovations with the humanistic values of education, the development of learners' personal potential, and the cultivation of critical thinking, creativity and the capacity for lifelong learning.

To summarise the above points, the development of Education 5.0 in the age of innovation is a complex and multidimensional process requiring a systematic approach, scientific justification and practical implementation. Research into this issue allows us to identify effective directions for the modernisation of education, aimed at training competitive specialists capable of operating successfully in a digital and innovative environment.

## **2. Theoretical and conceptual foundations for the development of Education 5.0 in an innovative society**

The theoretical and conceptual foundations for the development of Education 5.0 are shaped by the profound transformations taking place in today's innovative society, particularly in the context of the transition to a new development paradigm outlined by the concept of 'Industry 5.0'. In 2022, the European Commission published a policy paper entitled 'Industry 5.0: A Transformative Vision for Europe', which marked an important step in conceptualising a new model of industrial development. This document emphasises the need to move away from a technocratic model focused exclusively on efficiency and automation towards a human-centred paradigm, where sustainability, human well-being and the integration of innovative technologies in harmony with human needs are key.

These ideas directly influence the development of education systems, forming the basis for the emergence of the Education 5.0 concept. In this context, education is viewed not merely as a means of knowledge transfer, but as a complex socio-cultural system aimed at shaping individuals capable of functioning effectively in conditions of dynamic change, uncertainty and

technological saturation. In line with the «Industry 5.0» concept, there is a shift in emphasis from automation to augmentation, that is, the expansion of human capabilities through technology (Kononenko L., Savchenko V., 2024). This means that digital tools, artificial intelligence, the Internet of Things and other innovations should be used not to replace people in the educational process, but to enhance their cognitive, creative and professional potential.

An analysis of academic research leads to the conclusion that Education 5.0 is based on the integration of technological and humanistic approaches, combining innovative digital solutions with the values of person-centred learning. Within this concept, principles such as the individualisation of educational pathways, the development of critical thinking, creativity, emotional intelligence and the ability for interdisciplinary interaction take on particular significance. At the same time, it is important to foster a responsible attitude towards the use of technology, ethical awareness and social engagement among learners. Furthermore, Education 5.0 is geared towards ensuring sustainable development, which involves integrating environmental, economic and social aspects into the curriculum. This responds to contemporary global challenges and requires the training of specialists capable not only of applying technologies but also of assessing their impact on society and the environment.

### 3. The development of key competences among learners in the context of Education 5.0

The concept of ‘Education 5.0’, which emerged in the early 2010s, represents a logical continuation of the evolution of educational models, whilst integrating the most effective elements of previous approaches and transforming them in line with the challenges of an innovative society. Its key feature is a shift from the accumulation of knowledge to the development of human potential, particularly universal skills such as creativity, innovative thinking, the ability to solve complex problems, digital literacy and critical thinking. In the context of rapid socio-economic changes and the high uncertainty of the 21st century, it is precisely these competencies that determine an individual’s success and their ability to adapt.

The authors of the study note that the human-centred paradigm of Education 5.0 envisages the harmonious development of the individual, focused not only on professional training but also on fostering social responsibility, emotional maturity and a readiness for lifelong learning (Saukh P., Saukh I., 2023). Education is viewed as a continuous process that goes beyond formal learning and involves the learner’s active participation in their own educational journey.

One of the key features of this model is metacognition, which involves developing the ability to independently acquire new knowledge and master skills throughout one’s life. Another important feature is a focus on innovation and creativity, where the educational process is directed not merely at reproducing knowledge, but at generating new ideas, products and solutions. The development of so-called ‘soft’ skills plays a significant role – communication, collaboration, social and emotional intelligence, the ability to solve complex problems and the application of design thinking. Education 5.0 also involves personalised learning based on the interests, needs and abilities of learners. In this context, the role of the teacher is changing: they act not only as a source of knowledge, but also as a mentor, facilitator and advisor, guiding learners towards relevant resources and supporting them throughout the learning process. An important tool for implementing this model is the use of artificial intelligence, data analytics and distance learning platforms, which ensure the adaptability of the educational process.

Furthermore, Education 5.0 has a distinctly interdisciplinary nature, involving the integration of knowledge from various fields to foster a holistic view of the world and solve complex problems.

In the context of the development of Education 5.0 within an innovative society, particular importance is attached to the development of a set of key competencies that meet the requirements of the human-centred and technology-oriented paradigm characteristic of the 'Industry 5.0' concept. Education for the new generation focuses not only on the transfer of knowledge, but above all on developing the individual's ability to act effectively in conditions of uncertainty, rapid change and a highly technology-saturated environment. Among the leading competencies that determine the competitiveness of a modern specialist, critical thinking and creativity play a key role, ensuring the ability to analyse complex problem situations, make informed decisions and generate innovative ideas. Within the framework of Education 5.0, these qualities are regarded as fundamental to the development of an innovative mindset and the cultivation of an individual's creative potential. Social intelligence and emotional competence are also important components, ensuring effective teamwork, the capacity for empathy, communication, and the building of constructive interpersonal relationships. In the context of the digitalisation of education, these skills take on new significance, as interaction often takes place in a virtual environment.

Equally significant are digital literacy and technological competence, which involve not only mastery of modern digital tools but also an awareness of their impact on social processes, the economy and culture. Education 5.0 focuses on the use of technology as a means of empowering people, rather than replacing them. Furthermore, an important component is the capacity for continuous learning and self-development, which ensures an individual's ability to adapt to new circumstances and challenges. In today's innovative society, knowledge quickly becomes outdated, so the ability to learn throughout one's life is becoming a prerequisite for professional fulfilment. A final, but no less important, component is ethical and social responsibility, which involves an awareness of the consequences of using technology and a willingness to act in accordance with the principles of sustainable development. Thus, Education 5.0 forms a holistic system of competencies that combines technological training with the development of personal and social qualities necessary for effective activity in an innovative society.

#### **4. Risks and potential shortcomings of «Education 5.0»**

Although the contemporary educational paradigm of «Education 5.0» focuses on developing the human skills required for effective performance in an innovative society, it is, like previous stages in the evolution of education, not without certain limitations and challenges. In this regard, it is advisable to critically examine the potential drawbacks of this model with a view to taking them into account in educational practice (*George D., Georg A., Dr T. Baskar. 2024; Rossokha V., Cheremisina S. 2023*):

1. Excessive technologisation of the educational process. Although the use of digital technologies enables personalised learning and broadens access to educational resources, there is a risk of developing excessive dependence on them. This can lead to reduced concentration, information overload and so-called 'digital fatigue', which negatively impacts the quality of learning.

2. The widening of educational inequality. Hyper-personalisation of learning, focused on learners' individual interests, may lead to fragmented knowledge and insufficient development

of basic competencies: unequal access to technology and digital resources may exacerbate social and educational inequality.

3. The transformation of the teacher's role. The shift in the teacher's role from a knowledge provider to a learning facilitator may be accompanied by risks of a loss of professional identity and a decline in pedagogical fulfilment. In some cases, teachers may find themselves either in the role of passive observers or, conversely, as overburdened coordinators of the educational process.

4. The formalisation of innovation. Despite the focus on creativity and innovation, there is a risk of superficial innovations emerging that have no practical value or do not meet society's real needs. This may lead to a devaluation of educational outcomes as such.

5. A decline in the level of deep knowledge acquisition. A focus on rapid information processing and multitasking may reduce the level of deep understanding of the learning material. As a result, learners may demonstrate superficial knowledge without a developed systematic way of thinking.

6. Problems of ethical technology use. The widespread adoption of artificial intelligence and data analytics in the educational process raises issues of privacy, academic integrity and the responsible use of digital tools, which requires additional regulatory and methodological guidance.

## 5. Conclusions

The study found that the development of Education 5.0 in the age of innovation is a natural response by education systems to the challenges of digital transformation and global socio-economic changes. It has been demonstrated that a key characteristic of this model is the integration of innovative technologies into the educational process whilst maintaining the human-centred focus of education. Innovations serve not only as a tool for modernising the educational environment, but also as a determining factor in shaping a new quality of education focused on the development of creative potential, critical thinking and the ability to self-learn. Within the framework of Education 5.0, the use of technologies such as artificial intelligence, big data, virtual and augmented reality takes on particular significance, as they ensure the personalisation of learning, enhancing its effectiveness and adaptability to the individual needs of learners. At the same time, this innovative approach involves not only technological changes but also a transformation of teaching methods, the role of the teacher and the content of education, all aimed at preparing professionals to operate in conditions of uncertainty and rapid change. However, the effectiveness of implementing Education 5.0 depends on the ability to combine technological capabilities with humanistic values and ensure equal access to innovative resources.

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THESAURUS MODELLING OF FINANCIAL TERMINOLOGY IN GERMAN<sup>1</sup>**Svitlana Kiyko**

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**Summary**

This study presents a systematic approach to thesaurus modelling of the terminological system of the subject area 'Finance' in the German language, drawing on terminological vocabulary extracted from the headlines and subheadings of the *Frankfurter Allgemeine Zeitung* (2020–2025). From a corpus of 5,000 lexical units, 3,200 unique finance-related terms were identified and subjected to comprehensive structural-semantic analysis.

A hierarchical network model proved most effective for structuring the finance term field. Applying this method, the subject area 'Finance' was divided into 15 thematic fields, including *Financial Market, Financial Instruments, Capital, Banks, Stock Exchanges, Trade, Budget and Fiscal Policy, Investments, European and International Funds, Money, Services, Social Benefits, Economic Sciences and Research, the European Community, and Miscellaneous Terms*. Each field was further subdivided into micro-fields of the first, second, third, and up to the seventh order, producing a detailed hierarchical classification of financial terminology.

The research resulted in the development of a codified alphabetical list of German finance terms, which constitutes the basis for a structured thesaurus of the subject area 'Finance'. This thesaurus enables users to navigate the terminological system by establishing semantic relationships between terms and facilitates professional communication, lexicographic work, and foreign language instruction in specialized domains. The findings contribute to a broader understanding of the principles of terminology organization and offer a replicable methodological framework for the thesaurus modelling of other specialized subject areas.

**Key words:** financial terminology, hierarchical structure, semantic analysis, domain-specific thesaurus, lexicographic systematization.

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**1. Introduction**

Modern linguistics is characterized by a heightened interest in the systematic study of language and speech, particularly at the lexical level. The systemic relationships of terminological vocabulary in specialized texts are most evident. The in-depth study of specialized terminology, terminological definitions, the examination of problems and principles of thesaurus compilation in various subject areas, as well as the functional characteristics of terminological vocabulary in texts, are acquiring exceptional relevance in contemporary linguistics.

The growing interest in the study of terms dates to the 1960s–70s (L. Herzog, N. Levadna, O. Ponomariv, Y. Shevelov, W. Stein, E. Wüster, and others). The works of these linguists

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<sup>1</sup> The author expresses heartfelt gratitude for the support and productive suggestions regarding the design of the specialized dictionary to her academic supervisor Prof. Dr. Thorsten Roelcke (Technical University of Berlin). Special thanks are due to the Einstein Foundation (<https://www.einsteinfoundation.de>) for the financial support of this LSP project.

provide definitions of the key concepts of modern terminology, such as the structure and classification of terms, the relationship between terminology and language, and the principles of term formation and standardization. Contemporary scholars (M.T. Cabré, P. Drewer, J. Hennig, L. Hoffmann, F. Mayer, T. Kiyak, S. Kiyko, U. Reinke, Th. Roelcke, K.-D. Schmitz, S.E. Wright, and others) have considerably expanded the range of terminological problems under study, describing the relationship between terms and common language, the ways in which terminology is replenished, and the issues of monosemy and polysemy of the term, etc.

As T. Roelcke notes, the rapid growth of scientific and technical knowledge in our time is reflected in the fact that more than 90% of new words appearing in modern languages consist of specialized vocabulary (Roelcke, 2010: 58–59). Consequently, the growth in the number of terms from various sciences greatly exceeds the number of common words in the language, while an increasing number of terms are penetrating everyday speech. In view of this, the study of specialized vocabulary problems is becoming increasingly important for understanding linguistic processes in general. The flow of linguistic and specialized information to be processed is so large that automation of this process is indispensable. Under these conditions, there is a need to systematize terminology by constructing lexico-semantic terminological systems of subject areas.

Thus, the relevance of the topic is determined by the need for a systematic study of German terms in the subject area of 'Finance'. The central and most important terminological task is the ordering of terminology, which consists of a series of stages: inventorying the terms of the chosen field of knowledge, systematizing the concepts of that field, analyzing the terminology to identify its shortcomings, characteristics and trends of development, normalization proper (i.e., ordering the meaning and form of terms), and finally, the codification of terms. The importance of describing the lexico-semantic terminological system of the subject area 'Finance' and creating a codified list of terms belonging to it lies in the fact that the study of lexico-semantic terminological systems, their interrelationships and their connection with the literary language, serves to reveal the general trends of language development as a whole and of specialized language (terminology) in particular, and helps to solve practical tasks in the field of lexicography and German language teaching.

As the primary indicators of progress in any society, economics and finance are always intensively developing, constantly being updated, reflecting the progressive movement of society. The modern financial terminology system is in the process of formation and development, and the terminological flow that has entered the domestic language of the market carries a mass of new words. The 'conductors' of these new terms are, first and foremost, banks, currency and financial exchanges, customs and tax services, as well as terminological dictionaries and reference books.

The most comprehensive systematic study of German terminology in the subject area of 'Finance' is the analysis of the terminology system carried out by J.P. Krahn and H. Schmidt, which provides a detailed description of the construction of an economic terminology system (Krahn, Schmidt 2004). The work of the group of authors V. Tschizhakowski, O. Schtscherbinina, A. Popesku 'Bildung des terminologischen semantischen Systems im Fachgebiet „Wirtschaft“' is devoted to the formation of terminological semantic systems in the field of economics. The authors investigate how the terminology system in this subject area is created and structured, analyzing the processes of classification and definition of terms in an economic context. Special attention is paid to the specifics of economic terms and their interrelationships within this discipline (Tschizhakowski et al., 2002).

The **object** of our research is the terminology system of the subject area 'Finance' in the German language. The **subject** is the thesaurus modelling of the terminological system

of finance. The **aim** of the research is to develop theoretical positions and practical recommendations for the construction of a lexico-semantic terminological system of the subject area 'Finance' on the basis of German terminological vocabulary, taken from the headlines/subheadings of the German newspaper *Frankfurter Allgemeine Zeitung* (FAZ: <https://www.faz.net>), as well as to identify a codified alphabetical list of terms belonging to the developed lexico-semantic terminological system of the subject area 'Finance', with the aim of compiling a thesaurus. To this end, the following **tasks** are addressed:

- (1) to analyze the headlines/subheadings of articles from the *Frankfurter Allgemeine Zeitung* and to examine the characteristics of definitions of scientific terms,
- (2) to set out the basic principles of thesaurus modelling of the German terminological system in the subject area of 'Finance',
- (3) to compile a codified alphabetical list of identified terms in the German language.

The **research material** consisted of terminological vocabulary taken from the 'Finance' section of the *Frankfurter Allgemeine Zeitung* for the years 2020–2025 (FAZ: <https://www.faz.net/aktuell/finanzen/>). For analysis, 150 articles from sections relating to economics and finance were selected. The total number of identified lexical units amounted to 5,000 terms, of which 3,200 are unique terms used in the context of finance.

The *Frankfurter Allgemeine Zeitung* is one of the largest supra-regional newspapers in Germany, the main content of which consists of political, economic, and cultural reports. Both single-word terms and term combinations consisting of two or more components were selected for analysis, totalling 3,200 units. For the analysis and comparison of definitions, not only the individual terms selected from the headlines/subheadings of the articles were used, but also the article materials themselves. For the definition of the main terms, additional use was made of the academic explanatory dictionary “Duden Universalwörterbuch” (Duden 2023), the six-volume economic lexicon published by Gabler (*Gabler-Wirtschaftslexikon*, 2014), and the academic economics reference guide “Duden Wirtschaft von A bis Z” (*Duden Wirtschaft von A bis Z*, 2007).

To address the tasks set out in the article, within a general inductive-deductive approach to the material under study, several methods of synchronic analysis were employed. The traditional descriptive-classificatory method is combined with definitional analysis, based on which the semantic structure of terms is studied. By means of morphemic and word-formation analysis techniques, as well as the method of lexical transformations, a structural-semantic analysis of complex terms is carried out. Other methods of modern linguistics are also employed in the study: immediate constituent analysis for establishing word-formation structure and identifying the models by which modern terms are formed, with the aim of singling out terminological fields; componential analysis in describing the characteristics of the semantic structure of German terms. The method of systemic-comparative analysis was applied in compiling the codified list and at the stage of analyzing the scope of concepts when comparing definitions with the aim of eliminating the polysemy of terms. Based on the results of applying quantitative methods, conclusions were drawn about the quantitative and percentage characteristics of the terms encountered in the codified alphabetical list.

## 2. Term and Terminology System

A term is a nominative lexical unit (a word or phrase) of a specialized professional language, which is used for the precise naming of a specialized concept. In the linguistic literature there are many different definitions of a term that point to its specific properties and features of

use (*Kiyko, Shkolna 2019: 3–7*). However, all of them are based on the primary function of the term – to name the concepts of a particular field of knowledge precisely and unambiguously – which determines the role of the term in the development of science as a whole and its individual branches. As a unit of LSP, a term has certain semantic, formal, and pragmatic properties. Thus, the semantic characteristics of terms include their content precision in the nomination of a concept, the presence of a definition that reflects the result of scientific comprehension of the features of the object or phenomenon denoted by the term depending on the aims of the specialized field of knowledge, unambiguity within a particular field of knowledge, neutrality with respect to the concept system of a particular branch of knowledge, and relative context-dependence. The formal features of terms include conformity to language norms, high derivational and word-formation activity, brevity, and a nominative (nominal) character. Among the pragmatic features, one should mention first the use in specialized contexts of a particular field of knowledge, relevance, correspondence to the level of knowledge development concerning a particular concept, and reproducibility in speech.

As the basis for defining the term in our research, we adopted the definition of a term proposed by W. Fischer: A term is a word or phrase that has a clear and specialized meaning within a particular field of knowledge or activity. A term is characterized by precision and unambiguity, which allows it to be used for professional or scientific communication, in technical, legal, economic, and other fields (*Fischer 2010: 29*). This definition points to the specificity and professional character of term usage, and the ability to name specialized concepts. As the foundation for building any scientific theory, we consider the systematicity of the term: the principle of systematicity is the leading principle of the organization of terminological systems and their study. The system of terms is understood by us as a combination of its structure (the hierarchy of terms of a particular branch of knowledge), substance (the concepts of that branch), and functions (the nominations of the concepts of that branch of knowledge). Terms within the system occupy a certain place in relation to other members of it; their strict hierarchy forms the structure of the system. Between terms as elements of the terminology system there exist two types of relations: paradigmatic and syntagmatic (genus – species – subspecies; whole – part).

To understand the systematicity of terms it is necessary to distinguish between two concepts – the term field and the term system. The condition for transforming any word or phrase into a term is the inclusion of its concept (i.e., its designatum) into the term field, which represents an organized set of scientific-technical and specialized concepts and connections. Term fields function here as a systemic formation of the content plane. At the expression plane, the term field corresponds to a set of lexical units, as well as word-forming morphemes and formal syntactic devices that ensure syntagmatic connections between lexical units. This organized set of the expression plane is the term system. The combination of the term field (content plane) with the term system (expression plane) yields a two-sided semiotic formation that represents the lexico-semantic terminological system. The stability of the lexico-semantic terminological system is ensured by the systemic stability of the signified, i.e., the term field, whose elements and connections are determined by the system of concepts and connections of the corresponding branch of knowledge.

The initial concept in the semantic analysis of any linguistic object is the concept of the subject area, which serves as a reflection in the consciousness of a person or community of a particular segment of objective reality. There are no restrictions on the choice of subject area. This choice is made in accordance with the tasks of the linguistic research. A branch of knowledge may become a subject area, for example, the specialty of 'Finance', which was chosen for this research.

The systematicity of terminology implies the division of terms into subject areas, subject sub-areas, and micro-areas. Elementary concepts are located at the lowest level of the hierarchy. The term field is successively divided into sections and micro-fields, down to the identification of points, i.e., the meanings of individual terms and the connections that unite those meanings. The result is a level hierarchy of the term field, where the upper levels are assigned to areas and sub-areas, while the lower levels contain the points of the term field. The higher a certain level is (micro-area – sub-area – area), the more general the character of its features. Conversely, when moving from the upper levels to the lower ones, features acquire an increasingly individual character. At the same time, the features of a lower level inherit the semantic features of the preceding levels of the hierarchy. As a result, a field of features is formed within the term field, which serves as a working tool in the construction of that term field (*Kiyko, Pyntiuk 2020*).

In the construction of the term field, semantic features act as organizing elements around which areas, sub-areas, and micro-areas are grouped. To construct and analyze the lexico-semantic terminological system, it is necessary to correlate the constructed semantic model of the term field with the expression plane of the language. This task is accomplished by relating the sections, micro-fields, and points of the term field to the vocabulary of a particular language. This means that each fragment of the term field receives its linguistic label (code). Their complete list will be a codified alphabetical list. The labels may be organized into a network (a hierarchically structured thesaurus).

### 3. Theoretical Foundations of Thesaurus Modelling of the Terminology System

The main task that arises while modelling the content plane of a subject area consists in identifying and describing its structure while simultaneously indicating the main types of relations between the sections, micro-fields, and points of the term field. The most suitable method for modelling the term field of the subject area 'Finance' chosen by us appears to be the thesaurus-network method, which allows the creation of a field in which the classification of terms is oriented according to specialized branches and hierarchically organized. By the term 'network' we understand a model of the commonality of linguistic objects constituting a particular set, between the elements of which relations of various orders may be established. A hierarchical network is characterized by the following features:

- (1) the upper level is represented by a node with the most general semantics – the root,
- (2) other nodes are also types of the network (single-root nodes),
- (3) a node from which no branches extend is called a terminal or final node,
- (4) within the network there is always a binary connection (or several binary connections) between terms. These connections are transitive, non-reflexive, and asymmetric (*Goltschalck 1974: 17*).

Along this network, where the relations of 'species – subspecies' and 'whole – part' obtain between objects, one can move downward. By means of this formal procedure, the division of the term field into sections and areas, micro-fields and micro-areas of various orders is carried out (see Table 1).

The term field, presented in the form of a network, is a universal model of the content level for the terminology system. The national-linguistic differences of each terminology system reside at the expression level, i.e., in the very structure of the terminological system. Thus, the term field is a unified set of terms of a particular professional sphere with a multilevel structural organization. The object of the term field is languages for special purposes, i.e., professional

Table 1

**Structural scheme of the terminology system**

Level	Content plane	Expression plane
1	Term field	Terminology system
2	Section of the term field system	Section of the terminology
3	Micro-field of the 1st order (MF-1)	Micro-section of the 1st order (MF-1)
4	Micro-field of the 2nd order (MF-2)	Micro-section of the 2nd order (MF-2)
(n+1)	Micro-field of the (n-1)th order	Micro-area of the (n-1)th order
(n+2)	Point of the term field	Form of the term

languages. The differential features of the term field are conceptuality, integrity, systematicity, dynamism, evolutionarity, orderliness, stability, continuity, complementarity, mutual conditionality, completeness, and fuzzy boundaries.

#### 4. Methodology for Constructing the Term Field in the “Finance” Domain

The process of constructing a term field encompasses several stages: collection of material, identification of fields and micro-fields, systematization and unification of the collected material, and its codification. Let us consider the most optimal techniques and specific transformations necessary for the identification of terminological vocabulary and for its classification at the first and second stages, as well as for the practical use of the constructed term field.

As an information source for obtaining the necessary terminology in the relevant subject area of 'Finance' and for creating its term field, the German newspaper *Frankfurter Allgemeine Zeitung*, 'Finance' section, was used, since the content of the articles published there reflects the everyday reality of the financial life of modern Germany. In accordance with the methodology described above, terms and term combinations in the headlines and subheadings of articles were studied, since they allow the author or reader to predict the content of an article and to orientate themselves in the perception of its content (*Kiyko 2016: 247*). By means of headlines, in approximately 80% of cases it is possible to adequately determine the professional-thematic content of a scientific-technical document.

These properties of headline and subheadline terms were used in the creation of the term field. The meaning of a term allows one to concentrate on searching for concepts that participate in the definition of subdivisions of the term field. The semantic nature of each term manifests itself through its semantic features, which should be regarded as constituent elements of the corresponding concept that distinguish the meaning of one group of terms from the meanings of another group.

The semantic features of terms necessary for terminological work are reflected, as a rule, in their definitions. A definition is a clarifying explanation of expressions, a detailed explanation of the content and use of concepts, and as precise and complete an explanation of the meaning of concepts as possible by means of other concepts. Any definition includes two main constituent parts: the definition of the concept based on semantic features and the necessary additional information that specifies those features. A critical analysis of the information contained in the definitions allowed us to divide the specialized sphere of 'Finance' into 15 fields (Felder) and thereby create the upper level of its term field (see Table 2).

Table 2

**Visual representation of the structure of the subject area 'Finance'**

F01. Finanzmarkt F02. Finanzinstrumente F03. Kapital F04. Banken F05. Börsen F06. Handel F07. Haushalt und Fiskalpolitik F08. Investitionen	F09. Europäische und internationale Fonds F10. Geld F11. Dienstleistungen F12. Sozialleistungen F13. Wirtschaftswissenschaften und Forschung F14. Europäische Gemeinschaft (EU) F15. Sonstige Termini
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Thus, the subject area of 'Finance' consists of 15 fields:

- F1. Financial Market
- F2. Financial Instruments
- F3. Capital
- F4. Banks
- F5. Stock Exchanges
- F6. Trade
- F7. Budget and Fiscal Policy
- F8. Investments
- F9. European and International Funds
- F10. Money and Monetary Affairs
- F11. Services
- F12. Social Benefits
- F13. Economic Sciences and Research
- F14. European Community
- F15. Miscellaneous Terms

The proposed division of the term field 'Finance' was the result of a complex analysis involving two stages: 1) initial familiarization with the material to be researched; 2) categorization of the material.

At the first stage of the work, we familiarized ourselves with the specialized material explaining the content of the concept 'Finance'. This concept encompasses many terms that define the general content of the concept of finance and simultaneously the total content of the subject area 'Finance'. The terms of this subject area are subject to classification according to their semantic significance within the corresponding term field and according to the corresponding connections between them. Understanding these connections with the relevant terminological material allowed us to develop a logical classification of the terms of the subject area 'Finance'.

## 5. Practical Implementation and Classification of Terms

Below we provide an example that explains the course of our reasoning (see excerpt from the article published by journalist-reviewer N. Kuls on the website of the *Frankfurter Allgemeine Zeitung* in the 'Finance' section on 15.02.2019: <https://www.faz.net/aktuell/finanzen/finanzmarkt/die-groesste-bankenfusion-in-amerika-seit-der-finanzkrise-16039530.html>):

### Die größte Bankenfusion in Amerika seit der Finanzkrise

*Die angekündigte Fusion zweier Regionalbanken aus den Südstaaten beflügelt die Aktienkurse von potenziellen Übernahmekandidaten / Wall Street wettet*

In den Vereinigten Staaten zeichnet sich nach regulatorischen Lockerungen eine neue Fusionswelle unter regionalen Banken ab. In der vergangenen Woche gab es mit der angekündigten Übernahme der in Atlanta (Georgia) beheimateten SunTrust Banks durch den Konkurrenten BB&T den ersten großen Paukenschlag auf dem Weg zu der seit geraumer Zeit erwarteten Konsolidierung. Die in Winston-Salem (North Carolina) ansässige BB&T zahlt 28 Milliarden Dollar im Rahmen eines Aktientausches für SunTrust. Damit schließen sich die beiden Südstaaten-Institute zur neuen Nummer sechs der Branche zusammen. Es ist die größte Bankenfusion seit der Finanzkrise <...>.

*Translation: The largest bank merger in America since the financial crisis*  
*The announced merger of two regional banks from the Southern United States is boosting the stock prices of potential takeover candidates / Wall Street is betting on it.*

In the United States, following regulatory relaxations, a new wave of mergers among regional banks is emerging. Last week, the announcement of the acquisition of SunTrust Banks, based in Atlanta, Georgia, by its competitor BB&T, marked the first major milestone on the long-anticipated path to consolidation. BB&T, based in Winston-Salem, North Carolina, is paying \$28 billion in a stock exchange deal for SunTrust. The two Southern institutions will now combine to become the new number six in the industry. It is the largest bank merger since the financial crisis <...>.

In the excerpt from the article published under the headline 'Die größte Bankenfusion in Amerika seit der Finanzkrise' with two subheadings – Die angekündigte Fusion zweier Regionalbanken aus den Südstaaten beflügelt die Aktienkurse von potenziellen Übernahmekandidaten / Wall Street wettet – the terms present were underlined at the first stage. Next to each term, section numbers were placed in accordance with Table 2: «Die größte Bankenfusion (04) in Amerika seit der Finanzkrise (01) / Die angekündigte Fusion (02) zweier Regionalbanken (04) aus den Südstaaten beflügelt die Aktienkurse (05) von potenziellen Übernahmekandidaten (08) / Wall Street (01) wettet». The problematic term in this context proved to be Wall Street, whose meaning and place in our terminological system it was necessary to determine. The key word of this term combination is the word Street, borrowed from English, meaning 'street'. However, besides its direct meaning, this word designates a financial concept (a realia). In the German language, the term Wall Street has two meanings: a) a trading street in New York; b) a financial centre, a money market. This is also confirmed by the definition given in the explanatory dictionary Duden (*Duden 2023: 1708*): 'Wall Street – the financial centre (market) of America, the money market, or the short-term credit market'. The fact that Wall Street is a financial centre and a money market helps us to determine its place in the terminological system 'Financial Market' (01).

Several problems are also created by the attribution of complex words to fields and micro-fields. As is known, complex word-terms are formed from two stems. The first determines the second, which is the bearer of the generic feature and expresses the basic meaning of the word. The first component, on the other hand, indicates the feature or property that specifies the meaning of the main component, such as Finanzmarkt 'financial market', where the basic meaning of the word belongs to the word Markt, and the meaning of Finanz(en) is determinative for the main word. The same applies to the words *Devisenmarkt* 'currency market', *Geldmittel* 'monetary funds', *Börsengang* 'stock exchange process', etc.

A characteristic feature of complex terms in the German language is the formation of groups united by a generic feature with a homogeneous first or second component, and such a group may comprise a considerable number of terms. For example, with a common first component, the following can be identified: *Finanzabteilung* 'finance department', *Finanzplan* 'financial plan', *Finanzkontrolle* 'financial control', *Finanzkraft* 'financial strength', *Finanzkrise* 'financial crisis', *Finanzmann* 'financial figure', *Finanzminister* 'Minister of Finance', *Finanzministerium* 'Ministry of Finance', *Finanzplanung* 'financial planning', *Finanzpolitik* 'financial policy', *Finanzspitze* 'head of finance', *Finanzverwaltung* 'financial administration', *Finanzwesen* 'financial system', *Finanzwirtschaft* 'financial economy' (42 terms in total), etc.

There is also a group with a common second component that names a market concept characterized by various features conveyed by the first component, such as: *Devisenmarkt* 'currency market', *Aktienmarkt* 'stock and securities market', *Fondsmarkt* 'funds market', *Kapitalmarkt* 'capital market', *Finanzmarkt* 'financial market', *Warenmarkt* 'commodity market' (36 terms in total).

Two-component terms conveying genus-species relations accounted for 68% of the total number of terms in the subject area of 'Finance'. In addition to two-component terms, a small number of three-component complex terms were also recorded. Although formally such composites consist of three components, in terms of term-forming structure they are two-component, since they also consist of a head word (which may itself be complex) and a defining word, such as: *Geldmarktkredit* 'money market credit', where the head word is *Kredit* 'credit' and the defining component is *Geldmarkt* 'money market'; *Geldmarktsatz* 'money market interest rate', where the head word is *Satz* 'interest rate' and the defining component is *Geldmarkt* 'money market', etc.

Another problem was the attribution of metaphorically used words to fields and micro-fields. Let us take, for example, the article entitled 'Bären regieren Europas Börsen nun „offiziell“' from 07.03.2022 (FAZ: <https://www.faz.net/aktuell/finanzen/finanzmarkt/nach-dem-jamaika-bruch-zucken-die-boersen-nur-kurz-15301280.html>), which deals with a 'bear market', when share prices fall by 20% or more from their recent peak. A *bear market* often arises during economic downturns and may indicate a decline in investor confidence, high levels of unemployment, inflation, or other economic difficulties. In this article, the noun *Bären* is mentioned several times, which in stock exchange jargon denotes a speculator who plays for a fall in prices, cf.: *Bär*, *m*, *-en*, *-en* 3. (Börsenjargon) jemand, dessen Aktivitäten an der Börse von erwartetem Fallen der Kurse geprägt sind. A deeper reading of the article allows one to understand that the 'bears' (i.e., negative market sentiment) officially dominate, so a further decline in market prices is to be expected. The author's choice of metaphorical vocabulary assumes that the recipient, being a specialist in the field of finance, possesses approximately the same professional competence as the author – that is, they share a common thesaurus.

The analyzed terms, as bearers of the necessary information, served at the first stage of the research work as starting points for conceptual reference points (concepts). At the second stage, the 15 sections of the term field of the subject area 'Finance' identified by us were divided into micro-fields of the first order. After the identification of micro-fields of the first order, depending on the significance of a particular concept, new micro-fields of the second, third, fourth, and sometimes even the fifth, sixth, and seventh orders were identified. We shall demonstrate the course of this process using the example of the 12th area of the subject area 'Finance' – 'Social Benefits' – which has recently undergone substantial changes, obviously conditioned by the reorientation of the German financial market toward the sharp increase in refugees and the associated growth in social expenditure.

As a rule, one begins by identifying the main semantic components of the content of the key concept 'Social Benefits'. To grasp the essence of this concept, it is worthwhile to study and analyze the definitions associated with it in detail. Thus, the Gabler Economic Lexicon (*Gabler Wirtschaftslexikon 2014*) explains that social benefits are expenditures on services, benefits in kind, and cash payments provided for by social legislation. The analysis of the semantic features of the given terms helped to orientate oneself in the field of knowledge 'Social Benefits' and to make the correct decisions regarding the hierarchy of terms and their subordination. As a result of the analysis, the 12th area 'Soziale Leistungen' (social benefits) was divided into ten micro-fields of the 1st order (MF-1): *allgemeine Leistungen* (general benefits), *Sonderleistungen* (special benefits), *beamtenrechtliches System* (civil servant entitlements), *Arbeitgeberleistungen* (employer benefits), *Entschädigungen* (compensations), *soziale Hilfe und Dienste* (social assistance and services), *Sozialleistungsarten* (types of social benefits), *Leistungsquellen* (funding sources), *Sozialpolitik* (social policy), *indirekte Leistungen* (indirect benefits). The specification of the names of the micro-fields of the 1st order helps to determine the micro-fields of the second order. For example, the term *allgemeine Leistungen* (general benefits) is deepened by designations of various types of expenditures (micro-field of the 2nd order): *Renteversicherung* (pension insurance), *Krankenversicherung* (health insurance), *Unfallversicherung* (accident insurance), *Arbeitsförderung* (promotion of employment), *Kindergeld* (child benefit payments), *Erziehungsgeld* (child-rearing allowance). The other sections of the term field 'Social Benefits' were processed in the same way to obtain the terminology and its codification. The most substantial changes were experienced by the micro-field of the 1st order 'Social Assistance and Services', which included the 2nd-order micro-fields *Sozialhilfe* (social assistance), *Jugendhilfe* (youth assistance), *Ausbildungsförderung* (promotion of education), *Wohngeld* (housing subsidy), *öffentlicher Gesundheitsdienst* (public health service), *Vermögensbildung* (wealth accumulation). As a result of the reform of unemployment assistance under the *Hartz 4 Act* ([https://de.wikipedia.org/wiki/Arbeitslosengeld\\_II](https://de.wikipedia.org/wiki/Arbeitslosengeld_II)), social assistance was differentiated to cover temporary accommodation costs (*Unterkunft*), heating (*Heizung*), relocation costs (*Umszugskosten*), initial furnishing of an apartment with furniture and appliances (*Erstausstattung*), special nutrition (*gesundheitsbedingte kostenaufwändige Ernährung*), and expenditures for children's education (*Lernförderung für Kinder*). In turn, the latter micro-field of the 3rd order includes expenditures on lunches (*Mittagessen*), school excursions (*Klassenfahrten*), school supplies (*Schulbedarf*), tutoring (*Nachhilfe*), transport costs (*Fahrkosten*), and leisure activities (*Freizeit, Sport und Kultur*). The subdivision into micro-fields of various orders should be pursued to a reasonable limit – ideally to the terminal point of the term field, and in practice to the needs of the user, sometimes even to the 7th or 8th order. As a result of such division, we obtained a detailed hierarchical classification and codification of the term field of the subject area 'Finance'.

Each section of the term field of the subject area 'Finance' is a hierarchical network, the structure of which is dictated by the very way the human brain functions. By means of this hierarchical network, the user can obtain essential information relating to the content of the corresponding concept expressed by a specific term in the analyzed article. For example, upon encountering the term *tarifliche Leistungen* and finding it in the codified alphabetical list, one ascertains that it refers to the concept of 'tariff expenditures'.

If the analyzed headline term cannot reveal a direct connection with the concepts expressed in the scheme, i.e., cannot be directly attributed to one of them, one should be guided by semantic connection and understand it in a broader sense. For example, the term *steuerliche Unsicherheit* (tax uncertainty) should be attributed to section F7 'Budget and Fiscal Policy',

since the said uncertainty relates to the term 'tax' (*steuerliche*). Similarly, the term *das Geld*, depending on the thematic sub-area of its application, can be translated differently – as the financial concept 'money' or 'monetary funds'.

It is worth emphasizing that the acquisition of knowledge of this kind will be decisive for the correct interpretation of the content expressed by the term under analysis. The meaning of the latter will be determined by its position in the hierarchical network of the corresponding section of the term field. As a result, a foundation is laid for the acquisition of professional skills – that is, mastery of the minimum economic knowledge that a teacher of a specialized language or a highly qualified translator must possess.

## 6. Conclusions

The term field compiled by us consists of 15 sections, which in turn are divided into micro-fields of various orders, and is intended to be used for the purpose of acquiring the necessary information and organizing teaching or translation activities. Each section of the term field of the subject area 'Finance' is a hierarchical network, the structure of which is dictated by the very way the human brain functions. By means of this hierarchical network, the user can obtain essential information relating to the content of the corresponding concept expressed by a specific term in the analyzed article. The acquisition of knowledge of this kind will be decisive for the correct interpretation of the content expressed by the analyzed term. The meaning of the latter will be determined by its position in the hierarchical network of the corresponding section of the term field. As a result, a foundation is laid for the acquisition of professional skills – that is, mastery of the minimum economic knowledge that a teacher of a specialized language or a highly qualified translator must possess.

The process of constructing the term field comprised several stages: collection of material, identification of fields and micro-fields, systematization and unification of the collected material, and its codification. The article examined the most optimal techniques and specific transformations necessary for the identification of terminological vocabulary and for its classification at the first and second stages, as well as for the practical use of the constructed term field.

A critical analysis of the information contained in the definitions allowed us to divide the term field 'Finance' into 15 sections: *Finanzmarkt* (financial market), *Finanzinstrumente* (financial instruments), *Kapital* (capital), *Banken* (banks), *Börsen* (stock exchanges), *Handel* (trade), *Haushalt und Fiskalpolitik* (budget and fiscal policy), *Investitionen* (investments), *Europäische und Internationale Fonds* (European and international funds), *Geld* (monetary affairs), *Dienstleistungen* (services), *Sozialleistungen* (social benefits), *Wirtschaftswissenschaften und Forschung* (economic sciences and research), *Europäische Gemeinschaft* (European Community), *sonstige Termini* (miscellaneous terms), and thereby to create the upper level of its term field.

At the second stage, the 15 sections of the term field of the subject area 'Finance' were divided into micro-fields of the first order. Depending on the significance of a particular concept, new micro-fields of the second, third, fourth, and sometimes even the fifth, sixth, and seventh orders were identified. It was established that, in comparison with the content of the various micro-fields, the section 'Social Benefits' underwent the most substantial changes, which is evidently conditioned by the reorientation of the German financial market toward the sharp increase in refugees and the associated growth in social expenditure. Thus, the micro-field of the 1st order 'Social Assistance and Services', which had included the 2nd-order micro-fields

*Sozialhilfe* (social assistance), *Jugendhilfe* (youth assistance), *Ausbildungsfrderung* (promotion of education), *Wohngeld* (housing subsidy), *öffentlicher Gesundheitsdienst* (public health service), *Vermögensbildung* (wealth accumulation), was – as a result of the reform of unemployment assistance under the Hartz 4 Act – supplemented with terms for social assistance for temporary accommodation costs (*Unterkunft*), heating (*Heizung*), relocation costs (*Umzugskosten*), initial furnishing of an apartment with furniture and appliances (*Erstaussstattung*), special nutrition (*gesundheitsbedingte kostenaufwändige Ernährung*), and expenditures for children's education (*Lernförderung für Kinder*). In turn, the 3rd-order micro-fields became more differentiated; in particular, terms appeared for designating expenditures on lunches (*Mittagessen*), school excursions (*Klassenfahrten*), school supplies (*Schulbedarf*), tutoring (*Nachhilfe*), transport costs (*Fahrkosten*), and leisure activities (*Freizeit, Sport und Kultur*). As a result of such division, we obtained a detailed hierarchical classification and codification of the term field of the subject area 'Finance'. The position that a particular concept occupies in a specific section helps the user to clarify for themselves the interaction and interrelationship with all other concepts that form the hierarchical network – that is, it helps to deepen and specify knowledge regarding the content of the term that a particular author used in generating a text. The transition from the term to a specific section is carried out by means of a codified alphabetical list, the compilation of which will constitute the next step of thesaurus modelling.

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## EUROPEAN EXPERIENCE IN SHAPING CONTINUING EDUCATION POLICY

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**Summary**

This study analyses the theoretical and methodological foundations of lifelong learning policy in European Union countries and summarises the leading approaches to organising lifelong learning in the context of society's digital transformation. The content and essence of the concept of lifelong learning as a key factor in the development of human capital, enhancing the competitiveness of the economy and ensuring the social integration of citizens are explored. The relevance of the study stems from the need to modernise national education systems in the context of globalisation challenges, dynamic changes in the labour market and the growing role of knowledge as a strategic resource for development. Of particular importance is the study of European experience in shaping lifelong learning policy with a view to adapting it to the Ukrainian educational landscape. The aim of this article is to examine the characteristics of the formulation and implementation of lifelong learning policy in EU countries. The study found that lifelong learning policy in the EU is based on the principles of accessibility, flexibility, inclusivity and competence-based orientation. It is implemented through the development of a digital learning environment, the introduction of innovative pedagogical approaches, support for non-formal education and the creation of conditions for individual learning pathways.

**Key words:** continuing education, lifelong learning, education policy, digitalisation of education, digital technologies.

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**1. Introduction**

The leading conceptual framework for the organisation and development of education systems in the second half of the 20th century and the early 21st century was the idea of continuing education, which evolved into the modern paradigm of lifelong learning. Its emergence was driven by profound socio-economic, technological and cultural changes, which defined new demands on the individual as a subject of professional activity and social relations. In the current context of rapid scientific and technological progress, digitalisation and globalisation, the traditional model of «completed» education has proved insufficiently effective, highlighting the need to establish a flexible, open and dynamic system of continuous learning. The concept of lifelong learning is based on the idea that a person's learning is not limited by specific age or institutional boundaries, but continues throughout their entire life (*Demianiuk, 2025*). In this context, education is seen not as a one-off stage of preparation for professional activity, but as a continuous process of updating knowledge, developing competencies and personal self-improvement. This approach is driven by both objective factors – the rapid updating of knowledge

and the emergence of new professions and technologies – and subjective factors, linked to the individual's desire for self-realisation, the fulfilment of their potential and the achievement of life goals.

## 2. The conceptual and categorical framework of lifelong learning

In academic discourse, the concept of 'lifelong learning' is regarded as an integrative category that brings together various forms, levels and types of educational activity. It encompasses formal, non-formal and informal education, providing opportunities to acquire knowledge and skills in a variety of educational settings and social contexts. Formal education takes place in institutionalised settings (schools, universities), non-formal education within the framework of courses, training sessions and professional development programmes, and informal education through everyday activities, self-education and social interaction.

An important component of the conceptual and categorical framework is the distinction between the concepts of 'lifelong learning' and 'lifewide learning'. Whilst the former focuses on the temporal dimension of the educational process, the latter emphasises its spatial multidimensionality, which involves the integration of learning into various spheres of human activity: professional, social and cultural. Together, these approaches form a holistic vision of continuous education as a way of life for the individual.

The concept of lifelong learning involves the rational distribution of periods of study and work throughout a person's life, achieved by dividing education into basic (primary) and post-basic (further) education. Basic education ensures the development of fundamental knowledge and key competences, whilst post-basic education is aimed at updating, deepening and adapting them to the changing conditions of professional activity. This approach facilitates the formation of a flexible educational pathway, enabling individuals to respond promptly to the challenges of the modern labour market.

A key aspect of lifelong learning is its focus on a competence-based approach, which involves not only the acquisition of knowledge and skills but also the ability to apply them effectively in practice. In this context, categories such as «key competences», «professional mobility», «self-education» and «self-development» become key. The development of these characteristics ensures an individual's ability to adapt in a dynamic social environment.

The particular focus on the phenomenon of lifelong learning stems from the contradictory trends in contemporary development: on the one hand, there is a rapid renewal of technologies and knowledge, leading to their swift obsolescence; on the other, the role of human capital as a key resource for society is growing. In such conditions, a person who does not update their knowledge risks losing their professional competitiveness and social adaptability. This necessitates a shift away from the traditional model of 'final education' towards a model of lifelong learning. Lifelong learning is also regarded as an important tool for ensuring social justice and equal opportunities. It creates conditions for access to educational resources for various sections of the population, promotes social integration and improves quality of life. In this context, the creation of an educational environment that provides opportunities for the continuous updating of knowledge, the development of creative potential and personal fulfilment takes on particular significance (Kovalova, 2023).

To summarise the above, it can be argued that lifelong learning is not merely an educational concept, but also a socio-cultural phenomenon that defines the contemporary humanistic paradigm of education. It is geared towards shaping the individual as an active agent of their

own development, capable of independent thought, critical analysis and creative activity. This paradigm envisages the integration of education into all spheres of life, ensuring the harmonious development of the individual and their effective participation in public life.

Continuity of education is regarded in the educational sphere as a fundamental, guiding principle, which envisages the development in a person of 'the ability to live actively, act, work, develop the highest possible level of their professional abilities, achieve self-fulfilment and progressively renew their life in dynamically changing «socio-economic conditions»' (Sys-oieva, 2008). I. Ziaziun emphasises that «..the most important objective of creating a system of lifelong adult education is, firstly, the creative activity of the specialist, the ability to flexibly reorient it in accordance with changes in the system of social and cultural institutions of modern society, oriented towards human values; secondly, the development of a person's personal qualities, which determine not only their purely professional characteristics, but also their style of thinking, level of culture and intellectual development» (Ziaziun, 2001).

Continuing teacher education is understood as a holistic, dynamic process that involves the ongoing professional and personal development of teachers, the pursuit of their individual educational pathways, and the achievement of effective professional fulfilment. It encompasses the expansion of opportunities to participate in a variety of educational programmes, including both traditional forms of learning in educational institutions and alternative formats aimed at developing career potential, personal growth and the fulfilment of individual educational interests. A key characteristic of continuing teacher education is its flexibility, which is reflected in the variety of forms, content and educational environments that meet the needs and capabilities of learners. Important principles include the flexibility and accessibility of education in terms of time and location, enabling the combination of professional work with study. Furthermore, continuing teacher education involves broadening the teacher's professional profile through the acquisition of knowledge in related fields of pedagogical activity, building on their foundational training, as well as the development of additional competencies, including non-pedagogical ones. This need may be driven both by the objective challenges of modern society and by an individual's personal professional and life circumstances (Anishchenko, Padalka, 2010).

### **3. The legal framework for lifelong learning policies in Ukraine and the EU**

The national system of lifelong learning in Ukraine is viewed as a coherent set of institutional, organisational and regulatory mechanisms designed to create the conditions for learning and the all-round development of the individual throughout their life. Its formation is a long-term evolutionary process and reflects a gradual rethinking of the role of education as a key factor in the socio-economic development of the state and the improvement of human capital.

The regulatory and legal framework for lifelong learning policy in Ukraine is laid down in a series of strategic documents that define the main directions for the development of the education system. In particular, the Law of Ukraine 'On Education' (2017) enshrines the principle of lifelong learning as one of the fundamental principles, emphasising the need to create a flexible education system that ensures access to various forms of learning for all sections of the population. The State National Programme 'Education' ('Ukraine of the 21st Century'), the 'Concept of Civic Education' (2000), the 'National Doctrine for the Development of Education' (2002), the National Strategy for the Development of Education for 2012–2021, as well as updated strategic documents, in particular the Concept for the Development of Education until 2025. The current stage of development of lifelong learning policy in Ukraine is characterised

by a focus on European standards and integration into the European Education Area (Levchenko, 2012). In this context, key regulatory frameworks include the National Qualifications Framework, harmonised with the European Qualifications Framework (EQF), as well as mechanisms for recognising the outcomes of non-formal and informal education. Of particular importance is the introduction of a competence-based approach, which meets the current demands of the labour market and contributes to increasing the professional mobility of citizens.

At European Union level, lifelong learning policy is shaped on the basis of strategic documents. The Hamburg Declaration (Germany, 1997) outlined the key principles for the development of lifelong learning for adults and set out recommendations for national governments regarding the recognition of adult education as a priority area of public policy. These provisions were further developed at the European Summit in Lisbon (2000), where it was emphasised that the transition to a knowledge society must be accompanied by the provision of opportunities for lifelong learning. Subsequent European strategic documents emphasise the need to adapt education systems to the challenges of the 21st century. The author N. Nychkalo asserts that lifelong learning is defined as one of the key instruments for the development of civil society, the enhancement of social cohesion and the level of employment (Nychkalo, 2001). It must go beyond the traditional approach, which focuses solely on formal education, and include a broader range of opportunities, including upskilling, retraining and professional development for the adult population. Particular attention is paid to creating conditions for open access to educational resources for all categories of citizens. In this context, lifelong learning is viewed not only as a means of professional growth, but also as a tool for personal development, self-fulfilment and the satisfaction of an individual's cognitive and cultural needs. Also of significance are the EU Recommendations on Key Competences for Lifelong Learning (2018), which set out a list of basic skills and competences necessary for successful social and professional integration. EU policy emphasises access to education, inclusivity, the digitalisation of the learning process and the development of innovative forms of learning. The latest trends in the regulatory framework for lifelong learning are linked to the digital transformation of society. In this context, initiatives such as the development of digital competences (DigComp), the adoption of open educational resources, support for online learning, and the creation of a single European educational area are of particular importance. In Ukraine, these processes are reflected in the implementation of digital educational platforms, the development of distance learning and the updating of the regulatory framework to address contemporary challenges, including martial law.

Furthermore, an important area for improving the regulatory framework is the development of partnerships between the state, educational institutions, business and civil society. This contributes to the formation of a flexible system of lifelong learning capable of responding promptly to changes in the socio-economic environment and the needs of the labour market.

#### **4. Digitalisation and innovation in lifelong learning**

The digitalisation of lifelong learning in the EU is viewed as a comprehensive process encompassing both the technological modernisation of the educational environment and the transformation of pedagogical approaches. On the one hand, a digital educational environment is being developed, comprising electronic platforms, online courses, open educational resources, digital libraries and interactive services. On the other hand, a profound modernisation of the educational process is taking place, aimed at preparing individuals for life and professional activity in the digital economy.

In leading EU countries, the digitalisation of education is underpinned by clearly defined national strategies. In Finland, for example, an open education model is being actively implemented, providing access to online courses and programmes for adults regardless of age or social status. Significant attention is paid to the development of digital skills through the integration of ICT at all levels of education. In Germany, the 'DigitalPakt Schule' programme is being implemented, aimed at equipping educational institutions with modern digital infrastructure and enhancing the digital competence of teachers and learners. In Estonia, which is considered one of the leaders in digital transformation, an effective e-learning system has been established, integrating learning platforms, digital resources and assessment tools. The Estonian experience demonstrates the potential for the full digitalisation of the educational process, including distance and blended learning. In France and Spain, Massive Open Online Courses (MOOCs) are being actively developed, providing access to high-quality education for broad sections of the population. An important element of digitalisation is the development of citizens' digital competences, as defined within the European DigComp framework. It outlines the key skills required for the effective use of digital technologies in professional and everyday life. The implementation of this framework contributes to the development of digital literacy, critical thinking and information literacy, which are essential for successful integration into modern society. Innovations in lifelong learning in EU countries are not limited to technological changes but also encompass new pedagogical approaches. In particular, competence-based, activity-based, person-centred and andragogical approaches are actively applied. The competence-based approach ensures the development of the ability to apply knowledge in practical activities, which meets the needs of the modern labour market. The andragogical approach, focused on adult learners, involves taking into account their experience, motivation and needs, transforming the role of the teacher into that of a facilitator of the educational process.

The development of flexible learning pathways, which allow learning to be combined with professional activities, is of particular importance. In EU countries, modular learning programmes, micro-credentials, individual learning accounts and systems for recognising the outcomes of non-formal and informal education are being actively introduced. This helps to increase citizens' professional mobility and ensures their competitiveness in the labour market. Furthermore, the digitalisation of education contributes to the creation of what is known as a cyber-physical educational space, in which virtual and real learning environments are integrated. The use of video conferencing platforms (Zoom, Microsoft Teams, Google Meet), educational social networks (Edmodo, Moodle, Google Classroom) and digital resources creates the conditions for effective communication and collaboration between participants in the educational process, regardless of their location.

To summarise the above, digitalisation and innovation in lifelong learning within the European Union are key factors in the modernisation of education systems and the promotion of sustainable development. They contribute to increasing access to education, the development of new competences, the development of human capital, and society's adaptation to the challenges of the digital age. European experience in this field serves as an important benchmark for improving national education policies, particularly in the context of integration into the European Education Area.

## 5. Conclusions

Drawing on European experience in shaping lifelong learning policy, it is worth noting that it serves as a key instrument for developing human capital and ensuring the competitiveness of nations in a globalised world. In European Union countries, lifelong learning policy is implemented on the principles of systematicity, inclusivity, flexibility and a focus on the needs of the individual and the labour market. Supranational EU strategies and regulatory documents play a significant role in this process, ensuring the coherence of educational reforms, the development of key competences, and the integration of national education systems. It has been demonstrated that the effectiveness of lifelong learning policy depends to a large extent on the implementation of innovative approaches, the digitalisation of the educational environment, and the development of partnerships between the state, educational institutions and employers. Mechanisms for the recognition of non-formal and informal education, as well as the development of individual learning pathways, are of particular importance. European experience demonstrates the need to transition from the traditional model of education to an open, dynamic system focused on the continuous development of the individual. Its implementation in Ukraine will contribute to the modernisation of national education policy, the improvement of educational quality and integration into the European Education Area.

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## CONTEMPORARY APPROACHES TO TEACHING THE HISTORY OF THE ENGLISH LANGUAGE

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### Summary

The teaching of the History of the English Language (HEL) has undergone a substantial methodological transformation over the past two decades, shifting from a tradition of formal-descriptive philology toward an explanatory, interdisciplinary, and student-centred paradigm. This article examines that transformation across six interrelated dimensions of HEL pedagogy: the theoretical reorientation toward sociolinguistic explanation; the integration of corpus linguistics and digital humanities tools into classroom practice; the adoption of functional approaches to disciplinary literacy; curricular design and the tension between chronological and thematic organisation; the balance between internal linguistic history and external socio-political context; and the critical treatment of standardisation, codification, and prescriptivist ideology.

Drawing on empirical studies, pedagogical literature, and theoretical frameworks in applied linguistics, the article argues that these dimensions, when addressed in combination, constitute a coherent and evidence-based model for contemporary HEL instruction. The model prioritises students' capacity for diachronic reasoning, empirical inquiry, and critical metalinguistic reflection – competencies that extend well beyond the HEL classroom.

Particular attention is given to the needs of English language learners in linguistically diverse higher education contexts and to the expanding role of World Englishes in redefining what counts as legitimate data in the history of the language. The article concludes with directions for further research into assessment design, teacher preparation, and the integration of emerging digital resources.

**Key words:** HEL pedagogy, descriptive philology, explanatory sociolinguistics, disciplinary literacy, functional approach, digital humanities.

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### 1. Introduction

The History of the English Language (HEL) occupies a unique place in university curricula, combining elements of historical linguistics, literary studies, and social history. Traditionally, HEL has focused on describing linguistic changes across periods (Old, Middle, Early Modern English) without fully explaining their causes. This approach has often led students to perceive the subject as fragmented and disconnected from broader social and cultural contexts.

In recent decades, however, the field has undergone significant transformation. Developments in historical sociolinguistics, corpus linguistics, digital humanities, and functional approaches to language teaching have reshaped both the content and methodology of HEL instruction. Rather than abandoning traditional philological analysis, these innovations

contextualize linguistic data within social and historical frameworks, making them more meaningful and accessible to students.

As English continues to expand globally, understanding its historical development has gained broader relevance. Contemporary debates on language diversity, authority, and correctness highlight the importance of well-designed HEL courses, which can provide students with critical tools for analyzing both the past and present of the language.

The aim of the article is to examine and synthesize recent methodological developments in HEL pedagogy. It seeks to provide an integrated overview of current teaching approaches, including sociohistorical analysis, corpus-based methods, functional linguistic frameworks, and curricular design strategies, while also addressing key tensions such as the relationship between internal and external language history and the ideological aspects of standardization.

The study is grounded in four key theoretical traditions. First, historical sociolinguistics, as developed by Jeremy J. Smith and synthesized by S. Horobin (2016), explains language change as a product of social interaction, language contact, and ideological negotiation, building on the variationist foundations of William Labov.

Second, the pedagogy of contextualized language instruction is represented by M. Hayes and A. Burkette (2017), whose concept of “sociolinguistic realism” emphasizes that linguistic features should be taught within authentic social and cultural contexts to enhance learner understanding.

Third, corpus linguistics and digital humanities approaches, as discussed by C. Moore and C. Palmer (2019), as well as R. Reppen (2010), highlight the pedagogical value of large digital text collections such as the Helsinki Corpus, COHA, and EEBO. These resources allow students to engage in empirical, data-driven analysis of historical language change.

Finally, Systemic Functional Linguistics (SFL), developed by M. A. K. Halliday (1994) and applied to education by Mary J. Schleppegrell (2004) and M. Achugar (2005), conceptualizes language as a social semiotic system. This framework provides effective tools for addressing disciplinary literacy challenges, particularly for students developing academic language proficiency.

Together, these traditions form a comprehensive theoretical basis for modern HEL pedagogy, integrating linguistic structure with social meaning and educational practice.

## 2. From Descriptive Philology to Explanatory Sociolinguistics

The traditional HEL syllabus organised its content around formal categories (Grimm’s Law, the Great Vowel Shift, the loss of grammatical gender) and treated social context as secondary, if not incidental, to the linguistic record. This approach, though intellectually defensible, left students poorly equipped to account for the mechanisms of language change. Why did English lose its case system more rapidly than other Germanic languages? Why did French loanwords cluster so heavily in the domains of law, religion, and courtly culture after 1066? These are not questions that formal description alone can answer.

As S. Horobin (2016) has argued, recent methodological advances have redirected the field’s attention toward the *explanatory* dimension of linguistic history – toward what he characterises as the social, pragmatic, and ideological forces that make particular changes possible and probable at particular historical moments. This explanatory turn draws heavily on variationist sociolinguistics, with its attention to how language change propagates through social networks, prestige hierarchies, and contact situations (Labov, 1994). The result is a richer

analytical vocabulary available to students, one in which grammatical data and social history are treated as mutually constitutive rather than parallel but separate tracks.

This reorientation maps closely onto what M. Hayes and A. Burkette (2017) describe as “sociolinguistic realism” in language pedagogy – the commitment to situating linguistic phenomena within authentic social contexts rather than examining them as self-contained formal objects. The transition from Old to Middle English is an instructive case. Under the older paradigm, it appeared primarily as a set of morphological simplifications: the reduction of nominal inflections, the levelling of vowel distinctions in unstressed syllables, the gradual collapse of grammatical gender (Hogg, 2002). Under a sociolinguistically informed framework, those same changes become legible as outcomes of a contact situation of exceptional complexity – a multilingual environment in which English, Anglo-Norman French, and Latin occupied distinct but overlapping social registers, and in which the communicative pressures of a newly stratified post-Conquest society reshaped the language's formal architecture. Importantly, this reframing does not abandon the philological data; it contextualises it (Kachru, 1992; Jenkins, 2006).

Survey data from undergraduate HEL courses in North American and British universities suggest that students consistently rate courses incorporating sociohistorical contextualisation as more engaging and more intellectually coherent than those organised purely around formal periodisation (Hayes & Burkette, 2017). In one representative study conducted across three research-intensive institutions, students in contextualised HEL sections scored an average of 14 percentage points higher on conceptual retention assessments than their counterparts in traditionally structured sections (Moore & Palmer, 2019). While effect sizes of this magnitude should be interpreted cautiously, the directional consistency across studies is notable.

A further advantage of the explanatory approach is its capacity to introduce students to questions of power, identity, and linguistic prestige that have broad relevance beyond the HEL classroom. The standardisation of Early Modern English, for instance, is not simply a story of printing technology and orthographic stabilisation; it is also a story of whose English was deemed worth standardising, and whose was marginalised as dialect, slang, or error (Milroy & Milroy, 1999). Making these dynamics explicit enriches students' understanding of language variation in the present, not only in the past.

### 3. Corpus Linguistics and the Digital Humanities in the HEL Classroom

Besides these theoretical developments, the integration of corpus linguistics and digital humanities has fundamentally reshaped both the teaching and research of HEL. The large-scale digitisation of historical text collections – among them the Corpus of Historical American English (COHA), the Helsinki Corpus of English Texts, and the Early English Books Online (EEBO) corpus – has fundamentally altered the evidentiary basis of historical linguistic inquiry, placing representative samples of millions of words across multiple centuries within reach of undergraduate researchers.

The pedagogical implications of this shift are substantial. Where students once encountered historical language varieties primarily through curated textbook excerpts, they can now query large corpora directly, testing hypotheses about frequency, distribution, and contextual usage with a degree of methodological rigour that previously required specialist training. C. Moore and C. Palmer (2019) note that corpus-based assignments, when scaffolded appropriately, produce significant gains in students' capacity for empirical reasoning about language – a finding consistent with the broader literature on inquiry-based learning in linguistics (Reppen,

2010). For example, a student examining the decline of the second-person singular pronoun *thou* in Early Modern English can observe not merely that it declined, but trace the social registers in which it persisted longest, identify the text types in which it disappears earliest, and construct a nuanced account of pronominal change as a socially stratified process. This is a qualitatively different learning experience from reading a textbook description of the same phenomenon (Milroy & Milroy, 1999).

Digital humanities tools extend this empirical orientation in further directions. Visualisation platforms such as the Google Ngram Viewer, Voyant Tools, and AntConc enable students to represent diachronic data graphically, making patterns of lexical and grammatical change visible in ways that purely tabular data do not afford. Network analysis tools allow examination of how particular lexical innovations spread across textual communities. Geospatial tools can map dialect distributions against historical migration routes, offering a spatial dimension to questions that are usually treated as purely temporal. As M. Hayes and A. Burkette (2017) observe, these “resourceful teaching practices” resonate with contemporary undergraduates who are often more accustomed to data-driven environments than to traditional archival methods.

There is, however, a pedagogical caveat worth registering. Corpus tools are not self-interpreting; the patterns they surface require theoretical frameworks to become meaningful. A student who observes a sharp increase in passive constructions in early nineteenth-century scientific writing has observed something real, but the observation only becomes analytically significant when connected to an account of how scientific discourse was being institutionalised and professionalised during that period. The corpus, in other words, generates questions as much as it answers them, and effective HEL pedagogy must ensure that the theoretical scaffolding is in place to make those questions productive (Schleppegrell, 2004).

A further dimension of the digital turn deserves attention: its role in expanding the canon of texts available for analysis. Historical linguistics has traditionally relied on a relatively narrow band of sources – legal documents, religious texts, literary manuscripts – both because these were the texts that survived and because they were the texts that were edited, catalogued, and made accessible. Digital humanities projects have progressively widened this base, making vernacular materials, private correspondence, trade records, and marginal annotations available for systematic study. This democratisation of the historical record has direct consequences for what stories get told about English, and whose language use is treated as worthy of analysis (Thomason & Kaufman, 1988).

#### 4. Functional Approaches to Disciplinary Literacy

The theoretical and technological dimensions of contemporary HEL pedagogy are inseparable from a third development: the growing recognition that students require explicit support in navigating the specific literacy demands of the discipline. This recognition has become more pressing as university populations have diversified, particularly with respect to linguistic background. In many Anglophone higher education contexts, a significant proportion of students in HEL courses are English language learners (ELLs), for whom the archaic syntax, specialised metalinguistic vocabulary, and dense intertextuality of historical linguistic texts present formidable challenges.

Functional linguistics, particularly the Systemic Functional Linguistics (SFL) framework developed by M. Halliday (1994) and extended to educational contexts by M. J. Schleppegrell (2004), offers a principled basis for addressing these challenges. A functional approach

focuses not on language as an abstract system but on language as a social semiotic – as the means by which speakers and writers construct meaning in specific contexts for specific purposes. Applied to disciplinary literacy, it asks: what are the characteristic grammatical and discursive features of the texts students are expected to read and produce in this field, and how can those features be made explicit and teachable?

M. Achugar and M. J. Schleppegrell (2005) argue that effective history instruction requires students to engage with texts “deeply, fluently, and analytically” – a demand that presupposes familiarity not only with the content of historical discourse but with its formal conventions. Historical linguistic texts rely heavily on particular grammatical structures: nominalisation (the conversion of processes and qualities into noun phrases, as in “the reduction of inflectional morphology”), passive voice (used to background agents and foreground processes), complex embedding, and dense technical vocabulary. For students who are still developing their command of academic English, these features can be sources of comprehension difficulty even when the underlying conceptual content is within their grasp.

A functional approach addresses this by making the linguistic features of disciplinary texts explicit rather than leaving students to acquire them implicitly through immersion. M. McLaughlin (2010) argues that a well-structured approach to the history of English can provide a “rigorous framework” for exploring the relationship between language form and social function – a framework that is simultaneously an object of study and a tool for understanding the discourse of the discipline itself. This recursive quality is one of the more distinctive features of HEL as an academic subject: the language students are studying to understand is also, in modified form, the language in which that understanding is pursued and reported.

A practical illustration of this approach can be given by the example of the transition from Old English to Middle English. In a functionally oriented classroom, the loss of inflectional endings is presented not only as a morphological event but as a shift in the grammatical resources available for constructing meaning. With inflections gone, word order becomes the primary carrier of relational meaning – a structural change with profound implications for discourse organisation, cognitive processing, and the kinds of information structure that become available to speakers and writers. Students are asked to analyse how these changes are discussed in scholarly texts, attending to how authors use grammatical metaphor, hedging, and causal language to construct historical arguments. This approach treats the analysis of historical language and the analysis of academic discourse about language as complementary rather than competing activities.

Beyond its benefits for ELLs, the functional literacy approach has broader pedagogical value. It develops students' metalinguistic awareness – their capacity to reflect explicitly on how language works – which research in applied linguistics consistently identifies as a predictor of academic writing proficiency (*Schleppegrell, 2004*). It also equips students to read primary sources more critically, attending to how the language of a thirteenth-century charter or a sixteenth-century pamphlet does rhetorical as well as referential work.

## 5. Curricular Design and Organisational Strategies

One of the most persistent practical challenges in HEL instruction is the problem of scope. Fifteen centuries of linguistic history – spanning the Indo-European antecedents of Old English, the upheavals of the medieval contact period, the codifications of the Early Modern era, and the global dispersal of English in the modern period – must somehow be rendered

coherent and teachable within a single semester. The question of how to organise that material is not merely logistical; it reflects substantive assumptions about what a HEL course is fundamentally for.

The default answer has long been chronological sequencing. Beginning with the proto-Germanic and Indo-European roots of English and proceeding through Old, Middle, and Early Modern English to the present, the chronological model, as described by R. Hogg (2002), offers students a clear developmental narrative and a firm sense of the language as the product of a “continuing process” of change rather than a static given. Its advantages are real: it ensures coverage of the major structural transitions, it models the discipline's own historiographical conventions, and it provides a shared referential framework within which more detailed discussions can be anchored (*Labov, 1994*).

The limitations of strict chronological organisation are, however, increasingly well-documented. When content is sequenced by period rather than by problem, students may acquire knowledge of individual stages without developing the comparative analytical capacity that characterises genuine historical linguistic thinking (*Halliday, 1994; Schleppegrell, 2004*). C. Moore and C. Palmer (2019) argue that non-chronological, thematic arrangements – organising the curriculum around questions such as the evolution of the English pronoun system, the history of English spelling conventions, or the relationship between language and social authority – can yield stronger conceptual engagement precisely because they require students to reason across periods rather than through them. In one cohort study involving 217 undergraduates across four institutions, students in thematically organised HEL sections demonstrated significantly higher scores on tasks requiring diachronic comparison than those taught in strictly chronological formats (*Moore & Palmer, 2019: 148*).

M. Hayes and A. Burkette (2017) offer what may be the most practically workable resolution to this tension: a hybrid model in which the course maintains a broadly chronological spine while incorporating thematic modules of three to four weeks' duration that allow for more concentrated inquiry into specific issues. A module on “language and power”, for instance, might draw on materials ranging from the Norman Conquest to contemporary debates about English as a global lingua franca, using the chronological framework as a resource for contextualisation rather than as an end in itself (*Kachru, 1992; Jenkins, 2006*). A module on orthographic standardisation might move between fifteenth-century scribal practice, the impact of print culture, and twenty-first-century debates about spelling reform, tracing a single strand of the language's history with a depth that a purely sequential treatment rarely achieves.

The choice among these organisational models is not purely a matter of pedagogical preference; it is also shaped by institutional context, class size, student preparation, and the instructor's own research profile. What the evidence does suggest is that explicit attention to curricular architecture – rather than default adherence to the chronological convention – is associated with more coherent student outcomes. As R. Hogg (2002) observes, the history of English is sufficiently vast that any syllabus necessarily involves selection; the question is whether that selection is principled and transparent, or merely conventional.

## 6. Balancing Internal and External Histories in HEL Pedagogy

Closely related to the question of curricular organisation is a second structural tension that runs through HEL pedagogy: the balance between what historians of language have traditionally termed “internal” and “external” history. Internal history concerns the formal

properties of the language and the mechanisms by which they change over time – phonological processes, morphological reorganisation, syntactic reanalysis. External history concerns the social, political, and cultural conditions within which those changes occur: migration, conquest, trade, urbanisation, print culture, colonial expansion. The relationship between the two is not incidental; as the field has progressively recognised, internal and external histories are mutually constitutive, and treating them as separable risks producing a distorted account of either (*Labov, 1994; Thomason & Kaufman, 1988*).

Traditional philological instruction tended to prioritise internal history. This was partly a matter of methodological confidence – formal linguistic change is more tractable analytically than the complex social dynamics that motivate it – and partly a matter of disciplinary inheritance from the comparative-historical linguistics of the nineteenth century, which was primarily interested in reconstructing proto-languages and establishing sound laws rather than in explaining the social embedding of change. The result was a curriculum in which grammatical data predominated and social context appeared, if at all, as brief scene-setting before the “real” linguistic analysis began (*Halliday, 1994; Schleppegrell, 2004*).

As S. Horobin (2016) has argued, this inversion of priorities is no longer defensible given what historical sociolinguistics has established about how language change propagates and accelerates. The Scandinavian settlements of the ninth and tenth centuries, for instance, are not background to the loss of grammatical gender in Middle English; they are, on the available evidence, among its primary causes, operating through the mechanisms of dialect contact, levelling, and koineisation that sociolinguistic research has since modelled in contemporary contact situations. Similarly, the Norman Conquest of 1066 does not merely precede a period of rapid morphological simplification; it creates the conditions – a fragmentary, multilingual speech community with reduced literacy in English – under which accelerated phonological reduction and morphological levelling become intelligible outcomes (*Thomason & Kaufman, 1988*). Teaching these connections explicitly is not a concession to narrative over analysis; it is a methodological requirement if students are to understand why English developed as it did rather than simply that it did.

This integrative imperative becomes still more pronounced when the curriculum moves into the modern and contemporary periods. The global dispersal of English from the late sixteenth century onward cannot be understood through formal description alone; it requires engagement with the histories of colonialism, slavery, trade, and migration that distributed the language across five continents and produced the radically diverse range of Englishes that exist today. R. Hogg (2002) is explicit on this point, arguing that a complete account of English must address its geographic spread and the divergent trajectories of development that spread produced. In pedagogical terms, this means that a HEL course that ends its analysis at British English – or that treats World Englishes as appendages to a standard-language core – is not merely incomplete but misleading.

Case studies offer a productive pedagogical vehicle for demonstrating the interplay between internal and external factors. M. Hayes and A. Burkette (2017) point to African American Vernacular English (AAVE) as a particularly rich example: its grammatical features cannot be adequately described without reference to the conditions of its formation, and those conditions – the specific patterns of the transatlantic slave trade, the suppression of African languages, the long history of racial segregation and its consequences for dialect contact – are themselves illuminated by close attention to the linguistic evidence. Similar arguments apply to Indian English, Singlish, Nigerian English, and the other postcolonial varieties whose study now occupies a central place in World Englishes scholarship (*McLaughlin, 2010*). Far from

being distractions from the “core” history, these varieties are among its most revealing data points, demonstrating in compressed form the processes of contact, adaptation, and divergence that have shaped English throughout its history.

## 7. Standard Language Formation

The history of English is, inescapably, also a history of authority – of decisions, institutions, and ideologies that have designated certain forms of the language as correct, prestigious, or standard while consigning others to stigma, correction, or erasure. This dimension of the subject deserves sustained treatment in any HEL curriculum, not because it is the most technically demanding aspect of the history but because it is the one with the most direct relevance to students' experience of language in the present.

The emergence of Standard English is a process with identifiable historical coordinates: the dialectal convergence associated with the East Midlands triangle of London, Oxford, and Cambridge in the late Middle English period; the stabilising effects of print culture and the Westminster Chancery on orthographic and lexical convention from the fifteenth century onward; the codification projects of the seventeenth and eighteenth centuries, culminating in Johnson's Dictionary (1755) and Lowth's Short Introduction to English Grammar (1762); and the subsequent institutionalisation of the standard through mass education, the press, and eventually broadcast media. Each of these developments is both a linguistic event and a social one, and none is fully intelligible without attention to both dimensions.

C. Moore and C. Palmer (2019) argue that HEL courses offer a particularly effective context for students to examine the social construction of “correctness” – to understand that what is designated as standard is the outcome of a historical process shaped by class, geography, and institutional power rather than the natural expression of inherent linguistic superiority. This is not a claim that is easily received by students who have been educated within a system that treats prescriptive norms as self-evidently correct; it requires careful, evidence-based argument. The history of the language provides precisely that argument. Students who understand that the third-person singular -s ending was itself a regional feature of Northern Middle English dialects that displaced a competing Southern -eth form through social mechanisms rather than linguistic ones are in a stronger position to think critically about contemporary prescriptivism than students who encounter correctness norms without historical context (*Milroy & Milroy, 1999*).

This critical perspective becomes especially important when the curriculum addresses the situation of English beyond the traditional Inner Circle of native speakers. Kachru's (1992) model of the concentric circles of World English – the Inner Circle of countries such as the United Kingdom, the United States, and Australia, where English is the primary language; the Outer Circle of postcolonial settings where English functions as an official or institutional language; and the Expanding Circle of countries where English is learned primarily as a foreign language – remains a useful heuristic for understanding the diversity of English's global roles, even where its categories have been critiqued as insufficiently dynamic (*Jenkins, 2006*). What the model makes visible, pedagogically, is that “standard English” is not a single thing: Outer Circle varieties such as Indian English, Nigerian English, and Singaporean English have developed their own internal norms, their own patterns of innovation and stabilisation, their own prestige hierarchies, and their own claims to institutional legitimacy. Teaching students to recognise these varieties as rule-governed and historically intelligible systems – rather than as deviant approximations of a metropolitan norm – is both a linguistic and an ethical undertaking.

M. Hayes and A. Burkette (2017) situate this recognition within their broader principle of sociolinguistic realism, which holds that pedagogy should reflect the actual diversity of language use rather than a prescriptively sanitised version of it. The practical implications for the HEL classroom include the use of diverse text corpora that extend beyond canonical literary and official sources; explicit discussion of how standardisation has interacted with racial, class-based, and colonial ideologies; and assignments that ask students to analyse their own linguistic practices in relation to the historical processes they have studied. Research in this area consistently indicates that students who engage with the politics of standardisation not only develop stronger analytical frameworks for understanding the history of English but also demonstrate more nuanced metalinguistic awareness in their own writing – an outcome with clear implications for their broader academic development (*Milroy & Milroy, 1999; Schleppegrell, 2004*).

## 8. Conclusions

The reorientation of the History of the English Language (HEL) pedagogy represents a significant shift in both methodological perspective and instructional practice. This study has demonstrated that contemporary approaches move beyond purely descriptive accounts of linguistic change toward integrated models that combine formal analysis with sociohistorical explanation. Such an approach enhances student engagement, deepens conceptual understanding, and connects language history to broader cultural and political contexts.

The analysis has drawn on key contributions from scholars such as Simon Horobin (2016), M. Hayes, and A. Burkette (2017), whose work emphasizes the importance of contextualizing linguistic phenomena within authentic social environments. On top of it, advances in corpus linguistics and digital humanities have expanded the scope of student inquiry, enabling data-driven exploration of historical texts and fostering active, research-oriented learning.

At the same time, the application of Systemic Functional Linguistics, developed by M. A. K. Halliday (1994) and further applied by M. J. Schleppegrell (2004), has provided effective tools for addressing disciplinary literacy challenges. These approaches support students in interpreting complex historical materials while also developing their ability to produce academic discourse.

However, the findings also highlight several ongoing challenges. These include the need for stronger theoretical scaffolding when using digital tools, the difficulty of balancing internal linguistic analysis with external social factors, and the necessity of addressing ideological issues such as standard language norms and the diversity of World Englishes.

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## THE CLIL APPROACH TO TEACHING A FOREIGN LANGUAGE FOR STUDENTS IN ECONOMICS SPECIALISATIONS AT HIGHER EDUCATION INSTITUTIONS

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### Summary

The article examines the specific features of applying the CLIL approach (Content and Language Integrated Learning) in teaching a foreign language to students majoring in economics at higher education institutions. It **reveals** the essence of integrated content and language learning, its key principles, advantages, and implementation challenges. Special emphasis is placed on the interdisciplinary nature of CLIL, which enables students to simultaneously acquire subject-specific knowledge and develop foreign language proficiency in a meaningful context.

The study analyses the impact of CLIL on the development of both professional and foreign language communicative competence of future economists, highlighting improvements in critical thinking, problem-solving, and academic communication skills. Particular attention is paid to methodological aspects of CLIL implementation in the educational process, including the use of interactive technologies, project-based learning, case studies, and authentic materials relevant to the field of economics.

The paper substantiates the relevance and effectiveness of CLIL in the context of modern higher education and ongoing globalization processes. It also outlines prospects for further research, particularly in evaluating long-term learning outcomes and refining teaching strategies.

**Key words:** integrated subject-language learning, professional communicative competence, interdisciplinary approach, authentic learning materials, project-based learning, case study method, critical thinking skills, academic foreign language communication.

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### 1. Introduction

The modern stage of societal development is characterized by processes of globalization, internationalization of the economy, and the growing role of intercultural communication. Under these conditions, the training of competitive specialists in the field of economics requires not only solid professional knowledge but also a high level of proficiency in a foreign language.

Traditional approaches to teaching foreign languages often fail to ensure a sufficient level of integration between language and professional training. In this regard, the CLIL approach (Content and Language Integrated Learning), which involves the simultaneous study of subject content and a foreign language, is becoming particularly relevant.

CLIL is considered an effective pedagogical technology that contributes to increasing student motivation, developing their cognitive abilities, and forming professional foreign language competence.

The aim of the article is to provide a theoretical justification and analyze the features of applying the CLIL approach in teaching a foreign language to students of economic specialties.

## 2. Theoretical Foundations of the CLIL Approach

CLIL (Content and Language Integrated Learning) is an innovative educational approach that involves the simultaneous acquisition of subject content and a foreign language, where the language serves not only as an object of study but also as a tool for cognition. Unlike traditional foreign language teaching, CLIL integrates language learning into a professional context, ensuring more natural and effective acquisition of both linguistic and professional material.

### Essence and Conceptual Foundations of CLIL

The concept of CLIL emerged in the European educational space as a response to the need to train specialists capable of functioning in a multilingual and multicultural environment. It combines elements of the communicative approach, cognitive learning theory, and constructivism.

The essence of CLIL lies in:

- integration of language and subject learning;
- focus on the practical use of language;
- creation of conditions for a natural language environment;
- activation of students' cognitive activity.

It is important to emphasize that CLIL is not simply teaching a subject in a foreign language. It is a methodologically structured process that takes into account students' language needs, their level of preparation, and the specifics of the academic discipline.

### Key Principles of the CLIL Approach

CLIL is based on several key principles that determine its effectiveness:

#### 1. Dual focus

The learning process is simultaneously oriented toward mastering subject content and developing language competence. This means that the teacher must balance between explaining subject material and supporting students' language development.

#### 2. Integration of content and language

Language is used as a means of learning, not only as a goal. This contributes to the formation of functional language competence necessary for professional activity.

#### 3. Development of cognitive skills

CLIL stimulates higher-order thinking (analysis, synthesis, evaluation). Students do not simply absorb information but actively process, interpret, and apply it.

#### 4. Intercultural orientation

Language learning is inseparably linked with culture. CLIL contributes to the formation of intercultural competence, which is an important component of training economists in a globalized world.

### The "4Cs" Model as the Basis of CLIL

A key theoretical tool of CLIL is the "4Cs" model, which ensures the integrity of the learning process:

#### – Content

Involves mastering knowledge from a specific discipline (e.g., economics, finance, management). In CLIL, it is important that the content is relevant to students' professional training.

#### – Communication

Covers the development of language skills necessary for academic and professional activities. Special attention is given to functional language (language for learning, language of learning, language through learning).

– **Cognition**

Involves the development of cognitive processes – from basic (remembering, understanding) to complex (analysis, evaluation, creation). CLIL promotes critical thinking and analytical abilities.

– **Culture**

Includes the formation of intercultural awareness, tolerance, and the ability to interact effectively in an international environment.

**The Language Component of CLIL**

One of the important components of CLIL is language support within the learning process. Three types of language are distinguished:

- Language of learning – specialized vocabulary and grammatical structures necessary for understanding the content;
- Language for learning – language tools for participating in learning activities (discussions, presentations);
- Language through learning – language that develops in the process of learning.

This approach ensures the gradual and systematic development of language competence.

**The Cognitive Aspect of CLIL**

CLIL is closely related to the taxonomy of educational objectives (in particular, Bloom's taxonomy), which involves the development of thinking from simple to complex. In this context, teachers use tasks of varying levels of difficulty:

- reproductive (description, definition);
- analytical (comparison, classification);
- creative (project development, decision-making).

This contributes to deeper learning and the development of student independence.

**Pedagogical Conditions for CLIL Effectiveness**

For successful CLIL implementation, the following conditions are necessary:

- sufficient level of students' language proficiency;
- methodological training of teachers;
- use of authentic materials;
- integration of modern educational technologies;
- institutional support.

**Educational Potential of CLIL**

Research shows that CLIL:

- increases learning motivation;
- improves foreign language proficiency;
- develops professional competencies;
- fosters interdisciplinary thinking;
- prepares students for work in an international environment.

Thus, the CLIL approach serves as an effective pedagogical technology that combines language and professional training, ensuring comprehensive student development.

### 3. Features of Teaching a Foreign Language to Students of Economic Specialties

Teaching a foreign language to students of economic specialties in higher education institutions has a strong professional orientation and differs significantly from general language training. The main goal is not only to develop foreign language communicative competence

but also to prepare students for effective professional activity in an international economic environment.

One of the key features is the focus on professional vocabulary and terminology. Students must master a wide range of economic concepts, including:

- financial terminology;
- management and marketing vocabulary;
- banking and investment terminology;
- international trade terms.

Importantly, this vocabulary is acquired not in isolation but within the context of real professional situations, ensuring its effective use in future activities.

The learning process involves active use of authentic sources: economic articles, analytical reports, financial documents, and materials from international organizations (*Kuzminska and others, 2019*).

Such materials contribute not only to the development of language skills but also to the formation of professional thinking, as students work with up-to-date information and real cases.

#### **Development of Business Communication Skills**

A special place in the learning process is given to the development of business communication skills. Students must be able to:

- conduct negotiations;
- participate in business meetings;
- carry out professional correspondence;
- present economic projects.

In this context, activities such as role plays, business simulations, debates, and presentations are particularly important.

#### **Development of Analytical Thinking**

Economic activity requires a high level of analytical thinking. Therefore, foreign language teaching should include:

- analysis of economic data;
- interpretation of graphs and tables;
- evaluation of market trends;
- forecasting of economic processes.

This contributes to the development of cognitive skills and prepares students for making informed professional decisions.

#### **Key Professional Skills of Economics Students**

During foreign language learning, important professional skills are formed:

##### **– Analysis of economic information**

Students learn to work with large volumes of information, identify key aspects, and draw conclusions.

##### **– Data presentation**

The ability to present research results in a foreign language using modern visual tools is essential.

##### **– Participation in business negotiations**

Students develop the ability to express their position and reach compromises.

##### **– Working with international documents**

Students acquire skills in handling contracts, reports, and official documentation.

### **Integration of CLIL into Professional Training**

The CLIL approach allows for the organic integration of language and professional training (Akhobadze, 2021). In this case, a foreign language becomes not the goal but a means of:

- acquiring economic knowledge;
- developing professional competencies;
- forming practical skills.

Thanks to CLIL, students are immersed in a professionally oriented language environment, which significantly increases the effectiveness of learning.

### **Methodological Approaches to Teaching**

To achieve high results, various methods are used:

- case method (analysis of real economic situations);
- project-based learning;
- problem-based learning;
- interactive technologies.

These approaches ensure active student participation in the learning process and contribute to the development of learner autonomy.

### **Difficulties in Teaching**

Among the main difficulties, the following can be identified:

- different levels of students' language proficiency;
- complexity of economic terminology;
- limited time allocated for language learning;
- the need to integrate with professional disciplines.

These challenges require a flexible approach to organizing the educational process and adapting teaching methods.

Thus, teaching a foreign language to students of economic specialties has a comprehensive character and is aimed at forming not only linguistic but also professional competence. The use of the CLIL approach makes it possible to ensure a close connection between language and future professional activity, which significantly improves the quality of training for specialists in the field of economics.

## **4. Advantages of the CLIL Approach in Training Economists**

The application of the CLIL approach in the training of students of economic specialties has significant didactic potential and ensures the comprehensive development of both language and professional competencies. The integration of subject content and a foreign language creates conditions for more effective, practice-oriented learning.

### **4.1. Increasing Learning Motivation**

One of the most important advantages of CLIL is a significant increase in student motivation. Unlike the traditional approach, where language is often studied in isolation from real life, CLIL offers students the opportunity to work with material directly related to their future profession.

The practical orientation of learning:

- demonstrates the real value of a foreign language;
- increases students' interest in the learning process;
- fosters intrinsic motivation for self-development.

Students begin to perceive a foreign language not as a separate discipline, but as a tool for professional activity, which significantly enhances learning effectiveness.

#### **4.2. Formation of Professional Competence**

CLIL contributes to a deeper understanding of economic processes, as learning takes place through the analysis of real cases, economic models, and situations. This allows students to:

- acquire professional terminology in context;
- understand the specifics of international economic activity;
- develop decision-making skills.

It is especially important that students learn to think in a foreign language within their field of specialization, which is a necessary condition for professional mobility.

Studies confirm that the use of CLIL improves the level of mastery of both professional disciplines and specialized vocabulary, and also fosters interdisciplinary connections.

#### **4.3. Development of Language Skills**

CLIL provides a natural language environment in which a foreign language is used continuously and functionally. This promotes the development of all types of language activity:

- reading – through working with authentic economic texts;
- listening – through lectures, video materials, and presentations;
- speaking – through participation in discussions, negotiations, and presentations;
- writing – through preparing reports, analytical notes, and business correspondence.

Unlike traditional learning, language skills are formed in real communicative situations, which increases their practical value.

#### **4.4. Development of Critical Thinking**

CLIL is focused on active cognitive engagement, which promotes the development of critical thinking. During the learning process, students:

- analyze economic phenomena;
- compare different approaches;
- assess risks and prospects;
- argue their own positions.

The use of problem-based tasks, case studies, and projects stimulates analytical abilities and develops independent decision-making skills.

#### **4.5. Preparation for Professional Activity in an International Environment**

CLIL contributes to the development of competencies necessary for successful professional activity in the context of globalization. In particular, students acquire:

- the ability to work in international teams;
- intercultural communication skills;
- the ability to use a foreign language in professional situations;
- experience working with international standards and documents.

This significantly increases graduates' competitiveness in the labor market and expands their career opportunities.

#### **4.6. Development of Autonomy and Independent Learning**

CLIL encourages students to independently search for information, work with sources, and engage in self-education. In the learning process, they:

- develop research skills;
- learn to work with large volumes of information;
- build responsibility for their own learning outcomes.

This is an important component in preparing modern specialists capable of continuous professional development.

#### 4.7. Integration of Theory and Practice

CLIL ensures a close connection between theoretical knowledge and its practical application. As a result:

- learning becomes more meaningful and effective;
- students better understand the value of acquired knowledge;
- the ability to apply knowledge in real-life situations is developed.

Thus, the CLIL approach has significant advantages in training students of economic specialties. It ensures the integration of language and professional training, promotes the development of key competencies, and prepares students for effective work in the international economic environment. The use of CLIL improves the quality of education and adapts it to the modern demands of a globalized world.

### 5. Methodology for Implementing CLIL in Teaching Economic Disciplines

The effective implementation of the CLIL approach in teaching economic disciplines involves the systematic integration of methodological, linguistic, and subject-specific components. It is not only about using a foreign language as a medium of instruction, but also about creating a holistic educational environment in which students simultaneously develop professional knowledge, language skills, and cognitive abilities (*Andriichuk et al., 2024*).

The CLIL methodology is based on the principles of interactivity, communicativeness, contextualization of knowledge, and active student participation in the learning process.

#### 5.1. Use of Authentic Materials

Authentic materials are one of the key tools for implementing CLIL, as they ensure a connection between learning and the real professional environment.

Such materials include:

- economic articles from international publications;
- company financial reports;
- analytical market reviews;
- business cases;
- official documents of international organizations.
- Their use makes it possible to:
  - familiarize students with modern economic terminology;
  - develop skills in reading and analyzing professional texts;
  - build the ability to work with real data;
  - increase motivation through the relevance of materials.

An important condition is the adaptation of materials to students' language proficiency level (scaffolding), which includes explaining terms, using glossaries, and visualizing information.

#### 5.2. Project-Based Learning

Project-based learning is an effective method for implementing CLIL, as it allows the integration of knowledge and skills in practical activities.

Typical projects for students of economic specialties include:

- market analysis of a specific product or service;
- development of a business plan;
- research on economic trends;
- creation of a marketing strategy;
- financial planning.

During project work, students:

- use authentic sources;
- apply a foreign language for communication;
- develop teamwork skills;
- present the results of their work.

Project-based learning promotes autonomy, critical thinking, and responsibility for learning outcomes.

### **5.3. Interactive Teaching Methods**

Interactive methods are an integral part of CLIL, as they create conditions for the active use of language in the learning process.

The most effective include:

#### **– Discussions**

Allow students to express their opinions, justify their positions, and analyze economic issues.

#### **– Role-play**

Simulate real professional situations, such as:

- negotiations between companies;
- meetings with clients;
- discussions of investment projects.

#### **– Debates**

Promote the development of critical thinking and argumentation skills.

#### **– Case method**

Involves analyzing real or simulated economic situations followed by decision-making.

Interactive technologies:

- activate speech activity;
- promote deeper understanding of material;
- develop communicative competence;
- foster collaboration skills.

### **5.4. Use of Digital Technologies**

The modern educational process is impossible without the integration of digital tools, which significantly enhance the effectiveness of CLIL.

Key tools include:

- online learning platforms (Moodle, Google Classroom);
- multimedia resources (videos, podcasts, interactive presentations);
- electronic textbooks;
- specialized economic databases;
- presentation tools (PowerPoint, Canva).

Digital technologies make it possible to:

- diversify the learning process;
- provide access to up-to-date information;
- organize distance and blended learning;
- increase student engagement.

Video materials and online lectures play a particularly important role in developing listening skills and understanding professional language.

### **5.5. Language Support (Scaffolding) in CLIL**

Effective CLIL implementation is impossible without proper language support for students. Teachers should:

- explain new vocabulary;
- use visual materials (charts, tables, graphs);
- provide language patterns (phrases, sentence starters);
- gradually increase the complexity of the material.

This helps students better understand content and use language more confidently.

### **5.6. Assessment of Learning Outcomes**

In CLIL, it is important to assess both language and subject achievements. For this purpose, the following are used: tests, presentations, projects, written assignments, and oral performances.

Assessment should be comprehensive and take into account:

- correctness of terminology use;
- level of content understanding;
- ability to apply knowledge;
- communicative skills.

Thus, the methodology for implementing CLIL in teaching economic disciplines involves the use of a wide range of modern methods and technologies. The combination of authentic materials, project-based learning, interactive methods, and digital resources ensures the effective development of both language and professional competencies. This approach contributes to training competitive specialists capable of successfully operating in a globalized economic environment.

## **6. Challenges of CLIL Implementation**

Despite the significant potential of the CLIL approach, its practical implementation in higher education institutions is associated with a number of challenges of both methodological and organizational nature (Serdiukova, 2021). Addressing these challenges is essential for the effective implementation of integrated learning.

### **6.1. Insufficient Language Proficiency of Students**

One of the most common problems is the varying and often insufficient level of foreign language proficiency among students. This complicates the comprehension of subject-specific material, especially if it is presented without proper adaptation.

Main difficulties include:

- lack of understanding of specialized terminology;
- difficulty in comprehending lectures in a foreign language;
- limited participation in discussions;
- psychological barriers to speaking.

To overcome this problem, it is necessary to:

- introduce gradual increases in material complexity;
- use scaffolding techniques;
- apply visualization (charts, graphs, tables);
- organize additional language courses.

### **6.2. Insufficient Teacher Preparation**

CLIL places high demands on teachers, who must combine:

- deep knowledge of the subject;
- high proficiency in a foreign language;
- methodological competence in integrated learning.

- In practice, the following problems often arise:
- subject teachers may lack sufficient language proficiency;
- language teachers may lack sufficient economic knowledge;
- absence of specialized CLIL training.

Solutions include:

- professional development courses;
- interdisciplinary cooperation (team teaching);
- participation in international educational programs;
- development of professional teaching communities.

### **6.3. Lack of Teaching Materials**

Another significant problem is the limited availability of high-quality CLIL-adapted teaching materials.

The difficulty lies in the fact that:

- most textbooks are either purely linguistic or purely subject-specific;
- there is a lack of materials combining economic content with language support;
- authentic sources are often too complex for students.

As a result, teachers are often forced to independently develop materials, adapt texts, and create glossaries and methodological guidelines.

A promising direction is the development of specialized CLIL courses and electronic resources.

### **6.4. Organizational Challenges**

CLIL implementation is often complicated by organizational constraints within higher education systems.

Main issues include:

- overloaded curricula;
- limited hours for foreign language instruction;
- lack of clear integration between disciplines;
- insufficient technical resources.

Additionally, CLIL requires:

- changes in curriculum planning;
- coordination among teachers of different disciplines;
- institutional support.

### **6.5. Psychological Barriers and Student Adaptation**

Special attention should be paid to psychological aspects. Students may experience:

- lack of confidence in their language abilities;
- fear of making mistakes;
- difficulties adapting to new learning formats.

This can reduce their activity and motivation. Therefore, it is important to create a supportive learning environment, encourage participation, and use formative assessment.

### **6.6. Assessment Challenges**

Another difficulty is assessing outcomes in CLIL. The question arises: what should be assessed – subject knowledge, language proficiency, or both?

This requires:

- clear assessment criteria;
- a comprehensive approach;
- alternative assessment forms (projects, portfolios, presentations).

Thus, CLIL implementation is accompanied by a number of objective challenges related to student language proficiency, teacher competence, lack of materials, and organizational constraints. However, with a comprehensive approach, proper methodological support, and gradual adaptation, these challenges can be successfully overcome.

## 7. Prospects for the Development of CLIL in Higher Education

In the context of educational internationalization and economic globalization, the CLIL approach is becoming increasingly relevant and offers broad opportunities for modernizing higher education systems.

### 7.1. Integration with Digital Technologies

One of the key directions of CLIL development is its integration with digital technologies.

Promising areas include:

- use of online learning platforms;
- application of interactive resources (videos, podcasts, simulations);
- access to international economic databases;
- use of artificial intelligence for personalized learning.

Digital tools enable the creation of a multimodal learning environment combining text, audio, and visual materials, enhancing learning effectiveness.

### 7.2. Blended Learning

Blended learning, combining face-to-face and online instruction, is a promising model for CLIL.

Its advantages include:

- flexibility;
- individualized learning;
- access to diverse resources;
- increased student autonomy.

### 7.3. Development of Specialized CLIL Courses

Future development involves creating specialized courses such as:

- “Business English through CLIL”;
- “International Economics in English”;
- “Financial Analysis in English”;
- “Marketing and Management in English.”

These courses integrate subject content with language training and focus on practical skills.

### 7.4. Teacher Professional Development

Improving teacher qualifications is crucial. Key areas include:

- language skills improvement;
- CLIL methodology training;
- digital competence development;
- participation in international programs.

### 7.5. Internationalization of Education

CLIL supports integration into the global educational space through:

- joint programs;
- academic mobility;

- international projects;
- teaching in foreign languages.

### 7.6. Competency-Based Approach

CLIL aligns with competency-based education, focusing on:

- professional competence;
- foreign language communicative competence;
- critical thinking;
- lifelong learning skills.

### 7.7. Training Competitive Specialists

CLIL helps prepare specialists who:

- are proficient in foreign languages;
- can work internationally;
- possess analytical and critical thinking;
- are ready for intercultural interaction.

## 8. Conclusions

The study confirms that the CLIL approach is an effective and promising tool for integrating language and professional training of economics students in higher education. Its use aligns with modern educational trends focused on developing comprehensive competencies and preparing specialists for a globalized world.

CLIL increases student motivation, improves language proficiency, enhances professional competence, and fosters critical thinking. It also strengthens the connection between theory and practice.

Despite existing challenges, they can be overcome through improved methodology, teacher training, and resource development.

Overall, CLIL represents an important direction in modern education, providing a new level of training for students of economic specialties by integrating language competence with professional knowledge and skills.

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## DIGITAL LIBRARY INFORMATION RESOURCES AS TOOLS OF INFLUENCE ON SOCIAL UNITY

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### Summary

A comprehensive analysis of the strategic vectors of influence of library electronic information resources on social cohesion processes during the full-scale Russian-Ukrainian war was conducted. The essence of library digitalization as a tool for social cohesion, which involves uniting society through shared access to technology, knowledge, and opportunities for self-realization, is revealed. Using the example of the specialized full-text database "Ukraine in Foreign Press Reviews", produced by the V. I. Vernadsky National Library of Ukraine, the mechanisms of the influence of digital content on the consolidation of Ukrainian society are detailed. The key functional areas of this influence are identified and characterized, in particular verification (provision of reliable information), communication (ensuring remote access), scientific and educational (expanding the scientific and educational worldview and developing media literacy). It has been demonstrated that during intense hybrid threats, libraries are transformed into critically important players on the information front.

**Key words:** library electronic information resources, database, access provision, verification, users, media literacy, social consolidation.

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### 1. Introduction

In the face of hybrid threats and information fragmentation, digital library resources represent a strategic foundation for national resilience, where societal consolidation occurs around verified information as an antidote to manipulative influences. The research's novelty lies in rethinking the digital transformation of libraries and the development of electronic information resources not as a technical process, but as a social and communicative component of societal unity. As libraries undergo a fundamental shift in their role from traditional book repositories to dynamic digital hubs, they face a key contradiction: the rapid adoption of technologies (SI, digitalization of collections, virtual services) is often viewed as merely a technical upgrade, while their impact on social cohesion remains understudied. In the context of full-scale Russian aggression, which is causing social turbulence, migration processes, and a digital divide, there is an urgent need to understand how the digital transformation of libraries, using a resource base, can become a tool for overcoming social isolation and uniting society, and not just a way to automate processes.

The aim of the study is a comprehensive analysis of the strategic vectors of influence of electronic information resources of libraries on the processes of ensuring social unity in the context of a full-scale Russian-Ukrainian war using the example of the specialized database

“Ukraine in Foreign Press Reviews” of the V. I. Vernadsky National Library of Ukraine (hereinafter – NLUV).

The objectives of the study are as follows: to uncover the essence of library digitalization as a tool for social cohesion; to clarify the criteria for selecting verified database information as a factor in social consolidation; to characterize the communicative potential of databases in promoting social unity; and to highlight the influence of scientific and educational components on unity in the digital environment.

The research topic lies at the intersection of social communications and library science. To obtain objective results, a comprehensive approach to defining methods was used. Specifically, systems analysis was employed to examine library digital resources as a holistic system interacting with society, the state, and individual users. A dialectical method helps explore the problem of developing access to knowledge and, consequently, community consolidation. Analysis and synthesis were used to determine how databases influence social cohesion.

The theoretical basis of the study was formed by the works of domestic and foreign scientists, including: Adetayo A. D., Omolara O. V., Olovookeri A., Sharma V., Rana K., Prakash Sati P., Koloskova G., Mikhailova A., Sokur O. L., Klimenko O. Z. and others. The absence of a thorough monographic work on the vectors of influence of electronic information resources of libraries on society during the Russian-Ukrainian war was noted.

## 2. Digitalization of libraries as a tool for social cohesion

The current stage of development of the global information society is characterized by total digitalization and changing paradigms of content consumption. It would seem that in a world where access to any information is provided “in one click”, traditional institutions such as libraries should lose their relevance. However, the reverse process is observed: in times of social atomization, the spread of disinformation and the “digital divide”, libraries are transformed from passive book repositories into dynamic centers of social consolidation (*Sharma et al., 2025: 168*).

These transformations are particularly significant for Ukrainian society due to the urgent need for a neutral space that fosters cohesion. Libraries are currently rethinking their role not only as a cognitive resource, but also as a “third place”, which, according to R. Oldenburg's concept, is a space located outside of home and work where informal interaction, the exchange of ideas, and the formation of local communities occur (*Oldenburg, 2023: 104*). In the context of digital transformation, the library is becoming almost the only open platform that provides equal access to knowledge, technology, and cultural dialogue for all segments of the population, regardless of their socio-economic status. In particular, using the example of the structural unit of the VNLU, the Fund of Presidents of Ukraine (hereinafter – FPU), which forms electronic information resources on the issues of the presidency and all-ukrainian issues, we can trace how the formation of a common cultural space and the strengthening of national identity in the digital environment is taking place. One of the most popular among users of the FPU is the specialized full-text bibliographic database the “Ukraine in Foreign Press Reviews” (hereinafter – DB), which covers socio-political events in the Ukrainian state, published in 26 popular foreign online media in 13 countries (*V. I. Vernadsky National Library of Ukraine, 2011*). The information presented in the DB, which has been in operation since 2011, facilitates the rapid acquisition by users of logically structured information on the reactions of famous figures, experts, analytical institutes, etc., published on the pages of influential foreign media, in particular, to the Russian-Ukrainian war and its consequences for international politics.

The DB primary goal of providing government agencies with the necessary information to fulfill their mandates, as well as users of the global internet, is achieved through a complex set of influence vectors, through which digital resources in the hands of scholars and bibliographers become tools for social consolidation. Among the interconnected influence vectors, the following should be highlighted: verification, communication, and scientific and educational.

### 3. Verified information as a factor in social consolidation

Libraries provide access to reliable DB – this is not just a technical service, but a powerful tool that accumulates and produces significant information resources, guaranteeing their reliability. Therefore, one of the key vectors of the influence of DB that contribute to social consolidation is the provision of verified information. Unlike social media algorithms, the DB is compiled by professional bibliographers and scholars using criteria of scholarly quality, authority, and impartiality. Through systematic monitoring of foreign media, the DB selects information from reputable and influential publications such as the New York Post (USA), The Guardian (UK), Rzeczpospolita (Poland), Focus (Germany), and El Mundo (Spain). The following criteria are taken into account when selecting publications for the DB:

- the author must be a journalist, reporter, politician, expert, or military analyst, as well as an editorial team, such as Nick Hopkins, executive news editor of The Guardian, and Władysław Kosiniak-Kamish, deputy prime minister and minister of defense of Poland;
- the presence of references to influential institutions, such as the Institute for the Study of War (USA), the UN, the IAEA, the European Council, and others, as sources of information (articles attributed solely to an anonymous source are not considered);
- the presence of precise data in the material (names, dates, numbers, titles, for example: The Geneva Academy of International Law and Human Rights provided information that from 2024 to the end of 2025, the number of civilian deaths in Ukraine increased by 70 %;
- the accuracy of the content of the article in the abstract without adding one's own perspective, for example: Viktor Orban considers Ukraine an enemy of Hungary due to attempts to deprive the country of cheap Russian energy resources.

The DB materials are classified into objective categories to simplify searching. Specifically, the DB contains the following sections: activities of the Ukrainian government, Ukraine's European integration, peace proposals and the negotiation process, foreign expert opinion on the war in Ukraine, etc.

In order to popularize the DB and provide users with systematized information in a more accessible format, an information and analytical bulletin with a similar title, “Ukraine in Foreign Press Reviews” is being created. It is published online monthly and, in addition to a bibliography and links to official sources, contains a thorough analytical context of direction and tone (*VLNU, 2011*). A professional analysis of the DB materials demonstrates an impartial and objective approach to providing information to users.

Therefore, the DB contains only verified and structured materials from recognized authors and various institutions and organizations, which contrasts with the often unverified or biased information found on the open internet.

#### 4. The communicative potential of the DB in the unity of society

The impact of public knowledge on social cohesion isn't simply a matter of access to numbers or texts. It's a process of transforming disparate information into shared knowledge, which becomes the foundation of mutual understanding within society. When people use shared resources, they begin to operate on shared facts, which is critical for consensus. This mitigates the influence of “information bubbles” and fake news that tend to divide society.

The DB exerts a communicative influence, serving, first and foremost, as a powerful tool for informational dialogue between Ukraine and the world, which is realized not through direct communication, but through the collection, processing, and dissemination of significant meanings. For example, the DB accumulates articles from The New York Times on Ukraine's integration into the EU, adding annotations and translations to them. This makes foreign discourse understandable to ukrainian consumers (civil servants, academics, journalists). Through the DB, Ukrainian society hears how it is perceived from outside, and analysts, relying on the DB data, prepare reports for government agencies. This allows for the adjustment of government information policy – that is, responding to criticism or reinforcing positive narratives in the international space.

Furthermore, the DB provides equal access to information resources to everyone – professors, students, and retirees alike – helping to narrow the digital and intellectual divide between different segments of the population. The advantage of library resources hosted online is that they provide easy and quick access to information, allowing users to search and consult sources remotely at their convenience (*Koloskova et al., 2024: 18*). By providing remote access to users, particularly those who are internally displaced persons or temporarily residing abroad during a full-scale russian invasion, the DB allows scholars, students, and all citizens, regardless of their location, to continue to use the materials. It should be noted that by consistently organizing access to document collections using electronic technologies, the VLNU strives to expand access to remote users. (*Sokur et al., 2022: 167*). Remote access to BD information 24/7 maintains communication between users and maintains involvement in the ukrainian information space.

#### 5. Scientific and educational foundation for unity in the digital environment

Analysis of the impact of the scientific component of the DB on the unity of ukrainian society has shown its contribution to the expansion of the scientific worldview through familiarization with the views, approaches and results of analysis, expert forecasts and assessments regarding the war in Ukraine, which the DB contains both in annotated form and in full text. The DB provides researchers with systematized information from 13 countries of the world (USA, Great Britain, Germany, Poland, Japan, etc.), which allows for:

- comparative analysis: comparing how different countries and cultures perceive events in Ukraine;
- content analysis and imagology: studying the image of Ukraine that is being formed in the global media space;
- research into information wars: tracking foreign narratives and identifying attempts at disinformation or manipulation by the aggressor.

The DB data allows us to analyze not only current news, but also the dynamics of changing attitudes towards Ukraine since 2011, which is invaluable for historians and political

scientists. Although the DB is of a scientific and bibliographic nature, its impact on social unity is significant through several mechanisms: countering disinformation (scientific works written on the basis of the DB materials become the foundation for debunking myths, which works to consolidate society around true facts; a sense of global support; faith in victory, which is a critical factor in unity in times of crisis). Conducting high-quality scientific research and writing papers based on media publications by utilizing a wide range of thematic materials in the DB and ensuring access to information is important for the sustainable development of society. Digital libraries promote the systematic development of users' media literacy by developing comprehensive cognitive skills and practical competencies related to effective search, critical analysis, and ethical use of content in the electronic resource environment (Adetayo et al., 2023: 19). Working with DB, in particular, helps distinguish authoritative sources from dubious ones. DB contain materials from leading global media outlets with strict ethical codes, and users experience the application of such standards as balance of opinion, separation of facts from commentary, etc. Libraries are moving from a resource storage model to a model of providing intellectual services (Olowookere, 2025: 103). A systematized picture of global media discourse transforms information consumers from passive recipients to active analysts. The DB creates an intellectual standard, and when users become accustomed to high-quality, structured, and verified information, they automatically become more demanding of any online content. This is what media literacy is all about – the ability to base one's own opinion on proven facts, not manipulation.

By providing a high-quality level of satisfaction of the information needs of users through scientific and educational influence, the DB contributes to the increase of the general intellectual and spiritual potential of society, necessary for successful modernization and development.

## 6. Conclusions

The study found that library DB act as a strategic tool during wartime, ensuring the stability of national unity through effective verification (providing reliable information), communication (ensuring remote access), scientific and educational activities (expanding scientific worldview) and developing a competent approach to the media. The example of the “Ukraine in Foreign Press Reviews” database demonstrates that digital library content resources act as a mediator between the global media space and individual information consumers, transforming into an effective tool for ensuring social unity. It is revealed that the BD contributes to the formation of a homogeneous information environment, which is a necessary determinant of the sustainable development of the state and the preservation of national identity in the context of systemic challenges caused by russian aggression. We plan to direct further research toward determining the role of digital resources in different social groups through joint educational projects.

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# ADAPTIVE INTERACTIVE PLATFORMS AS A FACTOR IN BOOSTING MOTIVATION TO LEARN ENGLISH IN THE CONTEXT OF THE DIGITAL TRANSFORMATION OF HIGHER EDUCATION

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## Summary

The study investigates the functional potential of leading adaptive platforms (in particular, artificial intelligence-based systems such as Duolingo and Quizlet, as well as specialised LMS modules) in the context of foreign language teaching. It is noted that the use of online resources, mobile applications, web quests, case-based technologies and project-based learning significantly increases the level of learner engagement, stimulates their motivation and contributes to the development of communicative competence.

The relevance of the study is confirmed by the rapid digitalisation of the educational sector and the need to review traditional teaching methods in higher education institutions. The scientific novelty of the work lies in clarifying the role of adaptive technologies as a catalyst for personalised learning. An analysis of scientific research has established that the use of adaptive platforms contributes to improved academic performance, whilst the use of rating systems, achievement tracking and progress visualisation helps foster positive learning motivation and encourages students to actively participate in the educational process. It has been established that it is necessary not only to improve the technological aspects of adaptive platforms, but also to ensure their pedagogically sound integration into the educational process, which entails the development of teachers' digital competence, the development of methodological approaches to the use of adaptive tools, and the creation of a supportive educational environment geared towards maintaining student motivation and active cognitive engagement.

**Key words:** adaptive learning, digital transformation, the English language, motivation, higher education, artificial intelligence, interactive platforms.

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## 1. Introduction

In this era of globalisation, the study of foreign languages is taking on particular significance as a key factor in professional development, social mobility and intercultural communication. The intensification of integration processes within the European and global educational landscape has brought the concept of lifelong learning to the fore, establishing it as the leading pedagogical paradigm of the 21st century. This is precisely why the teaching of English is viewed not merely as the acquisition of linguistic knowledge, but as the development of comprehensive communicative competence, which ensures effective professional activity and the cultural integration of the individual (*Kaniuk, 2016*).

An analysis of scientific research allows us to conclude that the digital transformation of higher education necessitates a rethinking of traditional approaches to foreign language

teaching and highlights the need to implement innovative educational technologies. Adaptive interactive platforms occupy a special place among these, as they ensure the personalisation of the learning process, take into account the individual educational needs of learners, and enhance their motivation to learn. The pedagogical potential of such platforms lies in their ability to overcome the barriers of traditional learning, to promote the continuous development of language competences, and to foster readiness for active participation in a globalised information environment.

One of the most effective methodological approaches to teaching English is the communicative approach, which focuses on developing students' ability to engage in authentic communication in a professional setting. Within this approach, the key lies not only in the acquisition of linguistic structures, but also in the development of skills in using linguistic means appropriate to a specific communicative situation. This involves the active engagement of learners in practice-oriented tasks aimed at developing communicative strategies, expanding vocabulary, and understanding the sociocultural context of communication. In the teaching and learning process, adaptive interactive platforms serve as an effective tool for implementing the communicative approach, as they facilitate the integration of various forms of learning activities, including interactive exercises, simulations of communicative situations, gamified tasks and instant feedback. The use of such platforms helps to stimulate students' cognitive activity, increase their level of engagement and foster intrinsic motivation for learning. A key feature of adaptive platforms is their ability to analyse learners' educational activities using learning analytics and artificial intelligence. This enables the automatic adjustment of learning content and the selection of tasks tailored to the student's level of preparation, pace of learning, and individual needs. This approach facilitates the creation of personalised learning pathways, which is a key requirement for effective learning in the digital age.

The motivational potential of adaptive interactive platforms is determined by a number of factors, among which personalised learning, gamification elements, the ability to independently manage the learning process, and immediate feedback are of particular importance. The use of rating systems, achievements and progress visualisation helps foster positive learning motivation and encourages students to actively participate in the educational process. Furthermore, the interactivity of the platforms creates conditions for the development of autonomous learning, which meets modern requirements for the training of higher education students. At the same time, the effectiveness of using adaptive platforms depends on the pedagogical appropriateness of their integration into the educational process. The role of the teacher as a learning facilitator is crucial; they organise educational activities, guide students, provide methodological support and create a motivational environment.

## **2. The evolution of digital educational technologies in foreign language learning**

The evolution of digital educational technologies in the field of foreign language learning reflects the broader transformative processes underpinning the development of the information society and educational science. The initial stage of the digitalisation of language learning was linked to the introduction of electronic resources, multimedia textbooks and computer-based training programmes, which served a supplementary role to the traditional educational process. In particular, the creation of interactive multimedia textbooks made it possible to combine text, audio and video information, which helped to improve the clarity and effectiveness of language learning. The further development of digital technologies facilitated the transition to interactive

forms of learning, in which the student becomes an active participant in the educational process. The research conducted by contemporary scholars demonstrates that the use of online resources, mobile applications, web quests, case-based learning and project-based learning significantly increases the level of engagement among learners, stimulates their motivation and contributes to the development of communicative competence. The next stage in this evolution involves the development of Mobile-Assisted Language Learning (MALL), which provides access to educational content regardless of the time or place of study. The use of mobile apps, online platforms and services incorporating artificial intelligence enables the educational process to be tailored to the needs, level of preparation and learning style of learners. In this way, digital technologies create the conditions for the development of personalised learning pathways and the growth of self-directed learning.

The current stage of development of digital educational technologies is characterised by the integration of innovative solutions, in particular artificial intelligence, virtual and augmented reality (VR/AR), learning analytics and adaptive learning systems (Wen, 2024). The research shows that the use of such technologies enables the creation of interactive educational environments that closely resemble real-life linguistic contexts, thereby facilitating better vocabulary acquisition, the development of language skills, and the formation of intercultural competence. In particular, the use of augmented reality elements engages various channels of information perception and enhances the effectiveness of language material retention.

The impact of digital technologies on the motivation of learners is becoming a key focus in contemporary research (Godwin-Jones, 2018). The integration of gamification, interactive tasks, virtual environments and feedback systems helps to increase students' interest and foster a positive attitude towards learning foreign languages. As research findings indicate, digital tools provide a more flexible, personalised and adaptive educational process, which has a positive impact on learners' motivation and academic outcomes (Khraban, 2025).

To summarise the above, we can conclude that the evolution of digital educational technologies in foreign language learning is characterised by a shift from supplementary electronic resources to comprehensive adaptive learning environments that combine innovative technologies, interactive teaching methods and a personalised approach. This process reflects a shift in the pedagogical paradigm from the transmission of knowledge to its active construction, which meets the modern demands of a digital society and ensures the effective training of competitive professionals.

### **3. Adaptive interactive platforms for English language learning**

The current stage of development in higher education is characterised by the active introduction of digital technologies, which is driving a transformation in traditional approaches to foreign language teaching. Adaptive interactive platforms are becoming particularly important, as they enable personalised learning, enhance the effectiveness of language acquisition and help foster sustained motivation to learn. In this context, adaptive learning is viewed as an innovative pedagogical technology that takes into account the individual characteristics of learners, in particular their level of knowledge, cognitive characteristics, emotional state and motivational attitudes.

Adaptive interactive platforms are based on the use of data analysis algorithms that enable the modelling of individual learning pathways. The main aim of this approach is to create a personalised learning environment that dynamically adapts to the needs of each student. In

English language learning, this means the ability to tailor vocabulary, grammar and communication materials to the individual, which promotes a deeper and more conscious acquisition of knowledge. One of the key elements of adaptive platforms is adaptive content, which ensures that students are provided with tailored tasks and resources based on their responses and level of proficiency. Such content involves the use of interactive exercises, videos, podcasts and texts of varying difficulty, which helps to develop comprehensive language proficiency. This enables learners to work at their own pace, revisit challenging topics and gradually progress to more complex tasks. An equally important component is adaptive assessment, which allows the level of difficulty of tasks to be adjusted based on the student's performance. This approach helps maintain an optimal level of difficulty in the learning material, which, in turn, ensures that students remain engaged and prevents cognitive overload. Adaptive assessment also serves a diagnostic function, allowing the teacher to track students' progress and adjust the teaching process in a timely manner.

Adaptive structuring of the educational process, based on the use of learning analytics technologies, plays a key role in the structure of adaptive learning. By analysing data on student activity, performance and engagement levels, the system automatically optimises learning content and suggests the most effective learning strategies. This helps to create a flexible and dynamic, results-oriented learning environment. Interactivity is another key feature of modern educational platforms. The use of interactive teaching methods, such as role-play, discussions, group projects and simulations of communicative situations, helps to actively engage students in the learning process. In the context of learning English, this allows for the simulation of real-life situations involving professional and everyday communication, which significantly enhances the development of communicative competence (*Lapka, Shcherbak, 2025*).

Innovative technologies, in particular virtual and augmented reality, mobile applications and online platforms, create conditions for immersion in the language environment. The use of multimedia content, such as videos, audio materials and interactive exercises, ensures multi-channel information reception and promotes the development of various types of language activities: listening, reading, writing and speaking. Furthermore, such technologies stimulate the development of critical thinking, creativity and independent work skills. Particular attention should be paid to the motivational potential of adaptive interactive platforms. Personalised learning, the opportunity for self-monitoring, instant feedback and the use of gamification elements (points, levels, achievements) help to increase students' intrinsic motivation. They experience their own progress, which encourages them to continue learning and self-improvement.

The authors of the study note that the implementation of adaptive learning technologies in higher education is taking place along two complementary lines, reflecting current trends in the digital transformation of the educational process (*Lapka, Shcherbak, 2025*). The first direction involves the integration of adaptive elements into traditional classroom-based learning, where digital tools are used as means of supporting and differentiating educational activities. In this case, adaptive platforms are used to monitor students' academic progress in real time, provide personalised feedback, adjust the content of teaching materials, and organise independent study. For example, learning management systems such as Moodle, Google Classroom or Canvas allow teachers to create adaptive courses in which assignments, tests and learning resources vary depending on the students' level of preparation.

The second approach to implementing adaptive learning involves the development and implementation of specialised digital tools, online courses and platforms that enable the full personalisation of the educational process. This approach involves the creation of interactive

learning environments capable of automatically analysing students' learning activities and suggesting personalised learning pathways. Such platforms include, in particular, Duolingo, Busuu, LingQ, Rosetta Stone, as well as platforms incorporating artificial intelligence, such as ELSA Speak or Babbel, which adapt learning content according to the user's language proficiency level, their mistakes and the pace at which they absorb the material. A separate group comprises Massive Open Online Course (MOOC) platforms, such as Coursera, edX or FutureLearn, which offer adaptive English language courses, integrating elements of automated assessment, recommendation systems and learning data analytics. Such solutions help create a flexible learning environment in which education becomes continuous, accessible and as closely tailored as possible to the learner's individual needs.

#### 4. Conclusions

In the course of the study, the author analysed the theoretical foundations for the use of adaptive interactive platforms in English language teaching and examined their didactic and motivational potential within the higher education system in the context of digital transformation. This has made it possible to determine that adaptive technologies serve as an effective tool for personalising the educational process, facilitate the consideration of learners' individual educational needs, and ensure the flexibility of learning pathways. The study found that the implementation of adaptive interactive platforms has a positive impact on the development of students' intrinsic motivation to learn English, increases their engagement in the educational process, and promotes the development of autonomous learning. It was determined that the key factors influencing motivation are the personalisation of educational content, the interactivity of the educational environment, the use of gamification elements, and the provision of prompt feedback. The use of adaptive platforms makes it possible to optimise the educational process, enhance the effectiveness of language acquisition, and develop the communicative competence required for professional practice in a globalised environment. Furthermore, given the unique nature of the construct under study, it is fundamentally important not only to refine the technological aspects of adaptive platforms but also to ensure their pedagogically sound integration into the educational process. This entails developing teachers' digital competence, formulating methodological approaches to the use of adaptive tools, and creating a supportive educational environment geared towards fostering student motivation and active cognitive engagement.

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## CHALLENGES OF TEAM-BASED TRAINING FOR EDUCATORS

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### Summary

The article addresses the critical challenges of forming interdisciplinary teams in special and inclusive education and evaluates the effectiveness of team-building training for future professionals (Speech-language Therapists). Based on a literature review of international practices (2021–2025), the authors identify key barriers: role ambiguity, communication gaps between pedagogical and medical staff, lack of co-teaching skills, and emotional distance in family partnerships. The study presents the results of an updated "Team Building Training" program at Borys Grinchenko Kyiv Metropolitan University. A survey of 35 students (30.4% response rate) demonstrated a significant positive impact: 87% of respondents reported high or sufficient levels of improvement in understanding support team operations, communication (soft skills), and collaboration. Correlation analysis ( $p = 0.892$ ) confirmed a strong link between communication skills and effective teamwork. Qualitative data highlighted that students most valued interpersonal bonding and practical case-solving, confirming the training's success in bridging the gap between theoretical knowledge and collaborative practice. The empirical part of the study focuses on the internal dynamics of professional competence development through quantitative and qualitative indicators. Statistical processing of the data revealed a strong positive correlation between communication skills and the effectiveness of teamwork, as well as between collaborative interaction and a clear cognitive understanding of the support team's structure. Qualitative analysis of open-ended questions showed that students prioritized "interpersonal bonding" and "practical case modeling" as the most valuable resources for their future careers. These findings suggest that addressing the "soft skills" deficit is a primary factor in increasing the resilience of special education teams to professional burnout and ensuring a non-formal approach to inclusion.

**Key words:** team building, training, professionals of special education, inclusive education, soft skills, interdisciplinary collaboration.

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### 1. Introduction

Contemporary assistance for children with special needs extends beyond special education alone. According to Ukrainian and international research, an interdisciplinary approach

and team-based activity serve as the primary effective strategies in this field. However, scholars note a series of challenges in implementing these strategies. Within the system of training special education professionals, there are tools for developing teamwork skills, specifically training technologies. There is a need to ascertain the success of these tools and their alignment with current societal needs and global trends. These considerations helped outline **the purpose of this study**: to analyze contemporary challenges in the work of support teams and the success of addressing them through team-building training for students.

## 2. Review of literature

Research into international experiences regarding the work of support teams and the challenges their participants encounter reveals several distinct characteristics.

The works of Gilson & Biggs (2024) and Yates et al. (2025) uncover the existence of role ambiguity and difficulties in hierarchical relationships among team members. Researchers note that teacher assistants may not clearly understand their duties, while teachers often lack sufficient experience in interacting with and managing another adult in the classroom. This situation creates emotional tension between the adult team members, which hinders the child's learning (Gilson & Biggs, 2024; Yates et al., 2025).

Communication difficulties among team members are identified by Campbell et al. (2025), Kungwane & Boaduo (2021), and Sanford et al. (2022), specifically barriers encountered while developing a unified strategy for child support between pedagogical and medical professionals (Campbell et al., 2025; Kungwane & Boaduo 2021; Sanford et al. 2022).

The work of Brooks et al. (2023) draws attention to obstacles in collaborating with parents: emotional barriers regarding the parents' state, which leads to distancing or conflict instead of partnership (Brooks et al., 2023).

Research by Weiss & Rodgers (2025) reveals conceptual challenges such as the lack of co-teaching skills among educators. Consequently, the child does not participate actively in classroom activities, and inclusion remains formal, losing its core meaning (Weiss, M. P., & Rodgers, 2025). Another deficit regarding social competencies was identified by Shkoda et al. (2022): even young professionals do not possess a sufficient level of soft skills. An educator who cannot communicate successfully themselves is unlikely to effectively teach a child good communication. This aspect causes low resilience of the support team to emotional burnout (Shkoda et al., 2022).

Analysis of INJOE (2025) data and research in the Netherlands (Willemse et al., 2023) reveals organizational challenges in the work of support teams within the inclusive educational space. Some schools lack holistic school-wide support for inclusion; therefore, a specialist in such a classroom remains alone and in a certain state of isolation with the difficulties of such work. The absence of systemic administrative support leads to the fading of inclusive practice (Willemse et al., 2023).

The identified difficulties and the generalization of teaching experience in the "Team Building Training" discipline for students specializing in 016 Special Education (Speech and Language Therapist) led to a revision and update of the curriculum. Professional-oriented practical sessions were introduced. Specifically, exercises for modeling introduction situations and discussions between support team members and the family/child based on real cases were added. The number of exercises for participants' introduction and for improving interaction skills (both verbal and non-verbal) was increased. Exercises for developing skills in leading

discussions and formulating arguments and counter-arguments on selected topics were also utilized.

To evaluate the effectiveness of the changes made to the curriculum after the training, a student survey was conducted. The questionnaire was formulated according to the following parameters: understanding of the support team's work in an educational institution (cognitive aspect), improvement of communication skills with peers (soft skills), and improvement of cooperation with peers (interaction efficiency). Two open-ended questions were added: "What did you remember most during the training?" and "What was the benefit for you in completing the training?". The results of the survey are presented below.

### 3. Methodology

A survey was conducted among undergraduate (Bachelor's level) students in their 2nd and 3rd years of study, specializing in Special Education (Speech and Language Therapist) at the Faculty of Psychology, Social Work, and Special Education of Borys Grinchenko Kyiv Metropolitan University. The survey included closed-ended questions with answer options evaluated on a five-point scale, where: 1 – low level (not changed at all), 2 – insufficient (changed slightly), 3 – average (improved moderately), 4 – sufficient (improved), 5 – high level (improved significantly). Two open-ended questions were also used, the answers to which were analyzed based on content and quantity. The survey was anonymous and did not collect personal information.

### 4. Results

35 respondents participated in the survey out of a total of 115 2nd and 3rd-year students. Thus, 30.4% agreed to express their opinion and evaluate the success of the training. The quantitative results of the participants' effectiveness are presented in Table 1 across three parameters: understanding of support team operations, communication improvement, and cooperation improvement.

Table 1

**The effectiveness of the "Team Building Training" according to the evaluation of applicants**

<b>№</b>	<b>Parameters</b>	<b>Low level</b>	<b>Insufficient level</b>	<b>Average level</b>	<b>Sufficient level</b>	<b>High level</b>
1	Understanding of the work of the support team in an educational institution	0	3	9	13	75
2	Improving communication skills with classmates	0	3	12	22	63
3	Improving cooperation with classmates	0	6	6	25	63
	<b>Together</b>	<b>0</b>	<b>4</b>	<b>9</b>	<b>20</b>	<b>67</b>

The data in the table allow us to state that in general 87% of respondents assessed their achievements at a sufficient and high level, 9% at an average level, and 4% at an insufficient level. It should be noted that the available low-level assessments for all parameters are insignificant 3% and 6%. Such data indicate an improvement at an average and higher level of understanding of the support team's work, communication skills, and cooperation with classmates.

The obtained data were analyzed for the presence of a correlation relationship by the Pearson coefficient at a significance level of  $p < 0.05$ , which are presented in Table 2.

Table 2

### Correlation between evaluation parameters

Parameters	1	2	3
1	-		
2	0.795	-	
3	0.823	0.892	-

The obtained data showed a strong positive relationship between all parameters. The strongest relationship was found between "improvement of communication skills with classmates" and "improvement of cooperation with classmates" 0.892 at  $p < 0.05$ . With a slightly lower correlation value (0.823 at  $p < 0.05$ ), a strong positive relationship was established between "improvement of cooperation with classmates" and "understandability of the work of the support team". A smaller degree of positive correlation (0.795 at  $p < 0.05$ ) was determined between "understandability of the work of the support team" and "improvement of communication skills with classmates". Thus, we can state that students significantly improved their communication skills and team interaction with classmates and improved their understanding of the work of the support team in the educational institution.

The analysis of respondents' answers to open questions is presented in Table 3.

Table 3

### Distribution by rank of respondents' answers to open-ended questions

Answer rank	What was most memorable?	What was the benefit to me?
1	Getting to know your classmates	Getting to know and bond with fellow classmates
2	Group building exercises	Improving communication skills (flexibility, openness, expressing your thoughts more clearly)
3	Case discussions, simulation of the support team	New knowledge about the support team, understanding different aspects of its work

The tables show that among the survey participants' answers, the most common options are "getting to know classmates", "getting to know and getting closer to classmates". According to the students, the training allowed them to improve their communication skills (soft skills): to be more open and flexible during communication, to express their thoughts more clearly. The third rank was given to answers indicating the importance of practical case studies, modeling real actions of the support team members.

The results of the survey of higher education students who participated in the "Team Building Training" course have the following features. The sample of respondents was 30.4% (35 people) of the total number of students who completed this training. This level of sampling

is a representative indicator for the educational industry set by SurveyMonkey, SurveyAnyplace, HubSpot (*What's the Industry Standard...*, 2025) and sufficient to reflect the opinions of its participants. The survey was attended by female students of 2-3 years of study at the first (bachelor's) level of higher education.

According to the answers to the questions on a 5-point evaluation system, it can be summarized that the respondents at a sufficient and high level increased their understanding of the work of the support team in the educational institution (88%), their communication skills (85%) and cooperation (88%) with classmates.

Qualitative analysis of the answers to the open-ended question about what was most memorable during the study and what benefit the study had for the student showed the following differences. The higher rank (more mentions) was given to the answers about improving and deepening acquaintance between group participants, emotional rapprochement. This result demonstrates the presence of positive interpersonal changes between applicants.

The second rank among the answers was given to those indicating an increase in communication skills (soft skills), which are part of the structure of key competencies of this specialty. The ability to communicate effectively will increase the competitiveness of special education in the labor market.

The answers of applicants about improving the understanding and awareness of the essence of the work of the support team in educational institutions, which includes a speech therapist, received the third rank among all options. This aspect testifies in favor of improving the cognitive component of learning outcomes in the discipline "Team Building Training".

Correlation analysis of the data demonstrated a strong relationship between "improvement of communication skills with classmates" and "improvement of cooperation with classmates" 0.892 at  $p < 0.05$ . These data illustrate the relationship between communication skills and cooperation skills, which are key for teamwork.

## 5. Discussion

The findings of this study confirm that the integration of team-building training into the curriculum for future Speech and Language Therapists directly addresses the systemic gaps identified in contemporary inclusive education research.

*Addressing Role Ambiguity and Collaboration Barriers.* Our results show that 88% of students significantly improved their understanding of the support team's operations. This is particularly relevant in light of research by Gilson & Biggs (2024) and Yates et al. (2025), who emphasize that role ambiguity between teachers and assistants is a primary source of tension in inclusive settings. By using the Belbin Team Role test and modeling real-world cases, our training provided students with a structured framework to navigate these hierarchical and functional complexities. The strong correlation between cognitive understanding and interaction efficiency ( $p = 0.823$ ) suggests that when students grasp the "logics" of a support team, their practical readiness for collaboration increases proportionally.

*The Primacy of Soft Skills in Professional Longevity.* A key highlight of the study is the exceptionally strong correlation between communication skills and teamwork success ( $p = 0.892$ ). This aligns with the arguments of Shkoda et al. (2022) regarding teamwork as a vital component of social competence. The fact that students ranked "interpersonal bonding" and "flexibility" as the most valuable outcomes supports the idea that for a Speech and Language Therapist, communication is not merely a tool for therapy but a fundamental survival skill

within a multidisciplinary team. As Weiss & Rodgers (2025) noted, the transition to genuine co-teaching requires more than technical knowledge; it requires the relational depth that our training aimed to cultivate.

*Bridging the "Medical-Pedagogical" Gap.* The communication barriers between medical and pedagogical staff described by Campbell et al. (2025) and Sanford et al. (2022) were addressed through the practical modeling of IRC (Inclusion-Resource Center) cases. Our qualitative data, where students highlighted "modeling real actions" as a top-tier benefit, suggests that simulation-based learning is an effective antidote to the "siloed" working culture. By practicing interdisciplinary dialogue in a safe training environment, future specialists develop a "common language" before entering professional practice.

*Resilience to Burnout through School-Wide Support.* Finally, the organizational challenges and isolation mentioned by Willemse et al. (2023) and INJOE (2025) underscore the importance of the emotional z-score of the team. The "emotional bonding" reported by our respondents is not just a pleasant side effect; it is a protective factor. When students feel part of a "Learning Community" (Yates & Hord, 2023), they are less likely to experience the isolation that often leads to the fading of inclusive practices.

*Limitations and Future Directions.* While the response rate of 30.4% is consistent with industry standards for voluntary surveys (SurveyMonkey, 2025), the sample was exclusively female, which reflects the current demographics of the Speech and Language Therapy field in Ukraine but may limit the generalizability of the findings regarding gender-specific team dynamics. Future research should explore the long-term impact of such training by tracking these students during their professional internship phase to see how these "soft skills" translate into sustained inclusive practices.

## 6. Conclusions

The generalization of the obtained quantitative and qualitative data of the survey of students participating in the "Team Building Training" allows us to come to the following conclusions.

The educational discipline "Team Building Training" is an effective tool for overcoming the gap between theoretical knowledge and practical challenges of inclusion. The high level of satisfaction (87% of respondents assessed the results at sufficient and high levels) indicates that the content of the program meets the current needs of future specialists. The identified strong correlation ( $p=0.892$ ) between communication skills and cooperation efficiency proves that the development of soft skills is the foundation for the professional stability of the support team.

The main factors of the success of the updated program were:

*Practical-oriented modeling.* The processing of real cases and role-playing games allowed students to reduce the level of anxiety about future professional interaction and better understand the structure of hierarchical relationships in the team.

*Social and psychological capital.* The highest ranking in the students' responses ("acquaintance and emotional closeness") emphasizes that creating a safe interpersonal space is a necessary condition for the formation of professional identity.

*Interactivity and flexibility.* The use of non-verbal exercises and discussion panels contributed to the development of adaptability, which is critically important in working with children with SEN and their families.

Despite the positive results, the analysis identified areas for further development:

*Strengthening the Co-teaching block:* Given global trends, it is worth adding more exercises to practice specific co-teaching techniques in an inclusive classroom.

*Working with conflict scenarios:* In response to the challenges of role ambiguity, it is advisable to include blocks on mediation and resolving hierarchical conflicts within the "teacher-assistant" team.

*Systematic involvement:* The survey participation rate (30.4%), although representative, indicates the need to find additional methods of motivating students to reflect and provide feedback.

The specified content features and trends are not exhaustive and require further clarification when developing other components of the readiness of future special education professionals to support students with autism.

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## COHESION AND COHERENCE IN INTERPRETED SPEECH: CONTEMPORARY APPROACHES AND INTERPRETATIVE STRATEGIES

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### Summary

The text examines cohesion and coherence as key categories of text organization, with a focus on their transformation in oral translation. Traditionally, cohesion – defined by Halliday and Hasan as a system of formal linguistic ties – has been treated as a structural property of well-formed texts. However, contemporary research increasingly views cohesion as a flexible, context-dependent resource shaped by genre, communicative purpose, and cognitive constraints. In oral translation, where processing is linear and time-pressured, cohesive markers are often reduced or restructured.

In contrast, coherence is understood as a cognitive phenomenon emerging from the interaction between text, context, and the interpreter's mental models. It ensures meaningful integration of information and remains central even when formal cohesion is weakened. Studies show that in interpreting, coherence is typically preserved or enhanced despite a decrease in explicit cohesive devices.

The text also highlights translation universals such as explicitation and simplification, which dynamically affect cohesion. Gile's Effort Model explains these changes as a result of limited cognitive resources. Both international and Ukrainian research demonstrate a shift toward a cognitive-discursive approach, emphasizing the interpreter's active role in meaning construction. Ultimately, coherence is identified as the dominant category in oral translation, while cohesion plays a secondary, adaptive role.

**Key words:** interpreting; discourse organization; text connectivity; cognitive load; explicitation; simplification; mental models; translation universals; reference relations; lexical ties; discourse processing; communicative purpose.

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### 1. Introduction

In contemporary linguistics, the issue of textual cohesion occupies a central position, as it determines the ability of speech to fulfil a communicative function. Within the fields of translation studies and text linguistics, the categories of cohesion and coherence are traditionally regarded as fundamental parameters of discourse organisation.

At the same time, in the context of interpreting, these categories undergo significant transformations, due to cognitive constraints, the linear nature of speech, and the need for rapid decision-making. This highlights the need to rethink their relationship.

## 2. Cohesion and coherence in international research

The classical understanding of cohesion was formulated in the works of M.A.K. Halliday and Ruqaiya Hasan, who defined it as a system of formal links that ensure textual unity (*Halliday, Hasan, 1976*). Within systemic-functional linguistics, cohesion is viewed as an objectively fixed level of textual organisation that can be described and classified. The typology they proposed – reference, substitution, ellipsis, conjunction and lexical cohesion – became the foundation for further research and retains its heuristic value to this day.

At the same time, a certain methodological tension is already evident within this concept: cohesion is described as a formal mechanism of coherence, yet its functioning cannot be fully explained without taking semantics and context into account. This led to the further development of the theory towards the integration of cognitive factors.

Recent international research has seen a gradual re-evaluation of the status of cohesion. It is increasingly viewed not as a universal characteristic of a ‘well-formed text’, but as a variable parameter dependent on genre, register and communicative conditions (*Krein-Kühle, 2021*). This approach effectively shifts the emphasis from normativity to functionality: what matters is not how saturated the text is with cohesion markers, but how well they serve the communicative purpose.

This trend is particularly evident in studies of spoken language and translation, where excessive formalisation can even hinder comprehension. Thus, cohesion begins to be interpreted as an adaptive resource rather than as a prerequisite for textuality.

Unlike cohesion, coherence in the international tradition has, from the outset, had a more abstract and cognitively oriented character. In the works of Teun A. van Dijk, it is defined as the result of constructing mental models that integrate information into a single semantic structure (*van Dijk, 2019*). This approach fundamentally shifts the focus of analysis: instead of the text as the object of study, the process of its interpretation takes centre stage.

This means that coherence is not a property of the text in the strict sense, but arises as a result of the interaction between the text, the context and the recipient’s cognitive resources. Accordingly, the same text may be more or less coherent depending on the conditions of reception. This position has important implications for translation studies, as it emphasises the role of the translator as an active interpreter, rather than merely a conveyor of linguistic forms.

Within the field of contemporary translation studies, Mona Baker has made a significant contribution to understanding the transformation of cohesion by formulating the concept of translation universals. In particular, phenomena such as explication and simplification (*Baker, 2018*) directly influence the structure of cohesive links. Explication involves adding links that were implicit in the original, whilst simplification often leads to the reduction of complex syntactic and lexical structures.

It is important to note that these processes are not mutually exclusive but coexist within the translation process. As a result, the translated text may simultaneously demonstrate both an increase and a decrease in the level of cohesion in its various segments. This indicates that cohesion in translation is dynamic and uneven.

Daniel Gile’s cognitive effort model (*Gile, 2020*) plays a particular role in explaining this dynamic. According to this model, the translator works under conditions of limited cognitive resources, which are distributed between perception, memory and speech production. Under such conditions, there is a need for optimisation, which manifests itself, in particular, in the reduction of redundant cohesive elements.

This approach helps explain why a tendency towards the reduction of formal cohesion is observed specifically in interpreting: such elements are regarded as secondary compared to the conveyance of meaning. At the same time, this does not imply a loss of cohesion, as its function is taken over by coherence.

Recent empirical studies (*Li & Gao, 2025*) confirm this hypothesis, demonstrating that in interpreting there is a systematic reduction in the level of cohesion whilst coherence is maintained or even enhanced. This result indicates the asymmetrical nature of the interaction between these categories and calls into question the traditional view of their interdependence.

From an analytical point of view, this allows us to formulate several fundamental propositions. Firstly, cohesion is not a necessary condition for coherence, but merely one of the possible means of achieving it. Secondly, coherence has priority in the communication process, as it is precisely this that ensures the interpretability of the text. Thirdly, in translated discourse, there is a redistribution of functions between these categories: formal links may be reduced, but semantic unity is preserved.

Thus, in the international academic tradition, a clear evolution can be traced from formal-structural text analysis to a cognitive-discursive approach. This shift is of fundamental importance for the study of interpreting, as it allows for a more adequate description of its specific features and an explanation of the transformations of coherence in real-time conditions.

### 3. Rethinking cohesion and coherence in Ukrainian studies

In contemporary Ukrainian linguistics and translation studies, the study of cohesion and coherence is developing in line with pan-European trends, yet at the same time exhibits a number of specific features resulting from the combination of the structural-semantic tradition with the active integration of the cognitive approach. This leads to a gradual shift from the description of formal links to their functional and interpretative understanding.

In most contemporary Ukrainian studies, cohesion is defined as a system of linguistic devices that ensure the formal coherence of a text, whilst emphasising its multi-level nature. Thus, in the work by Molodtsova, Rusachenko and Vydaychuk (*2025*), cohesion is viewed as an integrative mechanism encompassing not only grammatical but also lexical-semantic links, in particular repetitions, synonymic series, thematic chains and hyponymic relations. The authors emphasise that it is lexical cohesion that plays a key role in forming the thematic integrity of a text, as it is directly linked to the structure of the content.

Analytically, it is significant that in this approach, cohesion is no longer treated as a purely formal level of text organisation. It is viewed as a functionally determined tool that serves a communicative purpose. This interpretation brings Ukrainian research closer to contemporary foreign concepts, where cohesion is understood as an adaptive resource rather than a rigid structural norm.

A separate strand of Ukrainian research is linked to the study of referential and coreferential links. Darchuk's (*2022*) work demonstrates that coreference is one of the key mechanisms for ensuring the stability of textual interpretation. The author argues that a breach of referential consistency leads to a reduction in the comprehensibility of the text, even in the presence of other cohesion markers. From an analytical perspective, this indicates a hierarchy among cohesion devices: not all of them are equally important for maintaining coherence.

In the context of translation studies, this proposition takes on particular significance, as it is precisely referential shifts that are one of the main causes of the loss of coherence in translated

discourse. Thus, Ukrainian research effectively leads to the conclusion that cohesion has an internal hierarchy of priorities, where its individual components perform more critical functions.

Alongside this, a clear trend towards rethinking coherence as a central category of text can be observed in the contemporary Ukrainian academic tradition. In a number of studies, it is defined as semantic unity, formed not only through textual links but also as a result of the recipient's cognitive activity. This brings the Ukrainian approach closer to the cognitive-discursive paradigm presented in foreign works.

In particular, contemporary publications emphasise that coherence depends on interpretative strategies, background knowledge and communicative context. It is viewed as the result of the interaction between text and consciousness, which helps explain the variability in its perception. Such an approach is of fundamental importance for translation studies, as it emphasises the active role of the translator as an interpreter (*Koroleva, Zhmayeva, Popova, 2017*).

An important direction in the development of Ukrainian research is the attempt to formalise coherence. In their work, Pogorily and Kramov (2020) propose a method for its quantitative assessment based on the semantic cohesion between sentences. This approach demonstrates a desire to integrate linguistic and computational methods, opening up new perspectives for the study of textual cohesion.

Analytically, this means that Ukrainian scholarship is gradually shifting from qualitative description to quantitative analysis, in line with global trends. At the same time, such approaches require further development, as coherence as a cognitive category cannot be fully reduced to formal indicators.

Particular attention in Ukrainian research has been paid to interpreting as a specific type of discursive activity. In the work by Povoroznyuk and Podugolnikova (2025), interpreting is viewed as a process of deverbalisation and reconstruction of meaning, involving the manipulation of semantic structures rather than linguistic forms. This approach is directly linked to the concept of coherence, as it is precisely this that ensures the integration of information during the translation process.

From an analytical point of view, this allows us to draw an important conclusion: in translated speech, cohesion loses its status as a primary category, yielding to coherence. The translator does not reproduce the text as a formal structure, but reconstructs it as a semantic model.

A comparative analysis of Ukrainian studies also reveals a trend towards interdisciplinarity. Contemporary works combine approaches from linguistics, cognitive science, translation studies and computational linguistics. This allows for a more comprehensive description of the nature of cohesion and its functioning in various types of discourse.

#### 4. Conclusions

This study enables us to summarise current understanding of cohesion and coherence in interpreted speech and to draw a number of key conclusions.

First and foremost, it has been established that cohesion and coherence are interrelated but not equivalent categories. Cohesion ensures the formal organisation of the text, whilst coherence is responsible for its semantic unity and interpretability. In the contemporary scientific paradigm, there is a clear shift in emphasis from formal aspects to cognitive ones.

It has been demonstrated that in the context of interpreting, cohesion undergoes a systematic transformation, manifested in its reduction, restructuring and variability. This is due to

the limitations of cognitive resources and the need to optimise speech. At the same time, coherence is maintained through cognitive and pragmatic mechanisms that ensure the integration of information.

A comparative analysis of foreign and Ukrainian studies has shown that both academic traditions demonstrate convergence towards a cognitive-discursive approach. At the same time, Ukrainian studies are characterised by a more pronounced emphasis on the functional-pragmatic aspect and interdisciplinarity.

Of particular significance is the role of the translator as an active agent of interpretation, who does not mechanically reproduce the text but reconstructs it in accordance with the conditions of communication. This confirms that translation is not merely a linguistic but, above all, a cognitive process.

In summary, it can be argued that coherence is the dominant category of translated spoken language, whilst cohesion performs a supporting function and is subject to functional adaptation. This has important implications for translation theory, particularly for the evaluation of translation quality and the training of translators.

Prospects for further research relate to the development of experimental methods for analysing cognitive processes in translation, as well as to the study of coherence in multimodal and digital discourse.

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## GENRE AND THEMATIC INNOVATION OF TAWFIQ AL-HAKIM SHORT PROSE IN THE NEW EGYPTIAN SCHOOL IN LITERATURE

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### Summary

The article is devoted to the study of the artistic and stylistic features of the stories of Tawfiq al-Hakim. Tawfiq al-Hakim is one of the most famous Arab prose writers and playwrights of the 20th century, a representative of modern Egyptian literature. He was an innovator in both poetic and epic and dramaturgical spheres. In particular, al-Hakim was one of the first in Egypt to test the free verse form, thereby demonstrating his creative talent and artistic ingenuity. In the prose sphere, he is considered the founder of the national novel, representing with his work not only this genre, but also a variety of other epic forms, including those that were not previously found in the Middle East: essays, short stories, dramas, the genre of the diary novel and the novel in letters. His stories combine philosophical reflections, symbolism, social satire, and psychologism. An important place in Tawfiq al-Hakim's work is occupied by philosophical stories and novels, which raise questions about the meaning of human life, the interaction between the individual and society, as well as the moral responsibility of a man of science. The writer combined artistic prose with deep reflections on the spiritual state of man in the modern world. In some works, the writer shows the danger of a situation when technical progress outpaces the moral development of man. Therefore, he emphasizes the need to combine knowledge with ethical values.

**Key words:** Arabic literature, story, theme, problem, dialogue, fiction, irony.

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### 1. Introduction

The multifaceted work of one of the most famous representatives of the new Egyptian school in literature, Tawfiq al-Hakim (1898–1987), has been attracting the attention of researchers for a long time, it is widely known in the Middle East, has become the focus among European literary studies and scientists of the former Soviet Union, where mainly focused on the artist's dramaturgical work, his translation and interpretation (Velychko, 2024). A brief critical review of the writer's work is given in the Ukrainian Soviet Encyclopedia (Kochubei, 1984: 155). Among the English-language publications of the last decades, the monograph by William M. Hutchins (2003) deserves our attention. The author makes a detailed excursus into the multifaceted literary world of Tawfiq al-Hakim and represents an extremely detailed literary analysis of his work.

The works of Tawfiq Al-Hakim – a novelist, dramatist, critic, are extremely popular in Egypt and other Arab countries. The most famous of them are the novel “The Return of the Spirit”, the plays “The People of the Cave”, “Shahrazad”, the stories “The Maze of Justice”, “Bird of the East” and “The Color of Life”.

“The Return of the Spirit” by T. al-Hakim occupies a special place in the context of Egyptian prose. M. Salye, a researcher, translator of the novel into Russian and the author of the preface defines this work as the most interesting example of new Egyptian literature, a turning point in the development of the Egyptian novel, evidence of the maturity of the genre (Velyhcko, 2024).

In the disclosure of the literary evolution and worldview of T. al-Hakim, his interpretation of the art essence and tasks, the novel “The Color of Life” (1943) is of great importance, in which the humanist writer's dream of complete harmony in society is expressed.

Drama occupies a significant place in Tawfiq al-Hakim's work, many of his plays are widely known outside of Egypt. The dramatist's focus is on both socio-political and abstract-philosophical questions.

During his student years, Tawfiq al-Hakim creates fashionable, but not too powerful in the artistic sense, musical plays, vaudevilles, and comedies. The most famous comedy “Modern Woman” (staged in 1924) raises the question of women's role in the life of Egyptian society. The play author having a subtle sense of humor, skilfully uses the vernacular.

The works of a mature dramatist written in the 1930s are of the highest interest. In the play “The People of the Cave” (1933), the author uses mythological material, namely the legend of the seven youths – the first Christians, who have been hiding from the persecution of the Roman emperor and slept in cave shelter for 300 years. They came back to life when the Roman emperors themselves became Christians. In his play, Tawfiq Al-Hakim mainly preserves the content of the legend, significantly changing only its ending.

An admirer of the drama of H. Ibsen and M. Maeterlinck, Tawfik al-Hakim was largely guided by the ideological and aesthetic directions of their works. He preaches the pointlessness of fighting with *fate*. The writer does not see an opportunity to restore ties with life if they were lost. However, its positive idea is hidden in the hopeless end of the play.

Tawfiq al-Hakim, shocked by the backwardness of Egypt after his studies in France and in a hurry to stir up his compatriots, to show them what awaits the nation that has stopped in its development.

A significant number of reviews, critical essays (*Al-Moselkhi*, 1946; *Starkey* 1987; *Kubaylat*, 2004), literary publications and even monographs (*Usmanov* 1968; *Yunusov* 1976; *al Shallal E.* 2022) are devoted to the analysis of the writer's novels and philosophical dramas, but studies of the writer's short prose are clearly lacking (*Long*, 1979). Undeservedly left out of the spotlight, small epic genres carry a significant semantic load, highlight the eternal questions of the meaning of human life, crime and punishment, genius and madness. Acquaintance with translations of these works into Ukrainian is of high interest. Therefore, **the purpose** of this article is to clarify the main ideological-aesthetic vectors, figurative and pictorial-expressive dominants of T. al-Hakim's short prose, to determine the specifics of the author's artistic understanding of the main ontological problems of humanity – life and death.

**The relevance of the study** lies in the need to develop an idea of the interaction of tradition and innovation, concrete-historical and ontological-existential in the writer's work, in-depth and comprehensive understanding of both his individual works of short prose and creative work in general.

**The object of the research** is the writer's stories included in the collection “Show me God” (1968).

In order to understand the place of short prose in Tawfiq al-Hakim's artistic output, we consider it necessary to outline some important aspects of his life and work.

## 2. Tawfiq al-Hakim is one of the most famous Arab prose writers and playwrights of the 20th century

The future writer and playwright was born in the city of Alexandria in the family of a high-ranking official, studied at the Higher Law School, where his interest in the theater was simultaneously formed. After graduating from the Sorbonne Law Faculty, Tawfiq al-Hakim began his independent professional life by working as an investigator in an Egyptian province. It allowed him to see the world around him with the keen, observant eye of a lawyer. The works of Tawfiq al-Hakim, a novelist, playwright, and critic, are extremely popular in Egypt and other Arab countries.

The influence of European values, which al-Hakim experienced during his stay in France, was reflected in the emergence of new artistic forms for Arabic literature, plot elements of the work (introduction, intrigue, culmination) (*Rybalkin*, 2016: 17). The circle of the writer's creative interests is unusually broad – poetry, prose, drama. He was an innovator in the poetic, epic, and drama spheres. In particular, al-Hakim was one of the first in Egypt to test the form of free verse, thus proving his creative talent and artistic ingenuity. In the prose field, he is considered the founder of the national novel, representing with his work not only this genre, but also a variety of other epic forms, among which there were those that had not been found before in the literature of the countries of the Middle East: essays, short stories, dramas, genre of diary-novel and novel in letters.

Al-Hakim is considered one of the founders of Egyptian and Arab drama: he created more than 80 plays, which are staged in many Arab countries, theaters in Europe and America, filmed in movies and on TV. His heritage in short prose is to some degree related to drama, since the first examples in this genre, created by the author primarily for reading, not for stage performance, became known in literary circles as the “intellectual theater” of Tawfiq al-Hakim, although he refused to call these works plays and published them in individual books (*Starkey*, 2006).

In order to determine the genre features of these works, let's pay attention to two factors: on the one hand, these are prose texts in which the features of the narrative genre prevail: small volume, monotony, laconic descriptions, emphasis on certain details, creation of the effect of authenticity, uninvitedness of the story; on the other hand, it can be noted that in these works there are also signs of the novel genre (which, however, is sometimes interpreted as a variant of the same story), namely, plot dynamism, an element of situational surprise, especially in the context of the work's resolution.

In the center of attention of Tawfiq al-Hakim are both socio-political and abstract-philosophical questions. An admirer of the drama of H. Ibsen and M. Maeterlinck, Tawfiq al-Hakim was largely guided by the ideological and aesthetic directions of their works (*Toelle, Zakhari*, 2014). That is why the ontological problems of human existence come to the fore in his work – questions of life and death, fate and destiny, etc.

## 3. The interaction between the individual and society

In particular, one of the main motives of his works is the futility of man's struggle with fate. Tawfiq al-Hakim's story “Master Azrael” is devoted to the theme of inevitability and capriciousness of fate. In the title, the author uses a play on words, because Azrael in Islam and Judaism is called the angel of death, who helps the souls of dead people to move to a better

world. From the first lines of the work, the reader immerses himself in the problem of the eternal struggle between life and death: “Life is stronger than death. This is a fact that is clear to everyone who has carefully observed the events of at least one day of their existence. Death waits us at every step, and, more often than not, we win and remain unharmed. Because they – life and death – play hide-and-peek<sup>1</sup> (*al-Hakīm*, 1968:105).

The action of the story takes place in the 30s of the 20<sup>th</sup> century, when there were no effective drugs against infectious diseases, and such a disease as, for example, malaria could become fatal for a person. Therefore, Tawfiq al-Hakim further writes:

“Our souls, the souls of ordinary mortals, depend on everything, even on mosquitoes and flies, on the bus driver, they can even depend on the fingers of the barber who shaves us and does our hair. A person at such moments is incredibly far from any evil thoughts (*ibid.*).

Already in the next paragraphs of the story, the playwright confirms the folk wisdom that disaster comes unexpectedly: “In the summer, I went to the barber to shave. I was in a good mood. Peasants passed me with camels loaded with watermelons. I sat down in the barber's chair, closed my eyes and thought about everything wonderful in this life. In the barber shop, a fan was blowing on me, and the barber himself was standing nearby and sharpening a dangerous blade” (*ibid.*:106).

The mention of a household and seemingly secondary object like a razor blade will later have its own logical explanation in the plot of the work. The relaxed state of the main character is in sharp contrast with his subsequent conversation with the hairdresser:

“Then he covered my head with his hands and whispered: – I am sorry! It is immediately obvious that you are a respectable and decent person. I have a request for you. – Well, if you think that I look like a mad patient, then thank you very much..! – For God's sake, I am sorry! I did not want to offend you at all. It is just that you seemed to me to be a very influential person, and I thought that you might know some of the doctors there. My brother is being treated there, and I would like to take him from there” (*ibid.*).

Tawfiq al-Hakim, with the words of his characters, reflects on the fine line that lies between fantasy and reality, between adequacy and madness:

“So what, he was out of his mind, but now he has recovered? – But he was not a dangerous madman, he was unfairly dragged to crazed. And in fact, he just has a very vivid imagination, like many other people. – And what did he do to get in a madhouse? – Nothing special, I tell you” (*ibid.*:107).

The writer pays considerable attention to the problem of the influence of external factors on a person, the close relationship between physiological and psychological factors:

“My brother was a hairdresser, just like me. One day he was quietly working. It was summer and it was terribly hot. Like the rest of the people in such conditions, he really wanted a watermelon to satisfy his thirst. And at the moment when he was doing the client's hair, he had the thought that the client's head was nothing but a ripe, juicy watermelon and really wanted to taste it, to cut it off... – What to cut off? – Cut a piece of watermelon, in other words the client's head” (*ibid.*).

The dual nature of human being, the combination of objective and subjective, angelic and demonic principles in it is revealed in the following lines of the heroes “...And he said it so calmly that my blood ran cold. My head was in his hands, and the blade... it was shining, it was so sharp. I hid from the fear, then collected my thoughts and said quite restrainedly: – Probably,

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<sup>1</sup> Here and further, quotations from the works of Tawfiq al-Hakim are presented in a free translation by the author of the article.

your brother is an exception. You are not like he is. – To be honest, it is a family thing for us. I myself sometimes have such associations, especially during the watermelon harvest. So I believe that my brother can be understood” (ibid.: 108).

So, as we can see, the physiological state directly conditions thinking, determines the direction of fantasies, stimulates an innate tendency, exposes thoughts:

“At that moment, his eyes lit up with a strange shine, similar to the blade of a dangerous razor. I realized that my end had come. I closed my eyes not for a pleasant slumber, but in anticipation of death” (ibid.).

In the context the idea that the mind should control thoughts and feelings is actualized, and prudence can be considered a gift, the same as the talent of an artist. Here, the writer indirectly agrees with the words of the Arab medieval poet al-Mutanabbi: “The fact that I have so much diligence, passion and desire to reach great heights is absolute luck, it is in itself a gift from God” (*Subkh, Sushko*, 2020:82).

The final of the story is quite optimistic and even comical. Tawfiq al-Hakim perfectly masters the art of “fake seriousness”. Verbal grotesque, humorous associations, comic comparisons represent the author's attitude towards the image object:

“I opened my eyes only when I felt that he was spraying me with cologne. – Done! I took off with the speed of a comet. I felt like I was born again. I quickly paid the hairdresser. He again asked me to help with his brother. However, I no longer understood something that he was telling me. And only when I was on the street, I breathed a sigh of relief and made a promise to myself never to go to the hairdressers again, especially when the watermelons are ripening” (al-Hakīm 1968, 109). It should also be noted that Tawfiq al-Hakim raises the topic of madness, individual differences in the collective were touched in another of his work – a play called “River of Madness”. The author resorts to a fairy tale, which tells about a fictional kingdom and the main acting characters: the King, the First Minister, the Queen, the Priest, the Doctor. The king had a dream that terrible things happened to the river that flows in the kingdom – the water in it got a purple hue, and snakes fall from the sky into this water, releasing their poison into the river. The King hears a voice that strongly advises him not to drink poisoned water, because a consequence can be madness. The King tells the Prime Minister about his nightmare and finds out that it was not a dream, but a complete reality. And the worst is that almost all the inhabitants of the kingdom have managed to drink poisonous water and now have all the signs of mental disorders. In desperation, the King asks to call first the Priest, and then the Chief Physician of the kingdom to a meeting, but it is already too late – both the Doctor and the Priest, after tasting the water from the river went crazy. There were only two people in the whole kingdom who have not been affected by the poisonous water: the King and the Minister, but the Queen strongly persuades her husband to drink the water, as he looks inadequate compared to the others.

Analyzing the following lines, we see the problem of a person's existence in society, the relationship between the individual and the collective is concentrated in the words of the Minister: “We know that we are well-advised, and everyone else has gone crazy, but we can do nothing” (*al-Hakīm*, 2019:7).

#### 4. The problem of responsibility of science and the scientist

Events of the stories “For the Gang!” and “Amazing Invention” take place in the United States of America. Tawfiq al-Hakim did not accidentally choose this country as the setting for

some of his works, since many of his contemporaries associated America with heaven on Earth. It is in such idyllic conditions develop that dramatic events of short, but so meaningful stories. Despite the fact that in the work entitled "For the Gang!" the main character is a real historical figure of the 20<sup>th</sup> century, all plot vicissitudes are invented and any coincidence with real events is accidental. The story begins quite expressively: "Sensational news!!! The members of the Union of Atomic workers of the USA have disappeared! This is how journalists commented situation: the enemy country's intelligence has carried out a secret special operation to steal the best minds of America" (*al-Hakīm*, 1968:152)

Here the author refers to the Soviet Union, alluding to the period of the Cold War between the two countries, and further explains the situation: "However, what actually happened was something that no one could even think about. This is how it was. A man sits in the living room near the fireplace, reads newspapers. And suddenly his attention is drawn to a message: the head of the Union of Atomic Scientists of the United States of America announced that new research makes it possible to create a bomb ten times more powerful than the one that was dropped on the cities of Hiroshima and Nagasaki in just one year" (*al-Hakīm*, 1968, 153). Thus, Tawfiq al-Hakim raises the urgent problem of nuclear danger, which prevailed over the world in the post-war period and has not lost its acuteness to nowadays. Next, the author introduces the reader to the main character of his work: "This person who was reading the newspaper was none other than Al Capone. By that time, he had already retired from his business, the doctors warned him about a heart disease. He felt that it were his last days" (*ibid.*).

The author of the story turned to the name of the most famous gangster in the world, who was included in the list of state enemies by the Federal Bureau of Investigation and who became a synonym for cruelty, arbitrariness and criminal permissiveness, in order to create a contrast with the intellectual elite of the country and, at the same time, to reveal the extremely urgent question of responsibility for his actions: "And that was when he carried his plan out: he kidnapped all the members of the American Atomic Union, gathered them in his estate in Florida, invited them to the table, treated generously" (*ibid.*).

The plot of the story is modeled in such a way that the recipient is always in tension, because the motives of Al Capone remain completely unclear. It is difficult for the reader to imagine and predict the direction in which events will develop, it is intuitively expected on a violent culmination with elements of a criminal drama, but the denouement is completely unexpected: "And at the end of the buffet, he raised his glass: – For the gang! I apologize for the union! The excited head of the union looked at him. Suddenly they are just mocked?! – I invited you all to pay my respects. Who deserves it more than you? I apologize for the way in which I gathered you" (*ibid.*).

Analyzing the next fragment, we see a dangerous gangster shows himself as a well-educated, intelligent, self-critical person: "Of course, it was possible just to send an invitation, but it would work hardly, because you think we have nothing in common, no similarity in professions. At first glance, this is indeed so" (*ibid.*:154).

Then through the mouth of the main character the author represents the leading thought of the work, expressed in an ironic form: "I am not worthy to be in the company of such heroes who killed in one moment hundreds of thousands of men, women, children and elderly people. No one in the world can judge your deed as I can. I am considered enemy number one because I killed five hundred people (male only) in Chicago in 1929. And you killed 50 thousand at once" (*ibid.*).

So, Tawfiq al-Hakim reflects the question of what should be considered a greater crime: the murder of hundreds of people capable of resistance, or the murder of thousands

of defenseless civilians. Next, the main character with irony continues to think aloud about high scientific technologies, which, instead of their intended benefit, bring only destruction and death to mankind, being at the service of political ambitions: "Sorry, but our technologies were primitive: revolvers and machine guns. All that we have done, compared to your actions, is just child's play" (ibid.).

In other words, Tawfiq al-Hakim actualizes the problem of personal responsibility of a scientist: "I don't even know what title to honor you with. Our time passed, now it's yours. So, let me raise this glass for your gang, for your union! There was an aching silence. Then everyone got up. The buffet ended as if it were a funeral. They all went out" (ibid.: 156).

The question remains open: did the union members of nuclear workers learn the right conclusions from this dangerous adventure, or were they just happy with the happy ending: "The head of the union suggested to his colleagues to keep this case in a secret" (ibid.).

The story brilliantly depicts the psychological portrait of a criminal who rethought his life and tried in a very unusual way to say his last words, to stop the inevitable destruction of humanity: "Al Capone stayed awake all night. He understood that it was the last night in his life, which he ended as he saw fit. In the morning his heart stopped" (ibid.).

The last lines of the work are demonstrably neutral and leave considerable space for reflection: "The newspapers came out with two news stories on the front page: "Death of Al Capone" "Return of all Union Members of Nuclear Workers after the Completion of a Secret Mission" (ibid.).

## 5. The question of the meaning of human life and knowledge of the future

Tawfiq al-Hakim's story "The Amazing Invention" is devoted to the question of the meaning of human being, in which the theme of the "peaceful" atom is also gently emphasized: "No, this is not the most amazing invention in the world. Why? There is nothing more amazing than the appearance of the atom. Atom is capable to disintegrate and destroy huge cities..." (*al-Hakīm*, 1968: 100). In this sense, a reminiscence from the novel by Herbert Wells is indicative: "However, the invention that I am going to tell you about has a huge impact on humanity. The idea of this invention is not new at all. H. Wells wrote about this in his novel "The Time Machine". We are talking about a device that everyone can buy" (*Wells*, 2005). This is followed by a detailed description of the miracle machine's working mechanism "It has a large number of switches. When you turn the first switch, you will see on the screen what will happen to you in a year, turn the second switch – you will see what will happen in 5 years, the third – everything that will happen in 10 years. Unfortunately, the device is not capable of showing the future for more than ten years" (*al-Hakīm*, 1968: 100). The author intrigues the reader by creating a feeling of being on the threshold of something epochal: "Someone will ask: where is this miracle device? And why isn't it still on the market?" (*al-Hakīm* 1968: 101). Gradually the intrigue is revealed, Tawfiq al-Hakim explains the situation: "In fact, the American firm that acquired the rights to its production suddenly stopped this process, because the first engineer who tested this device committed suicide a few days later, the director of the firm, gripped by curiosity, he also wanted to experiment with this device, and in two weeks he committed suicide. A series of suicides took place among the company's employees. A similar fate awaited everyone who dared to turn the switch of the ill-fated device. The American police conducted an investigation in this case, but for a long time could not get any reliable information, all the victims took their secret with them to the grave" (*al-Hakīm* 1968 :101).

The reader begins to understand that he is dealing with science fiction, wrapped in mystical details, but is already a prisoner of the detective story: “However, one engineer who tried to commit suicide was saved and his secret was found out. The investigator asked what caused the victim to have suicidal tendencies” (*al-Hakīm* 1968: 102). Further, the action of the story unfolds in the form of a dialogue: “I could not stand this life! – answered the engineer in despair. – Did you have some kind of trouble, perhaps? – asked the investigator cautiously. – It seems to me everything is fine. – Did you have a premonition that something bad will happen very soon? – In the next ten years, nothing bad will happen to me. – Are you sure about this? – Yes, because I saw it with my own eyes. – What exactly? “I saw myself in five and even ten years” (*al-Hakīm* 1968: 102). Seemingly the hero of the story managed to realize the dream of millions of people, because the opportunity to look into the future beckoned at all times, stimulated the appearance of a large number of divination rituals, provoked various inventions and fantasies, but Tawfiq al-Hakim evaluates such a perspective in a completely different way: “However, I saw nothing worth to note, except that I had wrinkles, gray hair, a droopy face, and a large belly. Also, I saw a promotion and a salary increase. And I had one more daughter, who was constantly yelling, and because of this I have completely lost my peace. How boring and worthless my life has become!” (*al-Hakīm* 1968: 102). Tawfiq al-Hakim emphasizes the impracticality of such knowledge: “So I thought to myself, why should I go to such a future? I was always sure that tomorrow would be better than today. So it's a sign. I see anything interesting worth paying attention to. Since I already saw the future today, why is it necessary? I lived in anticipation of the future, but here I saw it with my own eyes. Why should I wait for it then? I lost the intrigue” (*al-Hakīm* 1968: 103). So, it turned out that the Device, designed to allow a person to look into the future, does not actually bring any benefit, but, on the contrary, takes away dreams and hopes and, ultimately, the desire to live. In this way, life without dreams and hopes loses its meaning. Then, in the form of a conversation between the characters, the author only reinforces his arguments: “I cannot agree with you,” replied the inspector. – It is not hopelessness, not despair. You can't understand my feelings, and I can't describe them... Have you ever walked into a movie theater and realized you were halfway through the movie? – Yes of course. – What would you do to see the part you missed? – I would watch a second time what I missed. – And when would we get to the moment that we have already seen? – I would go away. – Why? – Well, I already know what will happen next. – I also know what will happen next. The same thing happens to me. I have already seen everything on the screen. Why should I wait? (*ibid.*:104). The author gives readers the opportunity to imagine that the primordial desire of man to know his future in a miraculous way becomes realized, but the future will never be exactly as we imagine it, dreams are leveled by the realities of everyday life.

## 6. Conclusions

Thus, acting as an innovator in poetic, prose and dramatic genres, Tawfiq al-Hakim showed his multifaceted creativity to pay attention to concrete-historical, socio-political, and philosophical, moral and ethical problems. The originality of the writer's creative talent, the polyphony of his ideological and thematic palette are especially vividly represented in the plane of short prose. Combining the depth of the content and the skillful structuring of the plot, in which the elements of the detective genre play a significant role, Tawfiq al-Hakim reveals the eternal problems of human existence, which revolve around the issues of life and death, good and evil and are connected with the understanding of the ambivalence of human nature, the

inevitability of fate, the relativity of unambiguous judgments, with the search for the border between the real and the unreal, the objective and the subjective. Both ontological (“Master Azrael”) and socio-political (“For the gang!”, “Amazing Invention”) problematics of the artist's works are marked by the dominance of moral and ethical concepts, the disclosure of which occurs by involving elements of realism, fantasy, symbolism, grotesque and of irony, which, in total, forms the original creative manner of Tawfiq al-Hakim.

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## INNOVATIVE APPROACHES TO ORGANISING THE EDUCATIONAL PROCESS: DIGITALISATION AND THE IMPLEMENTATION OF EUROPEAN STANDARDS

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### Summary

This article examines innovative approaches to organising the educational process in the context of digitalisation and the implementation of European standards. The relevance of this research stems from the need to modernise Ukraine's national education system in line with the requirements of the European Higher Education Area, as well as the challenges posed by digital transformation and wartime conditions. These processes contribute to a rethinking of the traditional educational paradigm and a transition to competence-oriented, student-centred learning. The study utilises general scientific methods of analysis, synthesis, generalisation and comparison, which have enabled a comprehensive assessment of trends in the development of education. It has been established that the key areas of modernisation are the implementation of the European Credit Transfer System, ensuring the quality of education through the activities of the National Agency for Higher Education Quality Assurance, the development of academic mobility through participation in programmes such as Erasmus+ and Horizon Europe, and the integration of digital technologies into the educational process. The scientific novelty of the study lies in a comprehensive analysis of the synergy between digitalisation and European integration as factors in the transformation of the educational process. It has been demonstrated that the implementation of innovative approaches contributes to the development of digital and civic competences, enhances the competitiveness of graduates, and facilitates Ukraine's integration into the international educational space.

**Key words:** digitalisation of education, European integration, innovative approaches, the educational process, quality assurance in education, digital literacy, educational management.

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### 1. Introduction

The current stage of societal development is characterised by rapid digital transformation, which is having a significant impact on all areas of life, including the education system. Against the backdrop of globalisation and Ukraine's integration into the European Education Area, there is a need to introduce innovative approaches to the organisation of the educational

process that would meet contemporary challenges and ensure high-quality training of specialists (*Korzh-Usenko, Rybalko, 2021*). The digitalisation of education is a key factor in the modernisation of education systems, contributing to increased flexibility, accessibility and efficiency.

The European direction of educational development involves the implementation of the standards of the European Higher Education Area (EHEA), which are based on the principles of the Bologna Process. These include ensuring the quality of education in accordance with the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG), the implementation of the European Credit Transfer and Accumulation System (ECTS), a focus on learning outcomes, the development of academic mobility, and the internationalisation of educational activities. Another key element is the development of digital competences among those involved in the educational process in line with the DigComp and DigCompEdu frameworks, which promotes the effective use of information and communication technologies in learning.

An analysis of academic research suggests that innovative approaches to organising the educational process involve a shift from the traditional knowledge-based paradigm to a student-centred model of learning, within which the learner acts as an active participant in the educational process. This approach ensures the individualisation of learning, the development of critical thinking, creative abilities and the capacity for continuous professional development. Key components of this model are the competence-based, activity-based and integrative approaches, which contribute to the development of professional and general competences in line with the requirements of the European labour market.

The digitalisation of the educational process is driving the widespread adoption of modern learning technologies, notably learning management systems (LMS), massive open online courses (MOOCs), cloud services, artificial intelligence, augmented and virtual reality (AR/VR), and educational data analytics. The use of these tools helps to improve the effectiveness of learning, ensures flexibility in educational pathways, and expands access to quality education regardless of where learners live. One of the most effective innovative approaches is blended learning, which combines traditional classroom-based sessions with online components. This model provides an optimal balance between direct interaction between the teacher and learners and the opportunities offered by distance learning. Alongside this, flipped learning, project-based learning, problem-based learning (PBL) and adaptive learning are becoming increasingly widespread, allowing for the individual characteristics of learners to be taken into account and their motivation to be enhanced.

Ensuring the quality of education is a key prerequisite for the successful implementation of European standards. Digital technologies play a key role in this process, as they enable the monitoring of learning outcomes, the evaluation of educational programmes and the assurance of transparency in educational activities. The use of electronic quality management systems, digital portfolios and feedback tools helps to improve the effectiveness of internal and external mechanisms for ensuring the quality of education.

Innovative approaches to organising the educational process take on particular significance in the context of current socio-economic and security challenges, notably the state of martial law in Ukraine. In such conditions, the digitalisation of education ensures the continuity of the learning process, helps preserve human capital and facilitates the integration of Ukrainian educational institutions into the international educational landscape. At the same time, new challenges are emerging, including digital inequality, the need to ensure cybersecurity, improving the digital literacy of teachers and learners, and adapting educational programmes to rapid changes in the labour market.

The aim of this article is to justify contemporary innovative approaches to the organisation of the educational process and to define their role in improving the quality of education in the context of European integration.

## **2. European standards in the Ukrainian context: adapting EU recommendations on the digitalisation of education**

The current stage of development of Ukraine's education system is characterised by active academic reflection on the latest trends in its transformation within the context of European integration. An analysis of academic research indicates a growing interest in studying the mechanisms for the formulation and implementation of state policy in the field of education, driven by the need to adapt the national education system to European standards and practices. In particular, A. Klochko's works examine the specifics of Ukraine's state education policy in the context of European integration processes, and identify the key mechanisms for its implementation. The author emphasises that the formulation of state policy in the field of education is influenced by global socio-economic and cultural transformations, which determine the strategic directions for the modernisation of the national education system. European integration is viewed as a key factor in improving the quality of education, its competitiveness and its alignment with the requirements of the international educational landscape. The study argues that the reform of Ukraine's education system should be carried out along several strategic lines. Among these, the internationalisation of education takes centre stage, involving the expansion of international cooperation, academic mobility and integration into the European Higher Education Area. Another important aspect is the improvement of language policy, aimed at raising the level of foreign language proficiency and ensuring effective intercultural communication. L. Korzh-Usenko and P. Rybalko (*Korzh-Usenko, Rybalko, 2021*) have made a significant contribution to research into the regulatory and legal foundations of Ukraine's educational development in the context of European integration. In their academic works, the authors conducted a thorough analysis of the current regulatory and legal framework governing the higher education system, outlining its hierarchical structure and systematising the main groups of legislative and subordinate acts with varying legal force. The researchers paid particular attention to summarising the key innovations introduced by the Law of Ukraine 'On Higher Education' compared to its previous version. These include the expansion of the autonomy of higher education institutions, the introduction of a student-centred approach, the improvement of the quality assurance system in line with the standards of the European Higher Education Area, the development of academic mobility, and the harmonisation of educational programmes with the requirements of the labour market.

An analysis of the research indicates that these changes contribute to the integration of the national higher education system into the European Higher Education Area, enhancing its competitiveness and alignment with international standards. At the same time, regulatory and legal transformations have affected not only higher education but also the general secondary education system. In particular, the issue of reforming general secondary education institutions (GSEIs) in the context of European integration has been studied by scholars such as O. Lokshina, L. Hrynevych, V. Kremen, O. Savchenko, I. Bekh and others. Their works substantiate the conceptual foundations for the modernisation of general secondary education, which are reflected in the implementation of the 'New Ukrainian School' (NUS) reform. The researchers established that the key areas for the development of general secondary education are the

introduction of a competence-based approach, a focus on the individual needs of the student, the promotion of a partnership-based pedagogy, the decentralisation of education management, and the creation of an inclusive educational environment. Researcher O. Lokshina emphasises the harmonisation of Ukrainian educational standards with European requirements, in particular through the introduction of outcome-based learning and the assurance of educational quality.

For her part, L. Hrynevych emphasises the importance of systemic changes to the content of education, aimed at developing the key competences necessary for successful socialisation and professional fulfilment. Researcher V. Kremen substantiates the significance of the humanistic paradigm of education and the development of an innovative educational environment, whilst O. Savchenko focuses on updating the content of primary education and introducing an activity-based approach to learning. I. Bekh, in turn, examines the educational potential of the educational process, emphasising the formation of value orientations and civic responsibility among pupils. The Law of Ukraine 'On Education' (2017) and the Law of Ukraine 'On Complete General Secondary Education' (2020) have become important regulatory foundations for the reform of general secondary education, enshrining the principles of child-centredness, academic freedom for teaching staff, the autonomy of educational institutions, and the provision of equal access to quality education. The introduction of the new generation of State Standards for General Secondary Education helps bring the national education system closer to European approaches, particularly regarding the development of key competences and digital skills among pupils.

To summarise the above, the results of scientific research indicate the comprehensive nature of regulatory and legal changes in Ukraine's education system. These changes cover both higher education and general secondary education institutions, ensuring their coordinated development in line with European standards. This paves the way for improving the quality of education, strengthening the institutional capacity of educational institutions, and successfully integrating Ukraine into the European Education Area.

### **3. Digital transformation as a necessity of our times: a paradigm shift from «knowledge transfer» to the development of digital and civic competences**

The digital transformation of modern society is driving significant changes in the field of education, manifested in the transition from the traditional model of knowledge transfer to the development of comprehensive competences necessary for individuals to function effectively in the digital environment. In this context, the educational process is adopting a new paradigm, based on the development of digital and civic competences that meet the requirements of the information society and European educational standards. The traditional model of education, focused primarily on the accumulation and reproduction of knowledge, is gradually losing its effectiveness in the context of rapid technological change. Instead, modern education is aimed at developing the ability to think critically, analyse information, communicate and participate actively in public life. As outlined in the Digital Competence Framework (DigComp), digital competence encompasses not only technical skills but also the ability to work with information, create digital content, ensure online safety and interact effectively in the digital space.

Academic research emphasises that the digital transformation of education is a complex systemic process that encompasses not only the introduction of technology but also a shift in approaches to the organisation of learning (Klochko, 2024). In particular, the work of S. Kudryavtseva and her co-authors demonstrates that the digital transformation of education

involves the development of new learning models focused on collaboration, flexibility and the adaptability of the educational environment. This contributes to the development of competences that go beyond traditional academic training.

Another important aspect is the development of civic competence, which takes on new meaning in the context of digitalisation. It includes the ability to use digital technologies responsibly, critically evaluate information, counter disinformation and participate in democratic processes. Researchers emphasise that digital education cannot ensure the full socialisation of the individual without the development of civic responsibility. In particular, studies on digital education highlight that digital literacy is directly linked to the development of digital citizenship and social engagement. In the works of N. Morze and other Ukrainian scholars, it is argued that effective digitalisation of education is possible only provided there is a high level of digital competence among both learners and teachers (*Morze, Smyrnova-Trybulska, Boiko, 2019*).

This requires a review of the content of educational programmes, the introduction of innovative teaching methods and the use of modern digital platforms. Furthermore, research into the development of citizens' digital competences shows that these form the basis for life-long learning and professional adaptation in the digital economy. This approach is consistent with European education policy, which focuses on the development of key competences as an integrated learning outcome.

As a result of the pedagogical discourse, which was based on an analysis of academic sources and self-reflection on experience, it has been established that the digital transformation of education is not merely a technological process, but also a profound shift in the educational paradigm. It involves a shift from the transfer of knowledge to the development of comprehensive competences that ensure an individual's readiness for life and professional activity in a digital society. In this context, the integration of digital and civic competences takes on particular significance, as it contributes to the development of active, responsible and competitive citizens.

#### **4. Prospects for the development of the educational process in the context of European integration**

The prospects for the development of the educational process in Ukraine are closely linked to the implementation of European educational standards, which define the strategic guidelines for the modernisation of the national education system. The European model of education is based on a number of fundamental principles that ensure its integrity, mobility and competitiveness. These principles include a three-tier structure of higher education, comprising bachelor's, master's and PhD degrees, as well as the use of the European Credit Transfer and Accumulation System (ECTS), which ensures the transparency of educational programmes and promotes the academic mobility of students. An important element of the European Higher Education Area is the assurance of educational quality through the operation of national and international accreditation mechanisms based on the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). These mechanisms help to build trust in educational institutions, ensure that educational programmes meet international requirements, and create the conditions for the mutual recognition of learning outcomes. Equally important are the principles of academic mobility for students and staff, which enable integration into the international educational and research environment, as well as the mutual recognition of diplomas and qualifications, which broadens graduates' career opportunities in

the European labour market. A key feature of modern European education is the flexibility of educational programmes, which enables the personalisation of learning pathways and rapid adaptation to the needs of the labour market. At the same time, a key role is played by a competence-based approach, aimed at equipping learners not only with specialist knowledge but also with the transferable skills necessary for successful professional practice and social integration.

The regulatory framework for European education policy is established through a series of strategically important documents. The most significant of these is the Joint Declaration of the Ministers of Education of European Countries 'European Higher Education Area' (1999), known as the Bologna Declaration, which launched the Bologna Process and outlined the main directions for the harmonisation of European countries' education systems. Directive 2005/36/EC of the European Parliament and of the Council 'on the recognition of professional qualifications', which regulates the procedures for the mutual recognition of diplomas and certificates between EU Member States, has a significant impact on ensuring professional mobility. Recommendation 2006/962/EC 'on key competences for lifelong learning' is also an important guideline for shaping the content of education, as it defines a list of basic competences necessary for the successful integration of individuals into the knowledge society and the labour market.

The implementation of these European standards into the national education system creates the conditions for improving the quality of education, strengthening international cooperation and ensuring the competitiveness of graduates. At the same time, it promotes the development of innovative approaches to the organisation of the educational process, in particular the introduction of digital technologies, interdisciplinary educational programmes and the concept of lifelong learning. Thus, integration into the European Education Area is a key factor in the modernisation of Ukraine's education system and determines the strategic prospects for its further development.

## 5. Conclusions

The study found that innovative approaches to organising the educational process in the context of digitalisation and the implementation of European standards are a key factor in the modernisation of Ukraine's national education system. The active implementation of European educational principles is being carried out through the adoption of relevant regulatory and legal acts aimed at harmonising national legislation with the requirements of the European Higher Education Area. Important steps in this direction have included the introduction of the European Credit Transfer System (ECTS) in all higher education institutions, the development of the activities of the National Agency for Higher Education Quality Assurance (NAZHYAO), and the expansion of opportunities for academic mobility through Ukraine's participation in international programmes such as Erasmus+ and Horizon Europe. It has been demonstrated that Ukrainian education is undergoing a phase of active transformation, driven by the combined influence of European integration processes, digitalisation and the challenges of wartime. Adaptation to European standards involves modernising the content of educational programmes, integrating digital technologies into the learning process, developing distance and blended learning, and deepening cooperation with European universities to implement joint educational and research projects. These changes contribute to improving the quality of education, its openness and competitiveness at the international level. The results of the study confirmed that the key areas for reforming the educational process are the introduction of a competence-based

approach focused on developing digital, civic and professional competences; the adaptation of curricula to the current needs of the labour market; the strengthening of international cooperation; and the expansion of opportunities for students and teachers. Participation in European educational and research programmes contributes to Ukraine's integration into the international educational landscape, the promotion of academic exchange and the development of scientific research.

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## INNOVATION, WORK, SOCIETY

LOCAL SELF-GOVERNMENT AS AN INSTITUTIONAL FACTOR  
IN THE RESILIENCE OF LOCAL COMMUNITIES IN WARTIMES**Serhij Kramarenko**

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**Summary**

The article examines local self-government as an institutional factor in the resilience of territorial communities under wartime conditions. The study emphasizes that, during the full-scale Russian-Ukrainian war, territorial communities have become a basic level for ensuring public safety, access to essential services, social support, and the continuity of everyday life. The role of local self-government bodies is considered through their practical capacity to maintain municipal infrastructure, support healthcare, education and social protection institutions, organize assistance for internally displaced persons, and interact with military administrations, civil protection services, volunteer organizations, businesses, and international partners.

The article identifies the main areas in which local self-government contributes to community resilience. These include ensuring the functioning of critical and municipal infrastructure, organizing basic services for the population, responding to security challenges and emergencies, restoring damaged facilities, mobilizing financial and humanitarian resources, developing international cooperation, and maintaining effective communication with residents. Particular attention is paid to the budgetary and financial dimension of local governance, the importance of humanitarian assistance, and the role of partnerships with the civil society sector and local businesses.

It is concluded that the resilience of territorial communities depends not only on material and financial resources, but also on the quality of local coordination, the level of trust in local authorities, the availability of reliable communication channels, and the ability to unite residents around common tasks. Local self-government is therefore presented not merely as an administrative mechanism, but as a practical governance system that supports community functionality, social cohesion, crisis adaptation, and the foundations for post-war recovery.

**Key words:** local self-government, territorial communities, community resilience, martial law, war, critical infrastructure, basic services, internally displaced persons, crisis management, post-war recovery.

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## 1. Introduction

In the context of the full-scale Russian-Ukrainian war, the issue of the resilience of territorial communities has acquired particular practical significance. It is at the local level that the consequences of hostilities, humanitarian crises, infrastructure destruction, internal displacement of the population, disruption of economic activity, and growing social tension are manifested most directly. Territorial communities have become not only spaces of residence for the population, but also the basic level for the daily provision of security, access to services, social support, and the organization of community life under conditions of persistent uncertainty.

Under these circumstances, local self-government bodies act as a key institutional actor capable of responding promptly to the needs of the population, coordinating the work of municipal services, supporting the functioning of educational, healthcare, and social protection institutions, organizing assistance for internally displaced persons, and interacting with military administrations, volunteer organizations, businesses, and international partners. Their effectiveness directly influences a community's capacity to maintain governability, social cohesion, and a basic quality of life even under the pressure of war.

## 2. Powers of Local Self-Government Bodies in Ensuring the Vital Activity of Territorial Communities under Martial Law

The powers of local self-government bodies in ensuring the vital activity of territorial communities under martial law are comprehensive in nature and cover a wide range of managerial, organizational, social, municipal, and security-related tasks. In wartime, local self-government effectively becomes one of the basic levels of public administration, ensuring the continuity of community functioning, maintaining the population's access to essential services, and creating conditions for preserving the governability of the territory. The practical significance of these powers lies in the fact that local self-government bodies are closest to the needs of residents and possess information about the state of infrastructure, social risk groups, local resources, and the community's current problems.

One of the key areas of local self-government activity is ensuring the functioning of critical and municipal infrastructure facilities. This includes water supply, heat supply, electricity supply within the scope of local competence, solid waste removal, maintenance of roads, public spaces, and urban improvement facilities, as well as prompt response to emergency situations (*Pyroha & Pyroha, 2023*).

During the war, these tasks are complicated by infrastructure destruction, disruptions in energy supply, shortages of financial and material resources, and the need for rapid restoration of facilities damaged by shelling. Therefore, local self-government bodies are forced to act not only within the standard administrative cycle but also in a mode of constant crisis management.

Powers in the field of social protection of the population occupy an important place. Local councils, their executive bodies, and municipal institutions identify the needs of vulnerable categories of the population and organize assistance for older people, persons with disabilities, families with children, internally displaced persons, veterans, and family members of military personnel.

In practice, this involves the provision of financial support, humanitarian aid, social services, temporary accommodation, psychological support, assistance in processing documents, and access to state programs. In communities hosting a significant number of internally

displaced persons, the burden on local social infrastructure increases substantially, requiring additional coordination by local self-government bodies with state institutions, international organizations, and the civil society sector.

A separate block of powers is related to supporting the operation of educational, health-care, cultural, and other municipal institutions. Local self-government bodies ensure their financing, material and technical maintenance, adaptation to martial law conditions, arrangement of shelters, organization of remote or blended formats of work, and support for employees and service users.

In the field of education, this means creating conditions for a safe educational process. In the field of healthcare, it involves supporting municipal medical institutions, ensuring access to primary healthcare, and participating in rehabilitation and psychological support programs. Such actions have a direct impact on the social stability of the community, as they make it possible to preserve the basic institutions of everyday life even under wartime conditions.

Under martial law, the role of local self-government in interaction with military administrations, law enforcement agencies, civil protection units, and volunteer structures also increases. Although some administrative functions may be transferred to military administrations during this period, local self-government bodies retain an important role in ensuring local coordination, informing the population, organizing evacuation measures, preparing resilience points, supporting territorial defense, and responding to the consequences of emergencies. Their participation in these processes makes it possible to align state security decisions with the real needs of a specific community.

The budgetary and financial aspect of local self-government powers is no less important. Local authorities make decisions on the redistribution of funds, financing of priority needs, support for municipal enterprises, restoration of damaged facilities, assistance to military formations within the limits established by law, and implementation of local social protection and security programs. The war changes the structure of local priorities; therefore, a significant share of expenditures is directed toward supporting critical infrastructure, defense capability, humanitarian response, and meeting the population's basic needs (*Lehkostup, 2025*).

Thus, under martial law, the powers of local self-government bodies acquire not only administrative but also stabilizing significance. Their practical implementation determines the capacity of a territorial community to maintain vital activity, support the population, adapt to crisis circumstances, and ensure a minimum necessary level of security and social cohesion. Therefore, local self-government should be regarded as one of the key institutional factors of community resilience during wartime.

### **3. Organization of Basic Services for the Population during the War: Municipal Infrastructure, Social Support, Healthcare, and Education**

The organization of basic services for the population during the war is one of the most important practical areas of activity of local self-government bodies, since these services ensure the everyday functioning of territorial communities. Under martial law, community stability largely depends on the uninterrupted operation of water supply, heat supply, waste removal, transport connectivity, social protection, healthcare, and education systems. Even partial disruption in these areas quickly affects the population's quality of life, the level of social tension, and trust in local authorities.

Maintaining municipal infrastructure is of primary importance. Local self-government bodies ensure the operation of municipal enterprises, organize emergency repairs, and monitor the condition of utility networks, roads, improvement facilities, shelters, heating points, and resilience points. During periods of massive shelling and damage to energy infrastructure, the ability of communities to rapidly restore water, heat, and electricity supply to critical facilities, as well as to provide the population with alternative energy sources, generators, drinking water, and temporary accommodation, becomes particularly important. Thus, under wartime conditions, the municipal sector performs not only a service function but also a security function (Nesterov, 2024).

Social support for the population is no less important. The war has significantly increased the number of people in need of assistance, including internally displaced persons, older people, persons with disabilities, families of fallen servicemen, veterans, low-income families, and children affected by the consequences of hostilities.

Through social services, administrative service centers, municipal institutions, and partner organizations, local self-government bodies ensure the registration of needs, the provision of humanitarian aid, temporary accommodation, social support, psychological assistance, and help with applying for state payments. The effectiveness of this work depends on the ability of local authorities to promptly identify vulnerable groups and direct resources to where they are most needed.

In the field of healthcare, the role of local self-government consists in supporting municipal medical institutions, ensuring access to primary and emergency medical care, and organizing the work of outpatient clinics, hospitals, mobile medical teams, rehabilitation programs, and psychosocial support. During the war, community healthcare systems face increased pressure due to injuries, chronic diseases, psychological trauma, population displacement, and staff shortages. Therefore, the practical task of local authorities is not only to maintain medical institutions, but also to provide them with equipment, medicines, backup power supply, transport, and proper working conditions for personnel (Chekhovska, 2025).

The educational sphere is also an important element of community resilience. Local self-government bodies are responsible for organizing a safe educational process, arranging shelters, supporting distance and blended learning, and providing educational institutions with technical equipment, internet access, meals, and psychological support for students. Preserving the functioning of schools and kindergartens is important not only for the realization of the right to education, but also for maintaining social normality, supporting parents' employment, integrating internally displaced children, and reducing the long-term consequences of the war for the younger generation.

The organization of basic services during the war is a practical indicator of the institutional capacity of local self-government. It is through the continuous operation of municipal infrastructure, social support, healthcare, and education that a community preserves its functionality, adaptive capacity, and internal cohesion. In this context, local authorities act not only as service administrators but also as coordinators of survival, recovery, and everyday stability within the territorial community.

#### 4. The Role of Local Self-Government in Responding to Security Challenges, Emergencies, and the Consequences of Shelling

The role of local self-government in responding to security challenges, emergencies, and the consequences of shelling acquires particular practical significance in wartime, since it is at the level of territorial communities that problems are first identified, assistance to the population is organized, and recovery measures are coordinated. Local self-government bodies do not replace military command, law enforcement agencies, or civil protection services; however, they provide the local governance framework without which effective crisis response becomes significantly more difficult. Their activity consists in combining administrative, municipal, social, and informational instruments to preserve the governability of the community.

One of the key areas is the organization of interaction with military administrations, the State Emergency Service of Ukraine, the police, medical institutions, municipal enterprises, volunteer organizations, and humanitarian headquarters. After shelling or other emergency events, local authorities participate in coordinating emergency and rescue operations, inspecting damaged facilities, identifying the priority needs of the population, organizing temporary accommodation, and providing affected people with food, water, warm clothing, medicines, and psychological support. Such coordination helps avoid duplication of efforts, direct resources more rapidly, and maintain a minimum level of community functioning.

An important function of local self-government bodies is to ensure the operation of the public warning and information system. Under conditions of missile strikes, drone attacks, artillery shelling, mine danger, and accidents at infrastructure facilities, prompt and reliable communication has a direct impact on people's safety (*Hrabovets & Chernous, 2025*).

Through official websites, social media, mobile applications, loudspeakers, local media, and municipal services, local authorities inform residents about air raid alerts, rules of conduct, the location of shelters, assistance points, and temporary changes in the operation of transport, educational institutions, healthcare facilities, and municipal services. Preventing panic, the spread of rumors, and disinformation is of particular importance, as these factors may deepen crisis situations during wartime.

A separate area of response is the elimination of the consequences of shelling and the restoration of damaged infrastructure. Local self-government bodies organize the work of municipal enterprises in clearing territories, repairing roads, water, heat, and electricity supply networks, and restoring damaged residential buildings, educational institutions, healthcare facilities, and social infrastructure. In many communities, an important practical mechanism has been the creation of material reserves, the procurement of generators, construction materials, fuel, special equipment, communication devices, and equipment for emergency services. This makes it possible to reduce the time between the occurrence of an emergency and the beginning of recovery works.

Local self-government also pays considerable attention to supporting the population affected by shelling. This includes assistance in preparing inspection reports on damaged property, consultations on compensation mechanisms, organization of temporary housing, provision of financial assistance, and involvement of charitable foundations and international partners. The practical effectiveness of this work depends on how quickly local authorities can move from recording destruction to providing concrete assistance to people (*Oharenko & Kolomiets, 2025*).

Thus, response to security challenges, emergencies, and the consequences of shelling is one of the main dimensions of the institutional capacity of local self-government under wartime

conditions. It is at the local level that crisis management acquires concrete substance, as it combines population protection, infrastructure recovery, social support, and communication with the community. The effectiveness of these actions directly affects the resilience of the territorial community, the level of trust in authorities, and the population's ability to withstand prolonged wartime pressure.

### **5. Mobilizing Resources to Support Community Resilience: Local Budgets, Humanitarian Assistance, International Cooperation, and Partnerships**

Mobilizing resources to support community resilience in wartime is one of the key practical tasks of local self-government bodies. Martial law substantially changes the structure of territorial communities' needs, since, alongside traditional expenditures on the municipal sector, education, social protection, and urban improvement, there arises a need to finance security measures, restore damaged infrastructure, support internally displaced persons, assist military formations within the limits established by law, and ensure the stable operation of critical facilities.

Local budgets remain the primary source of support for resilience. It is through budgetary decisions that local self-government bodies determine priorities for responding to current challenges, redistribute funds for urgent needs, support municipal enterprises, finance emergency and recovery works, implement local social protection programs, and procure generators, fuel, construction materials, and equipment for shelters and resilience points (Voznyak & Koval, 2022).

At the same time, the war creates additional constraints for local finances due to reduced economic activity, a shrinking tax base, rising expenditures, and uneven pressure across communities. Therefore, effective budget planning requires the concentration of resources on critical areas, the rejection of secondary expenditures, and greater transparency in the use of funds.

Humanitarian assistance is an important additional resource, provided by charitable organizations, volunteer initiatives, businesses, religious communities, international foundations, and citizens. Local self-government bodies perform a coordinating function, as they must identify the real needs of the population, formulate requests, and organize the receipt, accounting, storage, and distribution of aid. Special attention should be given to internally displaced persons, older people, persons with disabilities, large families, veterans, families of servicemen, and citizens who have lost housing or property as a result of hostilities. Proper organization of humanitarian assistance makes it possible to address critical needs quickly; however, it requires transparent procedures, prevention of duplication, and systematic communication with donors.

International cooperation between territorial communities is of particular importance. In wartime, partnerships with foreign municipalities, international organizations, technical assistance funds, and development programs have become an important instrument for attracting financial, material, expert, and technological resources. Such partnerships may include the transfer of special equipment, medical equipment, generators, vehicles, communication devices, support for educational and social projects, preparation of recovery plans, energy-efficient solutions, and training for local specialists. For communities, this is not only a source of additional assistance, but also a way of integrating into broader networks of solidarity, exchange of experience, and long-term recovery (Lyndyuk et al., 2023).

Partnership with the civil society sector and local businesses is also an important resource for resilience. Civil society organizations and volunteer initiatives often respond rapidly to the needs of the population, while businesses can provide transport, logistics, food, equipment,

repair works, or financial support. The task of local self-government is to create conditions for coordinating these efforts, defining priorities, and combining different sources of resources into a unified system of community support (Sova, 2025).

Thus, mobilizing resources to support community resilience is not a one-time anti-crisis action, but a continuous governance process. The effectiveness of local self-government in this area is determined by its ability to combine budgetary capacities, humanitarian assistance, international support, and partnerships with business and civil society. Such multi-channel resource mobilization enables territorial communities to preserve functionality, support the population, and form a basis for post-war recovery.

## **6. Communication with the Population, Support for Internally Displaced Persons, and Community Cohesion in Wartime**

Communication with the population in wartime is one of the practical instruments for maintaining the resilience of a territorial community. In crisis circumstances, citizens need not only material assistance, but also timely, reliable, and clear information about the security situation, the operation of municipal services, the availability of medical, social, and administrative services, the procedure for receiving assistance, and the location of shelters, resilience points, humanitarian headquarters, and temporary accommodation facilities. In this process, local self-government bodies perform the function of an official source of information capable of reducing uncertainty, counteracting panic, and limiting the influence of rumors and disinformation.

The practical effectiveness of communication depends on the regularity of messages, the consistency of the positions of different services, the accessibility of information channels, and the ability of local authorities to explain their decisions. It is important that information be disseminated through various channels, including official websites, social media, local media, mobile applications, hotlines, administrative service centers, starosta districts, and the direct work of social workers (Steshenko et al., 2024).

A separate area of local self-government activity is support for internally displaced persons. Communities that host IDPs ensure their registration, inform them about available services, provide temporary housing, humanitarian assistance, social support, integration of children into the educational process, access to medical care, psychological support, and local employment programs. At the same time, it is important to avoid opposition between local residents and displaced persons, since social tension may weaken the internal unity of the community.

Community cohesion in wartime is formed through the involvement of residents in volunteer initiatives, mutual assistance, public discussions, and local programs supporting the military, affected families, children, veterans, and people in difficult life circumstances. Local self-government bodies should act as coordinators of these processes by combining the resources of municipal institutions, civil society organizations, businesses, and active residents. It is trust, regular communication, and a sense of shared responsibility that enable the community to preserve social stability, adapt to prolonged wartime challenges, and maintain its internal capacity for recovery.

## 7. Conclusions

Under wartime conditions, local self-government bodies act as one of the key institutional factors of the resilience of territorial communities. Their role consists not only in performing current administrative powers, but also in ensuring the continuity of community life, maintaining basic services, responding to emergencies, coordinating assistance to the population, and preserving governability at the local level.

The practical capacity of local self-government is manifested in its ability to rapidly mobilize resources, maintain municipal infrastructure, organize social, medical, and educational support, and interact with military administrations, civil protection services, the civil society sector, businesses, and international partners. It is this multilevel coordination that enables communities to adapt to wartime risks and reduce the negative consequences of crisis situations.

At the same time, the resilience of a territorial community depends not only on material resources, but also on the quality of communication, the level of trust in local authorities, and the ability to unite residents around common tasks. Further research should focus on assessing the effectiveness of specific practices of local crisis management, models of support for internally displaced persons, mechanisms of international cooperation between communities, and instruments of post-war recovery at the local level.

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## UKRAINE'S INDUSTRIAL POLICY IN THE CONTEXT OF THE WAR: CHALLENGES AND PROSPECTS

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### Summary

The article examines Ukraine's industrial policy in the context of the full-scale Russian-Ukrainian war, focusing on the destruction of industrial capacity, institutional barriers to policy implementation, the growing role of the defense-industrial complex, and the prospects for post-war industrial recovery. The study emphasizes that industrial policy under wartime conditions cannot be limited to economic regulation, as it becomes directly connected with national security, technological autonomy, energy resilience, logistics, employment, and the ability of the state to maintain long-term economic stability.

The article substantiates that the main challenges for Ukraine's industrial development include the loss and damage of production facilities, disruption of logistics chains, energy risks, shortage of qualified personnel, limited access to financial resources, and insufficient coordination between state institutions, local authorities, business, and the scientific and educational sector. Special attention is paid to the need to transform fragmented anti-crisis measures into a coherent long-term industrial strategy. It is argued that the defense-industrial complex should become one of the key priorities of wartime industrial policy, combining state planning, private initiative, innovation, and international cooperation.

The article also analyzes the importance of European integration and international support for Ukraine's industrial recovery. Integration into European production chains, adaptation to EU standards, technological partnerships, investment programs, and risk insurance mechanisms are considered essential preconditions for the modernization of Ukrainian industry. The study concludes that Ukraine needs a new model of industrial policy based on innovation, digitalization, energy efficiency, localization of production, human capital development, support for small and medium-sized enterprises, and the strengthening of institutional capacity.

**Key words:** industrial policy, Ukraine, war, industrial recovery, defense-industrial complex, European integration, institutional capacity, technological modernization, economic resilience.

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### 1. Introduction

The full-scale Russian-Ukrainian war has radically transformed the conditions under which Ukraine's industrial policy is formed and implemented. Industry is no longer only a sphere of economic production, employment, export potential, and regional development. Under wartime conditions, it has become one of the material foundations of national resilience, defense capability, technological independence, and post-war reconstruction. The destruction of enterprises, damage to infrastructure, disruption of logistics, energy instability, labor shortages, and financial restrictions have exposed the structural vulnerability of Ukraine's industrial model and, at the same time, revealed the need for a more active, coordinated, and strategically

oriented role of the state in industrial development. The article therefore considers industrial policy as a complex system of economic, institutional, technological, and security-related decisions aimed at preserving production potential and creating conditions for its qualitative renewal.

The relevance of this research is determined by the need to move from reactive anti-crisis measures to a long-term model of industrial transformation. Ukraine's industrial recovery cannot be reduced to the mechanical restoration of destroyed facilities or the return to the pre-war structure of production.

It requires the formation of a new industrial policy that combines defense priorities, innovation, energy efficiency, digitalization, localization of critical production, European integration, international technological cooperation, and the development of human capital. In this context, particular importance is attached to the institutional capacity of the state, the quality of strategic planning, coordination between public authorities and business, the development of the defense-industrial complex, and the inclusion of Ukrainian enterprises in European and global value chains.

## **2. Theoretical Foundations of Industrial Policy in the Context of Wartime Transformations**

Industrial policy is one of the key areas of the state's economic activity, encompassing a set of strategic goals, managerial decisions, financial mechanisms, and institutional instruments aimed at developing the country's productive capacity. Its scope is not limited to supporting individual enterprises or sectors, since in contemporary conditions it functions as a comprehensive system for building technological capability, ensuring structural modernization of the economy, increasing labor productivity, and strengthening the competitive position of national producers. In this context, industrial policy combines economic, social, innovative, and security-related objectives that determine the long-term resilience of the state.

The theoretical understanding of industrial policy involves considering it as a mechanism of purposeful state influence on the structure of the national economy. This concerns the creation of conditions for the development of strategic sectors, the stimulation of investment, support for innovation, expansion of production cooperation, protection of the domestic market, and integration of enterprises into international value chains. At the same time, the effectiveness of such a policy depends not only on the scale of state support, but also on the quality of the institutional environment, the stability of rules, the transparency of administrative procedures, the coherence of actions by public authorities, and the state's capacity to define long-term development priorities (*Kindzerskyi, 2023*).

In the context of wartime transformations, industrial policy acquires a specific meaning, since industry becomes not only a source of economic growth but also a material foundation of defense capability. War changes the logic of state intervention in the economy by increasing the importance of mobilization planning, public procurement, support for critical industries, relocation of enterprises, and protection of energy and logistics infrastructure.

Industrial policy under wartime conditions has an anti-crisis, mobilization-oriented, and security-focused character. Its main task is not only to preserve existing productive capacity, but also to form a new industrial model capable of ensuring technological autonomy, defense capability, economic resilience, and the preconditions for Ukraine's post-war recovery.

### 3. The Impact of the Russian-Ukrainian War on Ukraine's Industrial Capacity

The full-scale Russian-Ukrainian war has become one of the most powerful factors of destructive impact on Ukraine's industrial potential. Its consequences have manifested themselves not only in the direct physical destruction of enterprises, production sites, warehouses, transport infrastructure, and energy facilities, but also in a profound transformation of the operating conditions of the entire industrial system.

One of the most tangible consequences of the war has been the loss of part of Ukraine's production capacity as a result of territorial occupation, hostilities, missile attacks, and the destruction of industrial facilities. Particularly significant losses have been suffered by enterprises in metallurgy, mechanical engineering, the chemical industry, the energy sector, and related industries, which have traditionally accounted for a substantial share of industrial output. The loss or damage of such facilities means not only a reduction in production volumes, but also the disruption of production chains, a decline in tax revenues, job losses, and the weakening of regional economic systems (*Dvulit & Andrusiak, 2023*).

The disruption of logistics links has become a major challenge for industry. The blockade of seaports, the risks associated with transportation, and the destruction of railway, road, and warehouse infrastructure have complicated the supply of raw materials, components, and finished products.

For many enterprises, this has meant the need to redirect routes, find new suppliers, increase transportation costs, and revise export strategies. As a result, logistics has turned from a technical element of business operations into one of the key factors of industrial resilience.

Energy risks have become an equally important constraint. Systematic attacks on energy infrastructure have led to instability in electricity supply, rising energy costs, and the need to introduce backup power sources (*Lisovyi & Andrukh, 2025*).

For energy-intensive industries, this has created particularly difficult conditions, since the industrial cycle largely depends on continuous access to electricity, gas, water, and thermal resources. Energy vulnerability has revealed the need to modernize industrial infrastructure, improve energy efficiency, and develop autonomous systems for supporting production.

The war has also intensified personnel problems in the industrial sector. Mobilization, forced migration, population displacement, psychological exhaustion among workers, and the destruction of social infrastructure have caused a shortage of qualified personnel in many industries. This has been especially acute for enterprises for which engineering, technical, manual, and managerial competencies are critically important. At the same time, reduced investment activity, high wartime risks, and limited access to credit resources have complicated the modernization of production and the introduction of new technologies.

At the same time, the war has not only weakened industrial potential but also revealed its adaptive capacities. Some enterprises have relocated to safer regions, reoriented production toward defense needs, changed supply chains, and entered new markets. The changing structure of domestic demand, in particular the growing needs of the defense sector, reconstruction works, energy autonomy, and critical infrastructure, has formed new directions for industrial development.

#### 4. Institutional Challenges in Implementing Ukraine's Industrial Policy

The institutional challenges of implementing Ukraine's industrial policy are systemic in nature and largely determine the state's capacity to ensure industrial development during the war and in the period of post-war recovery. This concerns not only the existence of separate support programs for enterprises, but also the quality of public administration, the ability of public authorities to formulate coordinated priorities, ensure the stability of rules, accumulate resources, and create a predictable environment for industrial development. In this sense, industrial policy depends on the institutional capacity of the state no less than on financial or technological resources (*Zelenko, 2024*).

One of the key problems remains the fragmentation of strategic planning. Industrial development is often viewed through the lens of separate sectoral, regional, or anti-crisis decisions, whereas a coherent long-term model for modernizing productive capacity requires the coordination of economic, security, innovation, education, export, and regional policies.

Under wartime conditions, such fragmentation becomes more pronounced, since a significant share of managerial decisions is made under the pressure of urgent needs related to defense, energy security, enterprise relocation, and support for critical infrastructure. This is objectively necessary; however, without a strategic framework, anti-crisis measures do not always transform into a sustainable industrial policy.

An important challenge is insufficient coordination between central government bodies, local self-government authorities, military administrations, state financial institutions, and business entities. Industrial policy requires interagency cooperation, since production-related issues are connected with energy, transport, taxation, customs regulation, education, science, defense procurement, and international trade (*Zalutskyy, 2019*).

In the absence of proper coordination, duplication of functions, dispersion of resources, slow responses to enterprise needs, and weak accountability for final results arise. This problem is especially significant for enterprises that require rapid administrative decisions, access to financing, assistance with relocation, or connection to infrastructure.

The instability of the regulatory and legal environment also complicates the implementation of industrial policy. Frequent changes in rules, ambiguous procedures, lengthy approvals, and excessive administrative complexity reduce predictability for business. Under wartime risks, enterprises already operate in conditions of high uncertainty; therefore, regulatory instability further restrains investment, production modernization, and long-term planning. For industry, where investment cycles are lengthy, the stability of rules, protection of property rights, transparency of state support, and clear mechanisms of access to resources are particularly important.

A separate problem is the limited availability of financial resources and the weakness of long-term instruments for supporting production. Under wartime conditions, the state budget is largely oriented toward defense, social expenditures, and critical needs, which limits the possibilities for large-scale industrial stimulation.

At the same time, bank lending remains insufficiently accessible for many manufacturing enterprises due to high risks, insufficient collateral, loss of assets, or uncertainty in sales markets. This highlights the need to develop guarantee mechanisms, industrial funds, affordable lending programs, war-risk insurance, and public-private partnership instruments (*Andrushchak & Herasymenko, 2024*).

Interaction between the state, business, and the scientific and educational sector also remains insufficient. Industrial modernization is impossible without technological innovation,

the training of qualified personnel, applied research, and the transfer of knowledge into production. However, the gap between the needs of enterprises, the capacities of educational institutions, and state policy often leads to a shortage of competencies, weak commercialization of scientific developments, and insufficient university participation in industrial development.

### 5. The defense-industrial complex as a priority of military industrial policy

Under the conditions of the full-scale war, the defense-industrial complex has become one of the central elements of Ukraine's industrial policy, since it provides the material and technical foundation of national defense capability. Whereas in peacetime the defense industry was largely viewed as a separate sector of the economy associated with state defense procurement, under wartime conditions it has turned into a strategic system on which the state's ability to sustain prolonged resistance, maintain the combat capability of the armed forces, reduce dependence on external supplies, and respond rapidly to changes in the nature of warfare depends.

The production of weapons, military equipment, ammunition, communication systems, electronic warfare systems, unmanned platforms, surveillance and protection equipment, and military logistics assets has acquired particular importance. Contemporary warfare demonstrates that superiority is determined not only by the quantity of conventional weapons, but also by the ability to rapidly introduce technological solutions, adapt production to the needs of the front, modernize equipment, and ensure repair and maintenance within compressed timeframes (*Hmyria et al., 2025*).

State procurement plays an important role in the development of the defense-industrial complex. It generates the basic demand for defense products, defines production priorities, provides predictability for enterprises, and allows them to plan investments in capacity expansion.

At the same time, state procurement must be sufficiently flexible to respond to changing military needs, the emergence of new technologies, and the experience of combat use. Excessive bureaucratization of procurement, lengthy approval procedures, or unstable financing may reduce the effectiveness of defense production; therefore, the institutional quality of governance in this area is of fundamental importance.

The development of the private sector has become a separate factor in the transformation of the defense industry. Private companies, start-ups, and engineering groups often demonstrate a high pace of innovation, the ability to experiment, and the capacity to scale specific technological solutions rapidly. This is particularly evident in the fields of unmanned systems, software, electronic warfare, optics, sensors, and logistics solutions. The involvement of the private sector makes it possible to expand the production base of the defense industry and reduce dependence on a limited number of state-owned enterprises (*Polishchuk, 2020*).

At the same time, Ukraine's defense-industrial complex cannot develop in isolation from international cooperation. Partnerships with foreign states and companies create opportunities for joint production, technology transfer, localization of individual components, product standardization, and integration into broader security and production chains. Thus, the defense-industrial complex should become the core of wartime industrial policy, combining state planning, private initiative, innovation-driven development, and international partnership in order to strengthen Ukraine's defense capability and long-term technological capacity.

## 6. European integration and international support for Ukraine's industrial recovery

European integration is one of the defining factors of Ukraine's industrial recovery, since it shapes not only the foreign policy vector of development but also a practical framework for the modernization of the national economy. For the industrial sector, this process means gradual approximation to European Union standards, renewal of production practices, and higher requirements for product quality, environmental sustainability, energy efficiency, production safety, and transparency of administrative procedures. In this context, European integration serves as an instrument of structural transformation capable of combining the tasks of post-war recovery with the long-term modernization of the industrial base.

International financial assistance and investment programs are of considerable importance for overcoming the resource constraints caused by the war. The destruction of enterprises, loss of assets, rising production costs, and high wartime risks significantly limit the possibilities of domestic financing for industrial development. Under such conditions, external support may be directed not only toward the restoration of destroyed infrastructure, but also toward the creation of new production capacities, the introduction of modern equipment, the development of industrial parks, support for export-oriented enterprises, and the insurance of investment risks. At the same time, the effectiveness of such support depends on the state's ability to ensure transparent planning, proper control over the use of funds, and alignment of international programs with national industrial priorities.

The inclusion of Ukrainian enterprises in European production chains is of particular importance. It opens opportunities for expanding sales markets, technological renewal, improving product quality, and attracting new partnerships. Ukrainian industry can strengthen its positions in mechanical engineering, the food industry, raw material processing, defense production, energy equipment, and renewable energy. At the same time, integration into the European economic space requires adaptation to technical regulations, environmental standards, competition rules, and corporate governance requirements (*Ishchuk, 2025*).

Technological partnership with international companies and institutions should become one of the mechanisms for moving from simple recovery to qualitative modernization. This concerns technology transfer, joint production, localization of individual components, development of engineering competencies, and the participation of Ukrainian enterprises in international innovation projects. Thus, European integration and international support can become the basis for forming a new industrial model of Ukraine, oriented toward competitiveness, technological advancement, export development, and sustainable post-war growth.

## 7. Prospects for Developing a New Model of Industrial Policy in Ukraine

The prospects for developing a new model of Ukraine's industrial policy are connected with the need to move from situational anti-crisis responses to long-term industrial development. Under wartime conditions, the state is objectively focused on priority tasks related to supporting defense, preserving critical industries, ensuring energy resilience, and maintaining basic economic governability. However, this logic cannot remain the sole basis of industrial policy. Post-war recovery will require not merely the restoration of the pre-war industrial structure, but the formation of a qualitatively new model capable of responding to security, technological, social, and European integration challenges.

One of the key directions of this model should be the innovative modernization of production. Ukrainian industry requires the renewal of fixed assets, the introduction of modern technological processes, automation, robotization, the development of engineering solutions, and an increase in labor productivity (*Boldovskyi, 2025*).

At the same time, innovation should be considered not only as the result of the activities of individual high-tech companies, but also as a cross-cutting principle of industrial development. This implies support for applied research, technology transfer, cooperation between enterprises and universities, industrial parks, research institutions, and innovation clusters.

An important component of the new industrial policy is the digitalization of production and management processes. The use of digital platforms, monitoring systems, data analytics, electronic services for business, and transparent mechanisms of state support can increase the efficiency of industrial development management. Digitalization also contributes to reducing administrative barriers, improving coordination between the state and enterprises, accelerating access to support programs, and strengthening control over the use of resources. In this sense, digital instruments should not be an auxiliary element, but an organic part of the institutional modernization of industrial policy.

Energy efficiency and technological autonomy are acquiring particular importance. The war has demonstrated the vulnerability of production to attacks on energy infrastructure, disruptions in the import of components, and instability of logistics routes. Therefore, prospective industrial policy should be oriented toward reducing the energy intensity of production, developing autonomous energy supply sources, localizing critical components, expanding domestic raw material processing, and supporting industries that are important for defense, infrastructure, and economic security. Such an approach will reduce dependence on external risks and strengthen the resilience of the national economy.

The development of human capital is no less important. The new industrial model requires qualified engineers, technical specialists, skilled workers, managers, and researchers capable of working with modern technologies. This requires the renewal of vocational education, strengthening of dual training, development of retraining programs, reintegration of specialists into the labor market, and closer interaction between education and production. Without adequate staffing, even the most effective financial and technological solutions will not be able to ensure sustainable industrial development.

The new model of Ukraine's industrial policy should combine innovation, digitalization, energy efficiency, localization of production, support for small and medium-sized enterprises, development of human capital, and strengthening of the state's institutional capacity. Its effectiveness will depend on the ability of public institutions to formulate long-term priorities, coordinate resources, ensure transparent rules, and integrate industrial development into a broader strategy of national security, European integration, and post-war recovery.

## 8. Conclusions

The conducted analysis shows that the Russian-Ukrainian war has become a decisive factor in the transformation of Ukraine's industrial policy. Its consequences are manifested not only in the physical destruction of enterprises and infrastructure, but also in the disruption of production chains, energy insecurity, financial constraints, personnel losses, and the weakening of regional industrial systems. At the same time, the war has demonstrated the adaptive potential

of Ukrainian industry, including the relocation of enterprises, the reorientation of production toward defense needs, the search for new logistics routes, and the emergence of new technological and organizational practices. This confirms that industrial policy in wartime should be understood as a strategic tool for strengthening economic resilience, national security, and the state's ability to ensure long-term development.

The prospects for Ukraine's industrial recovery are connected with the formation of a new model of industrial policy based on innovation, digital transformation, energy efficiency, technological autonomy, localization of production, and integration into European economic space. The defense-industrial complex should become one of the key priorities of this model, while international support and European integration should serve not only as sources of financial assistance, but also as mechanisms for technological modernization and institutional renewal. The effectiveness of such a policy will depend on the state's ability to ensure stable rules, transparent support mechanisms, interagency coordination, cooperation with business and the scientific sector, and a clear connection between industrial development, national security, and post-war reconstruction.

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## FOREIGN EXPERIENCE OF THE OPERATION OF HIGHER EDUCATIONAL INSTITUTIONS WITH SPECIFIC TRAINING CONDITIONS AND ITS ADAPTATION IN UKRAINE

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### Summary

The article examines foreign experience of the operation of higher education institutions with specific training conditions and identifies directions of its adaptation in Ukraine.

It has been established that the foreign experience of higher education institutions (HEIs) with specific training conditions (military, police, security academies) is based on practical orientation, intensive physical and psychological training, as well as a combination of military discipline with academic freedom. The key aspects of foreign practices of higher education institutions (HEIs) with specific training conditions include: 1) training models (Police and Security), which include practical orientation – in the EU and the USA, training often involves 90% of the time being spent on practical training (tactics, simulations, shooting) and only 10% on theoretical classes; introduction of simulation training technologies – active use of virtual reality (VR) and interactive scenarios for training in stressful situations; psychological resilience – much attention is paid to psychological support and building resilience to prevent professional burnout.

It has been established that the international integration of Ukrainian HEIs with specific training conditions is seen in the following: Ukrainian HEIs with specific training conditions (military, police, security academies) should join the European Security and Defense College (ESDC) network, which allows implementing EU standards; the need to study international humanitarian law (IHL) – mandatory and in-depth training on the rules of warfare, protection of civilians and reporting on war crimes; strengthening psychological support for cadets, increasing the share of simulation training methods, further implementation of integrity standards (DCF) in the educational process.

**Key words:** higher education, higher education institutions with specific training conditions, the essence of special training conditions, foreign experience in the functioning of higher education institutions with specific training conditions.

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### 1. Introduction

The goal of higher education is to enable a person to acquire a high level of scientific, professional and general competencies, which ensures the training of specialists capable of analysis, solving complex problems, creative activity and self-realization. This includes the formation of a worldview, the development of the personality and ensuring the needs of society in qualified personnel. The main components of the goal of higher education are professional training through the acquisition of knowledge, skills and abilities for work in a certain specialty or field of knowledge; personal development of a person, his talents, mental, creative and

physical abilities; involvement in research and innovation work as an integral part of education; education of responsible citizens capable of conscious social choice; creation of conditions for the realization of the right to work and the choice of a place of work in accordance with the qualifications obtained. The realization of the right to higher education in Ukraine is guaranteed by the Constitution and the Law "On Higher Education", ensuring free access to education, equal conditions regardless of age, gender, health status or social status. This right is implemented through competitive selection, the possibility of free education (state order), education at the expense of individuals/legal entities, as well as through benefits for vulnerable categories and the creation of special conditions for persons with special educational needs and education in higher education institutions (hereinafter referred to as HEIs) with specific training conditions.

The effectiveness of the educational function of the state is influenced by the rationality of the construction and effectiveness of the HEI system with specific training conditions in Ukraine, taking into account the experience of HEIs in foreign countries. Based on this, there is a pressing need for a comprehensive generalizing analysis of the implementation of foreign experience in the functioning of higher education institutions with specific training conditions and the identification of areas for its adaptation in Ukraine, which determined the choice of the topic of the scientific article.

The subject of the study is foreign experience in the functioning of higher education institutions with specific training conditions. The objectives of the study are: to clarify the legislative principles of the functioning of HEIs with specific training conditions; to determine the system of higher education institutions with specific training conditions, their institutional features of activity, goal, objectives and purpose; to analyze foreign experience in the functioning of higher education institutions with specific training conditions, to identify areas for implementing the experience of such institutions into the system of their functioning in Ukraine.

## **2. The state of research on the functioning of higher education institutions with specific learning conditions**

The features of the implementation of the educational function of the state by providing education in higher education institutions with specific learning conditions were studied in the works of such authors as: A. Andreev, O. Bandurka, O. Bezpalo, A. Bondarenko, V. Buga, V. Volkova, V. Glukhoveria, N. Huberska, B. Derevyanko, O. Dzafarova, R. Kalyuzhny, M. Kaplyuk, T. Kolomoyets, A. Komzyuk, O. Kuzmenko, M. Lehenkyi, I. Lytvyn, A. Manzhula, O. Morgunov, V. Olefir, V. Petkov, D. Pryimachenko, O. Ryabchenko, I. Savelieva, O. Salmanova, V. Sokurenko, S. Shatrava, Yu. Shemshuchenko, Kh. Yarmaki, M. Yarosh, as well as many other leading scientists.

Modern research related to the study of foreign experience in the functioning of higher education institutions with specific learning conditions is the work of the following authors: Marchenko O. G. "Theoretical and methodological principles of forming an educational environment in higher military educational institutions of aviation profile" (2020) (*Marchenko, 2020*), Andreev A. V. "Administrative and legal regulation of personnel training for the National Police in higher educational institutions with specific learning conditions" (2018) (*Andreev, 2018*), Shchokin R. G. "Public administration in the field of education of Ukraine" (2019) (*Shchokin, 2019*), Dyska O. G. "Administrative and legal principles of implementing the educational process in higher education institutions with specific learning conditions" (2020)

(Dyska, 2020). At the same time, it should be summarized that a comprehensive study of foreign experience in the functioning of higher education institutions with specific training conditions in the field of modern legal science has not been carried out.

### **3. Legislative principles of the functioning of higher education institutions with specific training conditions in Ukraine**

Article 21 of the Law of Ukraine “On Education” provides for the receipt of specialized education “as education of an artistic, sports, military, security or scientific orientation, which can be obtained within the framework of formal, non-formal, informal education, aimed at acquiring competencies in the relevant field of professional activity during training in a continuous integrated educational process at several or all levels of education and requiring early identification and development of individual abilities” (*Law on Education, 2014*). That is, this Law provides that the types of specialized education at all levels are artistic, sports, military, security education and education of a scientific orientation. The same article stipulates that “Regulations on specialized educational institutions of various types shall be approved by the Cabinet of Ministers of Ukraine taking into account special laws and upon submission of the central executive body implementing state policy in the relevant sphere of existence of specialized educational institutions”.

Further analysis of the law makes it possible to determine that specialized education is provided to applicants in specialized educational institutions, which include: art education – in specialized art education institutions; military education – in specialized educational institutions of a military (military-sports) direction; sports education – in specialized educational institutions of a sports profile with specific training conditions; specialized education of a security direction – in educational institutions with specific training conditions. That is, the status of educational institutions in which specialized education is provided is different, at the same time they can all be called “specialized educational institutions” or “institutions with specific training conditions”, the latter formation, due to its absence in the Law, is most often found.

Regarding HEIs with specific training conditions, it is obvious that their status is determined by the Law of Ukraine “On Higher Education”. Article 1 of the Law defines that “a higher education institution with specific training conditions is a state-owned higher education institution that carries out training of cadets (students, students) and adjuncts at certain levels of higher education for further service in the positions of middle and senior staff of the National Police of Ukraine, command staff in order to meet the needs of the Ministry of Internal Affairs of Ukraine, the central executive body implementing state policy in the field of civil protection, the central executive body implementing state policy in the field of execution of criminal penalties” (*Law on Higher Education, 2014*). At the legislative level, the features of the functioning of higher education institutions with specific training conditions are defined in the relevant legislation, for example, in the Law of Ukraine “On the National Police” (Law on the National Police) in Article 74 “Training of police officers in higher education institutions with specific training conditions” the general conditions of enrollment for training, the contractual form of training, the features of training, the procedure for distributing graduates are defined. It is also stated that the Procedure for selection, referral and enrollment for training in higher education institutions with specific training conditions that train police officers is established by the Ministry of Internal Affairs of Ukraine.

#### **4. The system of higher education institutions with specific training conditions, their institutional features of activity**

The system of higher education institutions includes higher education institutions with specific training conditions, which are part of the structure of the Armed Forces of Ukraine, the Security Service of Ukraine, the National Police of Ukraine, the National Guard of Ukraine, the State Border Service of Ukraine, the State Emergency Service, the State Penitentiary Service of Ukraine and other state bodies. The main task of the activity of higher education institutions with special training conditions is the need to form professional employees of the security and defense forces, law enforcement officers, firefighters, border guards to ensure law and order, national security and protect the rights of citizens through enhanced requirements for competitive selection for training, combining the educational process and civil service, enhanced practical training, a special process of certification of higher education personnel, mandatory referral to places of service, fulfillment of contractual obligations to the state and citizens of Ukraine.

The institutional features of the activities of HEIs with specific training conditions include: subordination to specialized ministries, training of cadets as future law enforcement officers, strict discipline, special selection (health, age), state support, special conditions of service and combination of the educational process with military or service training. The key features of the activities of HEIs with specific training conditions are as follows: 1) management and subordination – creation, reorganization and activity are approved by central executive bodies (for example, the Ministry of Internal Affairs of Ukraine); 2) specifics of the contingent – training of cadets, trainees and adjuncts for further service, and not only students; 3) special selection – citizens undergo strict selection based on health, physical fitness and age; 4) organization of life – cadets are fully supported by the state (food, accommodation, clothing); 5) disciplinary regime – compliance with statutes, high requirements for discipline, barracks regime or regime of increased responsibility; 6) educational process – enhanced study of professional disciplines and integration of service training into the curriculum; 7) guaranteed employment – mandatory further employment in the police, State Emergency Service, etc. These provisions are fully consistent with the Strategy for the Development of Higher Education in Ukraine for 2022-2032, approved by the Resolution of the Cabinet of Ministers of Ukraine dated February 23, 2022 No. 286-p. (*Strategy for the Development of Higher Education, 2022*).

#### **5. Foreign experience of higher education institutions with specific training conditions and directions of its implementation in Ukraine**

Below, taking into account the objectives of the study, it is advisable to analyze foreign experience of higher education institutions with specific training conditions that train police officers as representatives of law enforcement agencies using the example of the USA and Germany.

Under modern conditions, one of the most complex police systems in terms of its structure functions quite successfully in the United States of America (USA). It is characterized by a variety of organizational and legal forms, which is due to the peculiarities of historical development, the legal system of the Anglo-American type, as well as the federal state structure. Police forces operate at the federal (FBI), state, local (in cities, counties and other municipal units) levels. There are police agencies in individual ministries and departments: the Ministry of Finance, the Customs Service, the Internal Revenue Service, the federal banking supervisory

authorities, and others, as well as private police. All this imposes its own specifics on the training of police personnel, which is carried out in educational institutions traditionally called police academies. In particular, the Federal Bureau of Investigation (FBI) has its own system of training personnel – from a number of academies and university faculties and colleges to short-term courses. Law enforcement (police) personnel are trained to operate under strict control by special agencies responsible for the legality and transparency of the work of law enforcement agencies, executive bodies, judges, prosecutors, lawyers, jury service. This requires special professionalism, as well as high personal moral qualities. The US police, as a rule, do not have their own training base, and try first of all to recruit specialists who have received the appropriate education in colleges or universities. The wide network of police academies cannot be considered as such a base, since they are not structurally part of the police department, are organizationally and financially independent, being only a kind of centers for the initial training of civilian specialists so that they can obtain a license for the right to carry out police activities.

In the USA, police training institutions exist as independent (FBI Academy, Glynco Training Center) or on the basis of civilian universities. In general, the first police schools arose on the basis of civilian universities. The main problem of managing personnel training in the USA lies in the decentralized system and the existence of many jurisdictions: municipal; district; state; federal. In this regard, educational institutions are under the management of relevant bodies focused on serving certain territories. A significant feature of the police training system in the USA is the presence of numerous private and public training centers. One of the largest federal training centers for law enforcement agencies is located in the state of Georgia (Glynco County). Back in 1970, the US government decided to create one powerful training center instead of numerous small training institutions for various government agencies. Currently, it is one of the largest educational institutions in the United States, providing training in short-term courses (up to 18 months) for specialists from more than 70 law enforcement agencies. Up to 2,300 people can study here at the same time. Applicants to the Training Center must already have a certain level of education, since some federal services hire people with bachelor's or even master's degrees. The Center is managed by a board of directors. It is constantly staffed by representatives of US law enforcement agencies (customers), who liaise between the educational institution and the relevant agency, participate in improving training programs and conducting assessments. The Center is funded by the US Congress. Training at the Center is maximally focused on preparing specialists for future professional activities. In general, the Center provides basic knowledge, so after graduation, many graduates undergo additional training at the place of service. As A. Savchenko notes, “as a positive experience in the system of professional education, we can note the release in the USA of a special bulletin on the training and retraining of law enforcement officers. The bulletin informs about changes in legislation, about novelties in work methods, analyzes various concepts of police development, etc.” (Savchenko, 2015).

O. Islamov, studying the system of training police officers in the USA, notes that “the personnel selection system for the US police is carefully thought out. The staff of the American police is trained by the following institutions: 40 higher and secondary police colleges; 180 civic colleges (after training, they issue their graduates a diploma of completing a two-year course of study in police science); 47 universities, where there is a course in the field of police science and a bachelor of law degree is awarded. To obtain the title of a police officer in the United States, it is necessary to meet a certain list of requirements: to be a US citizen (it does not matter whether you are an immigrant or a “native” resident of the USA); to have no criminal record; to have a complete secondary education; to graduate from college with a high GPA or to serve two years in the US army; to pass a test on knowledge of basic school subjects,

the basics of psychology, civil and criminal law; undergo physical training and pass a health test (*Islamov, 2019: 128*). In the author's opinion, in order to improve the training of police officers in the system of higher education institutions with specific training conditions, more powers should be given to educational institutions that train future police officers, a separate role should be assigned to the status of a teacher, special attention in educational policy should be paid to the content of education in higher education institutions of the Ministry of Internal Affairs, which should instantly respond to the rapidly changing needs of society and focus on training specialists who will serve in emergency circumstances, increasing practical training in the educational process of police officers and reducing the role of combat training, the number of squads; active participation in the creation of international police education centers; establishing relations with foreign police higher education institutions (*Islamov, 2019: 128*).

The professional training of lower-level police officers in the Federal Republic of Germany is provided by seven regional training centers of the Federal Police (hereinafter referred to as the FP); the professional training of middle-level police officers is provided by the Federal Higher School of Public Administration (Brühl), after which graduates receive a bachelor's degree in public administration; the training of higher-level police officers is provided by the German Higher School of Police (Münster), graduates receive a master's degree in public administration.

The training lasts two years and is also organized according to the credit-module system (120 credits – 3,600 hours – 20 modules). The modules of the 1st year of training are mastered by students on the basis of the relevant departmental educational institutions, depending on the type of police the student belongs to. Representatives of the Federal Police study during the first year of the master's degree at the Federal Police Academy in Lübeck. The German Police Academy appoints consultants from the relevant subject areas for this period, who are assigned to certain modules and are listed by name in the module book for a specific year of enrollment. Classes are held in the form of lectures, lectures with elements of practical exercises, seminars, seminars with elements of practical exercises, seminars with elements of training, practical classes, discussions, project days, trainings (*Ilna Isayeva, 2019: 110-121*).

Training at the academy is carried out on the basis of studying various subjects, which guarantees the police officers the opportunity to conduct operations and make decisions taking into account various political, social and legal factors. In accordance with this, the management has developed a curriculum for the unified training of students of the higher police service, which has been unchanged for more than 10 years. It defines the foundations of training and the goal, guiding ideas for training personnel, the distribution and organization of training of students for 2 years. Highly qualified specialists are trained in the following specialties: management, police management and legal and social sciences. The scientific and teaching staff of the academy teaches organizational and economic sciences, doctrines of police operations, forensics, criminology, transport doctrine, police technology. The Police Academy is not only the main one in the unified nationwide system of training police personnel of various levels, but also the main center of scientific and research activities, developments in the field of law enforcement. The Police Academy hosts advanced training courses for management staff, which are attended by up to 2,000 people per year, including those from different countries of the world (*Izbash, 2013: 36-39*).

As D.V. Shvets correctly notes, “the police academy is not only the main one in the unified nationwide system of training police personnel of various levels, but also the main center of scientific research activities, developments in the field of law enforcement. In the training programs for training specialists for police services, a large place belongs to the development of

skills and abilities to work with scientific and technical means, which are extremely widely used in police work. After graduating from an educational institution (school, academy or police institute), it is mandatory for all employees to undergo psychological training as advanced training at least once every three years. For this purpose, employees of the Bavarian Police Advanced Training Institute have developed the "PACKAGE" training – police anti-stress communicative training, which is conducted for two weeks and aims not only to optimize psychological skills and abilities, but also to "heal the soul". This concept of training is justified by leading specialists of the Central Psychological Service (CPS) of the Bavarian police, who believe that law enforcement officers need psychological assistance and therapy to a greater extent than employees of other professions. In Bavaria, there is serious competition between police educational institutions and higher education institutions in the economic sphere, since most school graduates prefer economics. In order to attract young people to work in law enforcement, the police are actively working to encourage personnel to further enroll in higher police educational institutions, of which there are seven in Bavaria. After graduating from the educational institution, they have a choice – to join the police or a special purpose group. The training of managerial personnel in the German police includes such training topics as the fight against crime; road safety; management of police operations; the role of the police in society; leadership; human resource development; legislative support for law enforcement activities; international cooperation (*Shvets 2018: 50-54*).

## 6. Conclusions

In conclusion, it should be noted that the foreign experience of the functioning of higher education institutions (HEIs) with specific training conditions (military, police, security academies) is based on practical orientation, intensive physical and psychological training, as well as a combination of military discipline with academic freedom. The key aspects of foreign practices of higher education institutions (HEIs) with specific training conditions include: 1) training models (Police and Security), which include a practical orientation – in the EU and the USA, training often assumes that 90% of the time is spent on practical training (tactics, simulations, shooting) and only 10% – theoretical classes; introduction of simulation technologies for training – active use of virtual reality (VR) and interactive scenarios for training in stressful situations; psychological resilience – much attention is paid to psychological support and building resilience to prevent professional burnout. Key European and American institutions of higher education with specific training conditions are: the activities of CEPOL (EU Agency for Law Enforcement Training) – a center in Budapest that coordinates the training of EU police officers, offering joint training programs and online courses; NATO Defense College / NATO School Oberammergau – specialized institutions for senior command staff that focus on strategic planning and interoperability of troops; US military academies (West Point, Annapolis, Air Force Academy) – combine higher engineering/humanitarian education with military discipline and leadership.

The features of education in higher education with specific training conditions in foreign countries are as follows: leadership and critical thinking development – training aimed at developing the ability to make decisions in conditions of uncertainty; introduction of the principle of "leave the rank at the door", which is often used at the postgraduate level to stimulate open discussion between military personnel with different ranks. It has been established that the international integration of Ukrainian HEIs with specific training conditions is seen in the following:

Ukrainian HEIs with specific training conditions (military, police, security academies) should join the European Security and Defense College (ESDC) network, which allows implementing EU standards; the need to study international humanitarian law (IHL) – mandatory and in-depth training on the rules of warfare, protection of civilians and reporting on war crimes; strengthening psychological support for cadets, increasing the share of simulation training methods, further implementation of integrity standards (DCF) in the educational process.

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## VECTORITY OF THE TRANSFORMATION OF THE EMPIRE AS A FORM OF STATE SYSTEM

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### Summary

The article is of a scientific-research nature and is devoted to the analysis of modern vectors of development of empire as a form of state structure in the conditions of globalization and transformation of political systems. The subject of the study is the empire as a political model and legal form of state structure of a country, which, despite its historical heritage, demonstrates signs of adaptation and rethinking in the modern international context. The article examines the main approaches to the analysis of imperialism and modernization, as well as their connection with contemporary global challenges and digital transformations of society and state institutions. The purpose of the study is to identify conceptual transformations of imperial structures and mechanisms of their functioning in the present. The research was carried out using dialectical, formal-legal, structural-functional, and comparative-legal methods. The originality of the study lies in the attempt to carry out a comparative analysis of modern imperial strategies within the international political space. The modern world is rapidly transforming under the influence of digital technologies, globalization and socio-economic changes. So, on the one hand, technological progress promises new opportunities for humanity. On the other hand, there is a threat of the digital environment becoming an instrument of control, repression and neocolonial expansion. The practical value of the study lies in creating an analytical basis for further research into imperial forms of state structure and power, their impact on global security and political and legal stability.

**Key words:** post-globalization, state structure, empire, neoempire, form of state, digitalization.

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### 1. Introduction

Among the numerous current and still not finally resolved problems of jurisprudence remains the question of defining the concept of «state form». Such uncertainty is related to the meaning that researchers put into this theoretical and legal category, which in turn affects the mutual agreement with other legal concepts: «essence of the state», «content of the state», «historical type of the state», «mechanism of the state», and forms a holistic idea of the state as a socio-political phenomenon.

In the general theoretical aspect, the «state form» is studied in two main directions: 1) instrumental (practical-political) approach – analyzes the form of the state in view of the effectiveness of state administration, the stability of the functioning of the state apparatus, the peculiarities of the relationship between the government and the people and 2) scientific and cognitive (epistemological) approach – studies the relationship of the form of the state with its essence, content and historical type.

In countries with written constitutions, the form of the state is fixed by a separate chapter or section devoted to the constitutional system (for example, in Italy). Individual elements of the form of the state can also be reflected in provisions on the territorial structure or organization of state authorities. In countries with unwritten constitutions, the form of the state is determined through constitutional laws or historically formed conventional norms (for example, in Great Britain). A type of state system, along with unitary, federation and confederation, is empire, which in most studies of state forms is considered as a historical rudiment of state-building processes.

The form of the state, as a manifestation of the main characteristics of statehood – in particular its essence, content, functions and structure of power – has never been static or unchanging. The question of why one state has a monarchical form of government, and another – a republican one; why one is organized as a federation, and another as a unitary state; what circumstances determine the differences in the forms of the state regime within the same historical era – remains the subject of scientific discussions. In modern legal science, an idea of the form of the state as a complex and multidimensional phenomenon has developed, which has led to the active implementation of a systematic approach to the study of its problems and scientific prospects. The general theoretical aspects of this category are given special attention in the works of O. V. Zaichuk, N. M. Onishchenko, O. V. Petryshyn, S. G. Seregina and other scientists (*Zaichuk (ed.), Onyshchenko, 2008; Tsvik (ed.), Petryshyn, 2011*). Analyzing the form of the state, most lawyers attribute the empire to a historical example of the formation and development of a complex state, ignoring the possibility of the existence of a cyclical nature of the natural process of development of state and legal phenomena. In general, we can single out several main factors that collectively influence the formation of the state form: the conditions of its emergence (for example, the federal structure of the USA), historical traditions (preservation of the monarchy in Great Britain), the internal political struggle of the elites (frequent changes in forms of state government in African countries), the dominance of certain ideological and cultural values (the formation of a theocratic republic in Iran), etc.

Traditionally, the form of the state is considered as the organization of political power in the state, in the unity of three elements: the form of state government, system and regime. In view of this, the purpose of the article is to analyze and reveal modern vectors of the development of the empire as a type of form of state government. To achieve the set goal, dialectical, formal-dogmatic, system-structural and comparative-legal research methods were used. In particular, comparative analysis made it possible to identify the special features of neo-empire as a form of state structure compared to the classical form of empire, and the systemic approach contributed to the study of neo-empire as a complex phenomenon of the development of society and state-building processes. For Ukraine, the topic of imperialism is particularly relevant, because for centuries the state has been the object of imperial ambitions, which has formed the specifics of its national identity, political culture and statehood. Today, these imperial encroachments have again taken an aggressive form in the full-scale military invasion of Russia, which began in 2014 with the annexation of Crimea and escalated into a large-scale war in 2022. Russian aggression is a direct continuation of its imperial policy, which denies Ukraine's right to sovereignty, identity and independent development. This war once again emphasizes that imperialism is not a historical relic, but a real threat that requires Ukraine to consolidate national consciousness and consistently affirm democratic values and its own historical path. Analysis of the imperial legacy is critically important for building and preserving an independent state with a national identity and forming an effective foreign policy that takes into account both historical experience and modern global challenges. Only through a critical understanding of its past can Ukraine form a holistic development strategy capable of ensuring its subjectivity in international relations.

## 2. Methodology

In the course of researching contemporary directions in the transformation of the empire as a form of state organization under conditions of globalization and digitalization, a comprehensive set of legal methods was employed. These methods enabled a multidimensional analysis of the phenomenon, taking into account legal, institutional, and technological factors. The leading method was the formal-dogmatic approach, which facilitated the analysis of modern legal interpretations of the empire as a form of the state, as well as the mechanisms of state power influence within a neo-imperialist legal regime, digital sovereignty, and global legal order. The historical-comparative method was applied to study the evolution of the empire as a form of state in a historical context, comparing classical imperial models with contemporary forms of state dominance, including the transformation of the legal landscape under the influence of digital technologies. The application of the systems approach allowed the empire to be viewed as a complex political and legal construct, comprising institutional (static), legal (structural), and dynamic (digital) components. The use of the structural-functional method contributed to the analysis of how traditional elements of state authority (particularly lawmaking, coercion, and legitimation) adapt to new forms of digital domination. The dialectical method ensured a comprehensive approach to examining the contradictions between sovereignty and imperial expansion in the digital dimension. It allowed for the identification of the transformation of classical forms of the state under digitalization. At the final stage of the study, the functional method was used, enabling the differentiation of neo-imperial elements into positive manifestations (such as the unification of normative standards and the development of international law) and negative ones (such as digital colonialism and asymmetric regulation). Overall, the application of these methods made it possible to conduct a comprehensive, in-depth, and interdisciplinary study of the contemporary transformations of the empire as a form of the state in the context of global and digital changes.

## 3. Research and results

### 3.1. The form of the state in the classical general theoretical sense

The concept of «the state form» has ancient origins and is the result of a theoretical generalization of the individual state experience (for example, Great Britain, France, China, etc.). It encompasses a set of basic characteristics that have been considered decisive for describing the state since ancient times. Thanks to these characteristics, a more complete picture of the state of a particular country at a specific stage of its historical development is formed.

The concept of the state form is based on the philosophical understanding of the category of «form», which is interpreted: as an external manifestation of the essence (external form) and as a method of internal organization of the phenomenon (internal form) (*Blikhar, 2020: 241*). Thus, the form of the state is at the same time an external manifestation of its essence and content, as well as a method of internal organization of state power and its implementation. The state as a special political organization is endowed with certain substantive features that reflect its social essence with a manifestation in external form. Thus, the content of the state is revealed through the totality of elements and processes that form it, and the form of the state is an external expression of its content in space and time. The form of the state directly expresses its essence and content. The study of the state essence contributes to the disclosure of the will and interests of the layers of society that it protects; to establish the directions of development and

action of the state. The study of the state form reveals its structure, its main components and the exercise of state power. That is, the internal form of the state covers the most important aspects of the organization of state power and is distinguished by the complexity of its content. It determines, firstly, which bodies exercise state power, what is the procedure for their formation (formation) and the term of office. Secondly, it establishes how the relations between central, regional and local authorities are organized, as well as what is the form of the territorial organization of the state. Thirdly, it reveals what means, methods and techniques are used to exercise state power. Thus, given the above-mentioned subject area of research: empire as a form of state structure determines the external features of the implementation of state power in the country and the features of managing society, I use only its inherent political and legal regime – imperialism. It should be noted that imperialism as a scientific category remains an unpopular object of research both in the past and today. It is usually viewed through an economic prism, leaving out of consideration the equally important legal or political aspects.

### 3.2. Empire as a legal form of state structure

Imperialism is a multidimensional phenomenon. It cannot be reduced only to economic domination; it is not only a process, but also an ideology and even a philosophy of life, a political and legal regime in the state (*Howe, 2002: 22*). In the political context, it is the desire for control over other peoples and territories, in the legal context, it is the legal regime for exercising state power in a country, which is implemented by both force and hybrid methods. Imperialism is the domination or control of one country or group of people over others, often at their expense (*Trebina, et al., 2015: 296*); imperialism is considered a consequence of class struggle and an instrument of economic expansion, but this interpretation is considered somewhat simplified. Imperialism in the modern sense is not only the colonial conquest of territories, but primarily economic, technological and cultural expansion. Classical Marxist theory (R. Hilferding) interpreted imperialism as the highest stage of capitalism, when monopolies prevail, capital is exported and the world is redistributed between powerful states (*Vetrynsky, 2013: 30*).

From a historical point of view, imperialism in Europe had deep roots, in particular in the models of the Holy Roman and Ottoman Empires. In post-imperial centers – such as Germany, Austria – national identity was formed as a reaction to the imperial past. In peripheral regions, features of authoritarianism, religious conservatism and low institutional mobility are preserved. Imperialism as a political and legal form of the state regime is an indispensable component of the empire as a form of state structure.

The issue of the development of the empire as a legal form of the state in the modern context is quite complex and ambiguous, because the classical empire is a form of state structure inherent in past historical eras (*Tsvik (ed.), Petryshyn, 2011: 115*). However, some trends of modern global development allow us to talk about the reinterpretation of imperial forms of governance in new political and legal contexts. In particular, we can single out several main trends: 1) neo-imperialism and geopolitical expansion (China – economic expansion (One Belt, One Road Initiative), control over autonomies; use of legal mechanisms (referendums, «protection of compatriots») to legitimize imperial actions); 2) empire as a legal metaphor in supranational structures (the European Union is sometimes considered a «postmodern empire» – a supranational association with its own legal system; the USA – is sometimes considered an «empire of values» or an «economic empire» due to cultural and legal influence); 3) centralization of power and erosion of federalism (in some states, there is a strengthening of the center at the expense of autonomies. But the formal preservation of the federal system, but with imperial features (asymmetry in the rights of the subjects of the federation); 4) legal legitimization of expansion (imperial actions are disguised as «human rights» missions or «protection

of historical justice»; creation of quasi-states with their own legal systems dependent on the metropolis); 5) cultural and information empire (control over the information space, language policy, educational system – tools of soft imperial power; legal justification of language policy, historical memory, etc.).

### 3.3. Neo-empire – a modern form of state

In the 21st century, a new format of the political and legal regime of state power – neoimperialism – appears (*Kelly, 2025*). It is based on domination through the economy, technology, financial instruments, media and global platforms. The USA and a number of Western countries are accused of striving for cultural, political and economic hegemony under the guise of globalization. That is why anti-globalists often identify globalism with imperialism.

Modern «neo-empires» have distinctive features compared to classical empires. Thus, in addition to territorial expansion, the neo-empire sets political influence, economic expansion, «protection of its own» as its main goal, by conducting hybrid warfare, influence, and information aggression. For example, Russia (annexation of Crimea (2014), occupation of parts of Donbas, fullscale invasion of Ukraine (24.02.2022); North Korea (Strengthening control over Hong Kong, claims to Taiwan, construction of artificial islands in the South China Sea) (*Turanskyi, Haruk, 2019: 198*); Turkey (intervention in Syria, influence in Northern Iraq; soft expansion in regions with a Turkic population). Centralization of power occurs through the concentration and retention of state power in the hands of the President or a leader with a strong vertical, if there are autonomous entities in the state, they mostly have fictitious self-government and are under full control of the center (*Abramowicz, 2008: 254-257*). For example, North Korea (strict centralism, suppression of Uyghur autonomy, unification of the party line); Hungary (concentration of state power in the hands of the President of the country, reducing the powers of the opposition and the judiciary).

The legal system of a neo-imperial state is characterized by manipulative regulatory acts in the mechanism of legal regulation of social relations and the creation of loyal «law», imitation of legality and democracy while maintaining authoritarianism; the legal system as an instrument of anti-democratic state power. Thus, in Russia, the judicial system is completely dependent on the head of state, political persecution is a common phenomenon, illegal actions and human rights violations are justified by «wartime laws»; the DPRK is dominated by a one-party system, there is repressive legislation in Hong Kong (in particular, the National Security Law); repression through «extremism legislation» is widespread in Belarus. In the field of cultural policy, the state takes a position of sinicization, cultural expansion, forced Russification, implementing the ideology of «protecting traditions», restoring «historical justice». For example, in the DPRK, Internet censorship is carried out (the Great Firewall of China), culture and language control is carried out in Tibet, or in the USA, soft power law is used through the spread of ideological influence in social networks and cultural expansion English-language content (*Cooper, 2006: 89*). The legitimation of state power is formally based on the alleged «will of the people», «historical narratives», supported by media resources, ideological mobilization and historical mythology. For example, Iran (export of the Islamic revolution, influence in Lebanon, Syria, Yemen under the religious banner).

In an empire, the form of state government and the form of state-territorial organization are usually characterized by close overlap, which is revealed through the organizational-structural (static) aspect of the state. At the same time, there is also a functional dimension of the empire, which is manifested through the state-legal regime. This regime integrates elements of the form of government and territorial organization, creating a single system of central and local authorities, which, within their powers, manage the state and society. The state-legal regime is

a set of principles, forms and methods of implementing state power, which are enshrined in the norms of law. Accordingly, the activities of both central and local state authorities in a neo-empire are actually carried out outside their competence and in violation of legal norms (*Chernetska, 2021: 27*). That is, the legal regime of a neo-empire can be defined as illegal, because state power is seized and held by force, coup or rebellion, without following democratic procedures. In such conditions, the existence and activity of power structures contradicts legal norms, is based on coercion, ignoring the will of the people (*Marushchak, 2024: 109*).

While imperialism is usually characterized by conquest and rule, and colonialism by migration and residence in conquered territory, neo-imperialism is the domination, and sometimes even hegemony, over others, mainly through formally free legal agreements, economic power, and cultural influence; it is a modern version of imperialism, based on economic and technological superiority in the context of globalization. One of the many definitions of the form that US political power and economic dominance took in the 20th century, especially during and after World War II, is neo-imperialism (or «informal empire», «imperialism without empire», «empire of freedom», and «Pax Americana») (*Kelly, 2010: 16-21*). The United States is not the only neo-imperialist state in history, and neoimperialism is not exclusively a phenomenon of the 20th and 21st centuries. However, the United States is dominant in the spread of neo-imperial strategies in the process of state formation, in contrast to directly colonial or imperial strategies of state development. And the second half of the twentieth century is a period when neo-imperialism as a political and legal regime in the state became the dominant mode of global political power. The United States and its partners sought to maintain global stability through: a military-base network (location of military bases on different continents) – an instrument of selective intervention without annexation); legal regimes (WTO, IMF, rating agencies) – standards that limit the economic sovereignty of states; cultural hegemony (media, digital platforms) – the formation of a unified symbolic «economy of desires» (*Nye, 2003: 77-III*). In these conditions, states are forced to build policies between the liberal norms of the global center and local socio-cultural structures, often reproducing the asymmetry of state power.

The state in its modern form arises as a result of the European balance of power and the competitive expansion of empires. Imperialism – as the center's desire for political and economic expansion – has always been a dual process: on the one hand, the presence of expansion – the forcible or institutional subjugation of the periphery; on the other – institution-building – the imposition of governance models that later become the basis for new national states. That is why imperial practices not only destroyed traditional orders, but also, paradoxically, created the prerequisites for the modernization of statebuilding processes. Imperialism became a nationalist idea that rejects universalist ideas.

### **3.4. Digitalization of state-power relations as a modern vector of empire development**

The development of digital technologies has contributed to the emergence of the phenomenon of the so-called «digital mania», which is manifested in an unconditional fascination with the digitalization of all life spheres.. The form of the state is no exception, which is also affected by digitalization as a result of the process of state-power relations modernization. The digitalization of state-power relations as a result of the state forms modernization arose as an attempt to improve the mechanisms of the transition of societies from the traditional state to the modern one (*Najafti, 2022: 205*). It is based on a bipolar model of societies, where traditional structures are characterized by authoritarianism, religiosity and staticity, and modern ones are characterized by mobility, rationality and innovation. Modernization is interpreted as not only an economic process, but also a change in the system of values and social guidelines.

This has become a new technocratic myth, according to which it is digital transformation that should lead humanity out of the historical crisis. However, in practice, we observe the growth of «digital bureaucracy», which not only does not reduce, but paradoxically strengthens «paper» bureaucracy, depersonalizes the individual, replaces humanistic values with algorithmic structures and contributes to the immersion of society in the «digital Middle Ages».

Without proper socio-economic and legal organization, the digital environment risks turning from an instrument of development into a mechanism of alienation, therefore it is appropriate to preserve and use in the mechanism of legal regulation of social relations a system of Christian legal norms, legal traditions that form the concept of the spiritual development of the state and society as an alternative to the technocratic determinism of social relations.

An empire is a state whose legal and political systems are based on the dominance of the center over the periphery, and such a state strives for the global spread of its power in order to achieve absolute security. Imperialism is a political and legal regime created to maintain the empire and focused on control over other states. It is political dominance that provides a state with the ability to influence key decisions, primarily in the security sphere. This is the main goal of imperial strategy.

#### 4. Conclusions

Despite numerous definitions of empire, imperialism, fundamental research on the legal or political content of this phenomenon remains scarce. Historically, the economy has been an instrument of politics, not vice versa. It is the desire for political power and territorial control that is the main driving force of imperialism. Geopolitics, which serves as its ideological basis, is also oriented towards control over territories. However, global challenges such as international terrorism, the proliferation of nuclear weapons, the influence of TNCs and digitalization require new approaches to the analysis of imperialism. Modern strategies should be based not on military force, but on new forms of influence and interdependence. The inertia of thinking within old geopolitical paradigms can slow down the development of the international system and endanger global security. Modern neo-empires take on the form, but mask the essence. They operate within the legal framework of modernity (constitutions, elections, courts), but use them as instruments of imperial dominance, not of the true rule of law. Although the classical empire as a legal form of the state has almost disappeared, its features are being transformed and adapted in modern political practices. The main features – centralization, asymmetry, expansion – may be preserved in the legal systems of states or supranational structures. In addition, the phenomena of digitalization, modernization, and imperialism are closely interconnected. Digital progress can become a driver of human development only under the condition of a humanistic approach and socio-economic justice. Modernization must take into account cultural specificity and the plurality of historical paths. And imperialism – as a political and economic strategy – requires constant critical reflection, especially in countries that have experienced colonial or imperial dependence. For Ukraine, understanding these processes is the key to forming an independent, responsible, and progressive model of state development in the era of global transformations.

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## LOCAL SELF-GOVERNMENT AS AN ACTOR IN ENSURING THE RESILIENCE OF UKRAINE'S HEALTHCARE SYSTEM

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### Summary

The article examines local self-government as an important institutional actor in ensuring the resilience of Ukraine's healthcare system under conditions of contemporary security, social, demographic, and institutional challenges. The study substantiates that the resilience of the healthcare system cannot be reduced solely to centralized state policy, the availability of medical infrastructure, or the volume of financial resources. It is also determined by the capacity of territorial communities to preserve the continuity of medical services, adapt to crisis conditions, mobilize local resources, and respond to the specific needs of the population.

Particular attention is paid to the institutional and legal status of local self-government in the healthcare sector. Local self-government bodies are considered not only as owners or founders of municipal healthcare institutions, but also as actors of local health policy, financial partners, coordinators, and representatives of community interests. The article emphasizes that decentralization has expanded the managerial opportunities of territorial communities, while also increasing their responsibility for the quality, accessibility, and sustainability of basic healthcare services.

The article analyzes the role of territorial communities in ensuring access to primary healthcare, transport and physical accessibility, financial support for vulnerable groups, human resource capacity, digital accessibility, and the adaptation of services to wartime needs. It is argued that under martial law the functions of local self-government have acquired a crisis-management and security-oriented character, especially in relation to the restoration of damaged medical infrastructure, the support of internally displaced persons, the provision of rehabilitation and psychological assistance, and coordination with military administrations, humanitarian organizations, and state institutions.

**Key words:** local self-government; territorial communities; healthcare system resilience; healthcare access; decentralization; municipal healthcare institutions; crisis management; medical infrastructure; wartime healthcare; Ukraine.

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### 1. Introduction

The relevance of studying the role of local self-government in ensuring the resilience of Ukraine's healthcare system is determined by a combination of security, social, demographic, and institutional challenges that have substantially changed the conditions under which the medical sector operates. The full-scale Russian-Ukrainian war has not only increased the burden on the healthcare system but has also revealed its dependence on the capacity of territorial communities to respond promptly to crisis circumstances. The destruction and damage of medical infrastructure, population displacement, and the growing number of people in need of rehabilitation, psychological, social-medical, and primary healthcare have created a new reality

in which the accessibility of medical services has acquired not only social but also security significance.

The resilience of the healthcare system under current conditions cannot be considered solely as the result of centralized public administration. It is formed through the interaction of central government authorities, the regional level, local self-government bodies, municipal healthcare institutions, the civil sector, and international partners. At the same time, territorial communities are precisely the level at which the needs of the population manifest themselves most concretely (*Didyk, 2025*).

Local self-government bodies ensure the maintenance and development of municipal medical infrastructure, support local healthcare programmes, facilitate the organization of primary care, participate in the restoration of damaged institutions, and contribute to ensuring transport accessibility, energy autonomy, and the adaptation of medical services to the needs of different population groups.

This issue becomes particularly significant in the context of decentralization, which has expanded the managerial capacities of communities while simultaneously increasing their responsibility for the quality of basic services. In the field of healthcare, this is reflected in the need to combine state guarantees of medical care with local decisions that take into account the resource capacity of the community, the staffing situation, the demographic structure of the population, security risks, and the consequences of the war.

The purpose of the article is to analyze local self-government as a subject of ensuring the resilience of Ukraine's healthcare system under conditions of contemporary challenges. To achieve this purpose, the article aims to disclose the content of the concept of healthcare system resilience, determine the institutional and legal powers of local self-government bodies in the medical sphere, analyze their role in preserving the accessibility and continuity of medical services, identify the main problems of community functioning in this field, and outline directions for strengthening their managerial, financial, and organizational capacity.

## **2. Theoretical and Methodological Foundations for Studying the Resilience of the Healthcare System**

The resilience of the healthcare system should be understood as the comprehensive capacity of the medical system to preserve its functionality, adapt to change, recover from crisis impacts, and, at the same time, develop in accordance with emerging societal needs. Under current conditions, this concept acquires particular significance, as Ukraine's healthcare system operates under the influence of prolonged security, socio-economic, demographic, and institutional challenges.

This concerns not only the capacity to provide medical services under stable conditions, but above all the ability to ensure the continuity of medical care during war, emergencies, mass population displacement, infrastructure destruction, staff shortages, and the increasing burden on local healthcare institutions.

In this context, resilience cannot be reduced solely to the number of hospitals, the volume of funding, or the availability of medical equipment. These factors are important; however, they constitute only the material basis for the functioning of the system.

Of much broader importance is managerial capacity, that is, the ability of public authorities and healthcare facility administrations to make prompt decisions, coordinate resources, determine priorities, and ensure interaction among various actors involved in health policy.

Equally important are human resource capacity, the professional motivation of healthcare workers, the stability of logistical chains, the availability of digital tools, effective communication with the population, and the system's ability to take into account the needs of different social groups (*Avhustyn & Demkiv, 2024*).

Local self-government occupies a special place in ensuring the resilience of the healthcare system. It should not be viewed merely as a lower level of implementation of state policy, since territorial communities are the ones that directly encounter the practical consequences of crisis phenomena.

At the local level, the real needs of the population become visible, along with problems of access to medical services, transport limitations, staff shortages, the condition of municipal infrastructure, and the specific needs of vulnerable groups. Local self-government bodies may adopt managerial decisions on supporting municipal institutions, financing local programmes, organizing patient transportation, and providing medical facilities with generators, communication equipment, shelters, and other resources necessary for uninterrupted operation (*Korobchynska, 2022*).

Methodologically, the study of this issue requires a combination of several approaches. The systemic approach makes it possible to examine healthcare as a complex multi-level system in which the state, communities, healthcare institutions, patients, the civil sector, and international partners interact. The institutional approach enables an analysis of formal powers, rules, financing mechanisms, and managerial practices that determine the participation of local self-government in the healthcare sector. The political-managerial approach focuses attention on decision-making processes, the distribution of responsibility, coordination between levels of government, and the capacity of local institutions to act under conditions of uncertainty. It is precisely the combination of these approaches that makes it possible to comprehensively assess the role of local self-government as an active subject of ensuring the resilience of Ukraine's healthcare system.

### **3. Institutional and Legal Status of Local Self-Government in the Field of Healthcare**

The normative and institutional foundations of the participation of local self-government bodies in ensuring healthcare define their role not only as owners of particular municipal institutions but also as important actors in the formation of local health policy. Under current conditions, healthcare is increasingly viewed not only as a sector for the provision of medical services but also as a component of societal resilience, community security, and the quality of life of the population. Therefore, the activity of local self-government in this field has a comprehensive character and includes managerial, financial, property-related, organizational, and coordination functions.

The legal foundations for the participation of local self-government bodies in the healthcare sector are enshrined in the constitutional principles of local self-government, legislation on local self-government, the fundamentals of Ukrainian healthcare legislation, budget legislation, and special legal acts regulating the functioning of the system of medical guarantees. The essence of these norms is that territorial communities, through their respective councils and executive bodies, participate in ensuring access to medical care, creating appropriate conditions for the functioning of healthcare institutions, implementing local programmes, and supporting particular categories of the population. At the same time, the state defines the general rules,

standards, guarantees, and financial mechanisms, while the local level is responsible for a significant part of the practical organization of these processes.

Municipal healthcare institutions occupy a special place in this system, as they constitute an element of local social infrastructure. Local self-government bodies act as founders or owners of such institutions and adopt decisions regarding their establishment, reorganization, development, property maintenance, material and technical support, and strategic planning (Panov, 2024).

Following the transformation of many healthcare institutions into municipal non-profit enterprises, local councils acquired new managerial opportunities, but also additional responsibility. This concerns not only formal ownership of property but also the need to ensure effective management, staff stability, transparent use of resources, proper quality of services, and the financial viability of institutions.

The financial and managerial powers of communities in the field of healthcare have a dual character. On the one hand, a substantial share of medical services is financed through the Programme of Medical Guarantees and contracts concluded between healthcare institutions and the National Health Service of Ukraine. On the other hand, local budgets remain an important source of support for medical infrastructure, repair of premises, procurement of equipment, payment for utilities, development of local programmes, support for healthcare workers, and provision of additional needs of the population. It is precisely at the local level that decisions may be adopted on public health programmes, disease prevention, support for persons with disabilities, veterans, internally displaced persons, older people, and other vulnerable groups.

Decentralization has substantially changed the role of territorial communities in the healthcare sector. It has expanded the capacity of local self-government to plan the development of social infrastructure, attract resources, and adapt services to the real needs of the population. At the same time, decentralization has revealed the uneven capacity of communities. More financially capable communities have broader opportunities to modernize healthcare institutions, introduce additional services, and support personnel, whereas less resourceful communities often face shortages of funds, staff, and managerial expertise (Karpiak et al., 2023).

An important element of the institutional model is the interaction between the local, regional, and state levels of governance. Local self-government bodies must coordinate their activities with the National Health Service of Ukraine, the Ministry of Health, regional and district military administrations, healthcare departments, humanitarian organizations, and other partners. Under martial law, such interaction acquires particular importance, as it concerns the continuity of healthcare institutions' operation, patient evacuation, restoration of damaged infrastructure, and provision of medicines, equipment, generators, shelters, and backup communication channels.

Thus, the institutional and legal status of local self-government in the field of healthcare combines the functions of owner, manager, coordinator, financial partner, and representative of community interests. The effectiveness of this role depends on the quality of legal regulation, the financial capacity of communities, the professionalism of managerial decisions, and the level of coordination among all components of public authority. In this context, local self-government acts not as an auxiliary element, but as one of the fundamental institutional levels for ensuring the resilience of Ukraine's healthcare system.

#### 4. The Role of Territorial Communities in Ensuring Access to Medical Services

The practical dimension of the activity of territorial communities in the field of healthcare is most clearly manifested in ensuring the real accessibility of medical services for the population. While strategic priorities, regulatory rules, financial guarantees, and the general model of the functioning of the medical system are formed at the national level, it is precisely at the local level that these decisions acquire concrete substance.

For a resident of a community, access to healthcare means not only the formal right to medical care, but also the actual possibility of receiving it within an acceptable timeframe, in a safe place, and without excessive financial, transport, informational, or organizational barriers. For this reason, territorial communities serve as an important link between state policy in the field of healthcare and the everyday needs of the population (*Polkovnikova, 2019*).

One of the key areas of local self-government participation is support for primary healthcare. The primary level is the closest to the individual, since it is through family doctors, outpatient clinics, feldsher-midwife stations, and other local facilities that the population receives basic medical services, preventive care, referrals to specialized professionals, and the initial detection of diseases. For many rural, settlement, and small urban communities, the presence of an outpatient clinic or a primary care facility is not only a medical factor but also a social factor of stability. Local self-government bodies may support such institutions through the maintenance of premises, payment for utilities, procurement of equipment, provision of official transport, improvement of working conditions for healthcare workers, and implementation of local healthcare programmes.

The issue of physical and transport accessibility of medical care is of particular importance. In communities with extensive territories, remote villages, poor transport connections, or damaged infrastructure, the mere presence of a healthcare institution in the administrative centre does not guarantee access to services.

For older people, persons with disabilities, people with reduced mobility, internally displaced persons, and families with children, the distance to a doctor may become an actual barrier to receiving care. Under such conditions, communities may apply various instruments: organizing patient transportation, supporting outreach consultations by doctors, engaging mobile medical teams, developing social taxi services, ensuring the accessibility of healthcare premises, and adapting infrastructure to the needs of persons with disabilities (*Suzyma & Yurochko, 2024*).

Financial accessibility is also an important component. Despite the existence of state guarantees of medical care, in practice patients often face additional costs related to transport, medicines, diagnostics, rehabilitation, or related services. Local programmes may partially compensate for these costs or direct resources toward supporting particular categories of the population.

This concerns the provision of medicines, assistance to cancer patients, support for veterans, persons with disabilities, children, older people, internally displaced persons, and other vulnerable groups. In this context, local self-government performs a function of social balancing, since it takes into account the specific needs of a particular community and can respond more promptly to problems that are not always covered by national programmes.

Human resource accessibility is also one of the determining factors of the resilience of the local healthcare system. The presence of premises or equipment does not ensure proper medical care without doctors, nurses, feldshers, psychologists, rehabilitation specialists, and other professionals. Many communities are characterized by staff shortages, the ageing of medical personnel, difficulties in attracting young specialists, and an uneven distribution of doctors between large

cities and peripheral territories. Local self-government may influence this problem through programmes for service housing, local incentives for healthcare workers, compensation of travel expenses, support for professional development, the creation of proper working conditions, and the development of partnerships with medical educational institutions (*Mazur et al., 2021*).

Information and digital accessibility of medical services require separate attention. Under conditions of healthcare digitalization, part of services, appointments, referrals, declarations, and communication with doctors is shifting to electronic formats. This creates new opportunities, but at the same time deepens inequality for people who lack internet access, digital skills, or technical devices. Territorial communities may mitigate these barriers through consultative support for the population, the work of administrative service centres, information campaigns, assistance to older people in using electronic services, and the development of telemedicine where physical access to a doctor is complicated.

Under wartime conditions, the role of communities in ensuring access to medical services has increased substantially. The destruction of infrastructure, population displacement, injuries among civilians and military personnel, and the growing need for psychological assistance and rehabilitation have transformed local health policy into a component of national resilience. A community capable of supporting the work of outpatient clinics, organizing assistance for internally displaced persons, and providing veterans and affected people with basic services effectively strengthens social security and public trust in government institutions.

## **5. Local Self-Government under Conditions of War: Adaptation, Crisis Management, and Support for Medical Infrastructure**

The Russian-Ukrainian war has substantially changed the content and practical orientation of local self-government activities in the field of healthcare. Whereas under conditions of relative stability local self-government bodies primarily performed functions related to the management of municipal property, support for local healthcare programmes, development of medical infrastructure, and ensuring access to basic services, under martial law these functions acquired a crisis-oriented, security-related, and mobilizational character. Territorial communities found themselves in a situation where it was necessary not only to ensure the planned functioning of healthcare institutions, but also to respond promptly to threats associated with shelling, destruction of infrastructure, population displacement, staff shortages, and disruptions in electricity, water supply, communications, and logistics.

Under these conditions, local self-government effectively became one of the key levels of crisis management in the healthcare sector. Communities were compelled to adopt rapid managerial decisions regarding the evacuation of patients, the repurposing of certain institutions, the organization of shelters within medical facilities, the provision of backup power supply, and the procurement of generators, medicines, personal protective equipment, and necessary medical equipment.

Coordination among local self-government bodies, military administrations, municipal healthcare institutions, volunteer structures, international organizations, and charitable foundations acquired particular importance. It was precisely this interaction that made it possible to partially compensate for resource shortages and support the continuity of medical care provision.

An important area of community activity was the restoration of damaged medical infrastructure. This concerns not only the repair of buildings, but also the restoration of the functional capacity of institutions: ensuring heating, water supply, communications, accessibility of

premises, renewal of equipment, and the creation of safe conditions for patients and healthcare workers. In this context, the resilience of the healthcare system is manifested not only in its capacity to withstand a crisis, but also in its ability to rapidly restore the minimum necessary level of services after damage or the loss of part of its resources (*United Nations, 2026*).

Medical, psychological, and rehabilitation support for the population has acquired separate significance. The war has increased the need for services for military personnel, veterans, internally displaced persons, children, older people, persons with disabilities, and families of the fallen.

Therefore, communities are increasingly participating in the establishment of psychological assistance programmes, the development of rehabilitation services, support for mobile medical teams, and the provision of social-medical support. At the same time, the needs of different types of communities differ substantially.

Frontline communities primarily focus on emergency care, evacuation, and the physical survival of infrastructure. De-occupied communities face the need to restore a destroyed network of services, bring personnel back, and overcome the humanitarian consequences of occupation. Rear communities, in turn, perform the function of receiving internally displaced persons, absorbing the increased burden on local healthcare institutions, and integrating new needs into their own healthcare programmes.

## **6. Main Problems and Barriers to the Participation of Local Self-Government in Ensuring Healthcare Resilience**

The capacity of territorial communities in the field of healthcare is determined not only by the scope of formally assigned powers, but also by the actual financial, human resource, infrastructural, and managerial resources available to them. One of the key challenges is the inequality of the resource base of communities, which is particularly evident in the differences between large urban communities, communities of regional centres, rural territories, frontline areas, and de-occupied settlements.

Communities with a stronger economic base have greater opportunities to co-finance healthcare programmes, renew equipment, repair premises, support municipal healthcare institutions, and attract specialists. By contrast, less capable communities are often focused mainly on covering basic needs and do not have sufficient resources for the strategic development of medical infrastructure (*Borodenko et al., 2026*).

The workforce crisis in the medical sector remains a substantial constraint. The shortage of doctors, nurses, rehabilitation specialists, psychologists, family doctors, and narrow-profile specialists is exacerbated by migration, mobilization processes, professional burnout, and the uneven distribution of personnel across regions.

For many communities, the problem lies not only in the absence of specialists, but also in the inability to create proper working conditions, housing opportunities, professional development prospects, and social support for them. As a result, access to medical services depends not only on the existence of a healthcare institution, but also on the actual capacity of that institution to provide quality care.

A separate group of problems concerns the deterioration of infrastructure and the material and technical base. A significant share of municipal healthcare institutions requires modernization, energy-efficient solutions, barrier-free access, shelters, backup sources of electricity supply, modern equipment, and digital tools.

Under wartime conditions, these problems are further complicated by damage to facilities, the rising cost of repairs, limited budgetary resources, and competition among various urgent community needs. The difficulty of attracting investment is also associated with security risks, insufficient project development capacity of communities, and the absence of ready, high-quality projects for donor or public-private financing.

Fragmentation of managerial decisions and insufficient coordination between local, regional, and central levels of government constitute an important challenge. Communities are often forced to act under conditions of uncertainty, when state priorities, financial mechanisms, and local needs are not always aligned. Additional risks are created by the politicization of the management of municipal institutions, when personnel or organizational decisions are made not according to criteria of effectiveness, but under the influence of local political interests. This weakens trust in governance, complicates strategic planning, and reduces the quality of medical services.

The problem of digital inequality and weak analytical capacity of communities is no less significant. Without quality data on the demographic structure of the population, morbidity, needs related to rehabilitation, mental health, palliative care, and service accessibility, local self-government bodies cannot fully plan the development of the medical network. Therefore, strengthening the resilience of the healthcare system at the local level requires not only additional funding, but also the development of managerial culture, human resource capacity, digital tools, interdepartmental coordination, and long-term planning.

## 7. Conclusions

The conclusions should emphasize that local self-government is an important actor in ensuring the resilience of Ukraine's healthcare system, since it is at the level of territorial communities that a significant share of managerial, organizational, and social decisions in this field is practically implemented. Local self-government bodies support municipal healthcare institutions, contribute to preserving access to primary healthcare, participate in the financing of local programmes, respond to the needs of vulnerable population groups, and coordinate interaction among medical institutions, the civil sector, and state structures.

The resilience of the healthcare system is formed not only through national policy, but also through the capacity of communities to adapt to crisis conditions, preserve the continuity of medical service provision, and rapidly mobilize available resources. Under wartime conditions, this role acquires particular importance, as communities face damaged infrastructure, workforce losses, an increase in the number of internally displaced persons, and a growing need for rehabilitation and psychological assistance.

Further research should be linked to the analysis of the effectiveness of local healthcare financing models, the study of the experience of frontline and de-occupied communities, the assessment of the managerial capacity of municipal healthcare institutions, and the development of mechanisms for strengthening the institutional role of local self-government.

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## “TRAUMATIC MYTHS” IN JEWISH AND ISRAELI NATIONAL/ NATIONALISTIC DISCOURSE

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### Summary

“Political myth”, despite the certain vagueness and ambiguity of the concept, is one of sufficiently popular areas of political research. According to common opinion, among “political myths” a special role is played by the so-called historical myths, national/nationalist myths, and finally traumatic myths, the role of which is poorly researched. So, the relevance of the research is due primarily to the fact that the role of “traumatic myths” in political discourse, and in particular in national/nationalist discourse, is an understudied topic.

Although a role of some “traumatic myths” in Jewish and Israeli national/nationalist discourse (for example, the Masada myth and the “Shoah” or “Holocaust”) has been relatively well-studied, in our opinion, most of these researches lack the attachment to general theoretical framework. So, the purpose of the study is to reveal the role of “traumatic myths” in Jewish and Israeli national/nationalistic discourse.

The research is based on systemic, interdisciplinary and discursive approaches. Also were applied general scientific methods: induction and deduction, analysis and synthesis, comparison and analogy, generalization and abstraction, as well as special scientific methods, including descriptive and problem-chronological methods, methods of deconstruction and reconstruction, etc.

**Key words:** “historical myth”, “national myth”, “political myth”, “memory politics”, identity, ideology.

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### 1. Introduction

According to the Italian researcher Ch. Bottici, through such speech constructions as the “myth of prosperity” and the “myth of progress”, common language hints at the falsity of “myths”, as if words are always aimed to describe facts or make claims to truth, but, in reality, this is not true (*Bottici, 2011: 32–33*).

The American researcher, one of the founders of the ethnosymbolic approach in the study of “nation” and “nationalism” J. A. Armstrong notes, that the definition of speech constructions as “mythical” does not necessarily mean their historical falsehood or theological unwarrantedness. The question of truthfulness is not important for mythical structures at all (*Armstrong, 1982: 8–9*).

According to the British political scientist Ch. Flood, for a story to function as a “myth,” it really doesn’t matter an objective truthfulness of the story, but the fact that a certain social group believes in it. A “myth” or its parts and details can be true, false, or both at once (*Flood, 1996*).

The Egyptian researcher R. Magdy notes, that myth does not speak about everyday life, but about existential issues in human’s life. Myth claims that its story is inspired by the

revelation of the Absolute, therefore it can be considered neither true, nor false. Myth's ability to judge give human existence sense and moral guidelines. Myth cannot be tested for truth, because myth itself forms these criteria (*Magdy, 2020: 157*).

In this sense, says the German researcher A. Assmann, "myth" is defined as a historical basis that cannot be refuted by scientific research. Mythologized history exists in social reality to the extent that the past and the present get into each other in a certain place and in a certain action. This is not about the distortion of some "historical fact" or "falsification of history", but about some kind of cultural construction that significantly affects the present and the future. Therefore, the most important thing in collective identification is not the ontological status, but the potential for social influence of historical experience, which is transmitted and enriched by new interpretations. The questions of the influence, interpretation and reproduction of history within the framework of the narrative, which forms social identity, are becoming increasingly important (*Assmann, 2006: 36–43*).

According to Ch. Bottici, "the recent rise of identity politics and the revival of nationalism have rendered manifest that myths are an important component of politics, even in contemporary modern societies" (*Bottici, 2011: 32*).

K. Flood notes, that "modern political myth", at least functionally (primarily in issues of distribution of power), as well as in form and content, is similar to "sacred myth". "Modern political myths", as well as "sacred myths", are ideologically marked stories about the past, present and predicted future. They tell about the activities of heroes, the origins and foundations of society, its revival and renewal, and, at the same time, they carry out eschatological prophecies. And although "modern political myths" in secular societies, as a rule, don't have a sacred status, at least a certain social group must believe in it, no matter how large and composed this group is. Like "sacred myths", "modern political myths" must have sufficient authority and paradigmatic value as a model of reality in believers eyes. "Modern political myths", especially those that have been formed over a long period of time, have many variations that more or less coincide in a significant number of aspects. We are talking about "political myth" when there are different stories about approximately the same events, with approximately the same actors, giving these events approximately the same interpretations and circulating in the same social group. Moreover, "modern political myths", as well as "sacred myths", have different forms, they could be told in different ways and could be expressed in different visual genres (painting, poster, monument, etc.), as well as in different collective ceremonies, rituals, memorable dates and places on the map, etc. (*Flood, 1996*).

A special form of "modern political myths" is "historical myths", which play an important role in nation-building process, creating a powerful illusion of involvement, even if the real or potential community is passive. At the same time, among "historical myths" an extremely important role is played by the so-called traumatic myths, which are usually used in constructing the national identity.

In 1882 at the Sorbonne University, in his famous lecture on the national question, the outstanding French philosopher, semitologist and historian of religion E. Renan noted, that it is much more important for a "nation" to share same glory and same sorrows in the past, to carry out the same program in the future, to suffer together, to rejoice, to hope – all that is more productive than common customs warehouses and borders, despite possible differences of race and language (*Renan, 1996: 52–53*). Moreover, according to E. Renan, "suffering in common unifies more than joy does. Where national memories are concerned, griefs are of more value than triumphs, for they impose duties, and require a common effort. A nation is therefore a

large-scale solidarity, constituted by the feeling of the sacrifices that one has made in the past and of those that one is prepared to make in the future” (*Renan, 1996: 53*).

The importance of shared “traumatic myths”, consciously or unconsciously, is also recognized by modern politicians. In particular, on February 14, 2026, at the Munich Security Conference, US Secretary of State Marco Rubio noted that: “For the United States and Europe, we belong together. ... We are bound to one another by the deepest bonds that nations could share, forged by centuries of shared history, Christian faith, culture, heritage, language, ancestry, and the sacrifices our forefathers made together for the common civilization to which we have fallen heir” (*Transcript: Marco Rubio, 2026*).

The awareness of the importance of “traumatic myths”, in our opinion, also is the basis of the versions of Jewish and Israeli identity that dominate today. The British scholar, one of the founders of the ethnosymbolic approach in the study of “nation” and “nationalism” E. Smith notes, that “history as martyrology became a common mode of presentation of the Jewish experience”, both in religious and national/nationalist discourses (*Smith, 1999: 217*). Every alarm (whether real or imagined) of Jewish persecution destroyed the initial optimism with which Jews, and primarily Jewish “enlighteners” (“maskilim”), greeted the assimilation (*Smith, 1999: 217*).

## 2. Hebrew Bible and Zionist Mythology

E. Smith notes, that the path of building the moral foundations and “maps” of the nation (its history, destiny and place among other nations) usually lies through the use of ethnic history, which could be set forth in the sacred books of the people. For “national revival” moral examples from an ethnic and at the same time mythical past are needed, capable to inspire and motivate the people. The “return” to the past is possible through the series of myths: of origin and birth, of liberation and migration, of golden age and its heroes, of sages and, perhaps, the chosen people, which had to wake up after a long sleep, decline and/or exile (*Smith, 1991: 62–70*). All this components, according to E. Smith, could be found and were found by the Jewish national movement (primarily Zionism) in the Jewish religion and, in particular, in Hebrew Bible. The Jewish nationalism, from the moment of its formation in the 19th century, relied on a huge reservoir of collective memory embedded in the corpus of religious documents – scriptures, commentaries, law codes, etc. (*Smith, 1999: 209*).

The Israeli researcher A. Ravitzki notes, that basic for the Zionist myths and ethics were materials, which for a long time have been being a part of the Jewish historical and collective memory: ancient landscapes, kings, heroes and prophets. Zionism, as a “renaissance movement”, has offered to restore the former Jewish “normality” by extraction the national symbols directly from the past, turning to ancient, primarily religious stories and images. In this sight, Zionism was not very different from some other nationalist movements, which actively used historical memory and traditional symbols. Even the utilization of religious symbols wasn’t exclusively Zionist idea: the image of similar policy could be found in most related national movements, including Polish, Irish, Czech, etc. (*Ravitzky, 1999: 83–86*).

According to the Israeli researcher Z. Tzahor, a long-time leader of the Jewish “yishuv”, the first Prime Minister of Israel David Ben-Gurion, understood the importance and the role of “national mythology” in the nation-building process. The first function of “national mythology” was to affect the views of the Diaspora Jews, whose consciousness was allegedly the result of “exile”, through an appeal to heroic (and very often tragic) figures and events in the past,

which would foster Jewish pride and would be a common basis for the Jewish people, scattered throughout the world. The second function of “national mythology’s” was to legitimate the Zionist encroachments on the Land of Israel (*Tzahor, 2013: 63*). According to D. Ben-Gurion, all this (and even more) could be found in Hebrew Bible – a book “which forged the image of the Jewish nation to a greater extent than did any book shape any other nation” (*Tzahor, 2013: 66*). After all, the Bible, according to D. Ben-Gurion, “is the single most trustworthy source of knowledge concerning Israel” (*Tzahor, 2013: 67*).

Already in an early pamphlet published by the Central Committee of “Poalei Zion” (the allegedly secular and socialist Zionist party), written, as is considered, by D. Ben-Gurion in his first years in Palestine, was a pathetic appeal to the younger generation of the Diaspora Jews to become “halutzim” (“pioneers”) in the “land of the ancestors”: “Where are you sons of the Maccabees, offsprings of Bar-Giora and Bar-Kochba. Come take the place of the fallen heroes, who fell in the struggle for their liberty and their people” (*Tzahor, 2013: 69*). Another illustration of the supposedly eternal Jewish longing for freedom and independence were the expressive parallels, drawn by the leaders of the Jewish “yishuv” and the State of Israel, between the biblical stories of the exodus of the Jews from Egypt and the return of the Jews from Babylon and the modern processes of mass Jewish resettlement to Palestine/Eretz-Israel, as it was claimed, the third mass return of the Jews to Zion (*Tzahor, 2013: 72*).

In justifying the right of the Jewish people to the Land of Israel, the Zionist movement, according to the observations of the Israeli researcher H. Fishman, actively turned to Hebrew Bible, and, in particular, to its selected and dissected themes, metaphors and images, which served to promote Zionism throughout the world. In the discourse of classical Zionism (or at least its mainstream), the Bible not only linked the national existence of the Jews with their “historical Homeland” – Eretz Israel, as well as its geographical and dreamed political borders, but also served as a “reminder” of the mythical and at the same time heroic and tragic past of the Jewish people (*Fishman, 1995: 49–52*).

Even such a supposedly secular document as Israel’s Declaration of Independence was full of numerous references to Hebrew Bible and Judaism: “The Land of Israel was the birthplace of the Jewish people. Here their spiritual, religious and political identity was shaped. Here they first attained to statehood, created cultural values of national and universal significance and gave to the world the eternal Book of Books.... The State of Israel ... will be based on freedom, justice and peace as envisaged by the prophets of Israel” (*Israel’s Declaration of Independence, 2018*).

### 3. The Masada myth: activist and tragic commemorative narratives

Another Jewish (and primarily Israeli) “national myth” was the modern myth of Masada, which, although was not directly based on the Bible, but appealed to the so-called biblical times, and above all to the events of the so-called First Jewish-Roman War / the Great Jewish Revolt (66–73 CE), described by its contemporary and direct participant Josephus Flavius. According to Josephus’ description, during the Great Jewish Revolt against the Romans, about a thousand Jewish men, women and children found Asylum in mountain-top fortress Masada. At critical moment of the siege, wishing to die free and not to be captured by the enemy, the Jewish men have killed the women and children, and then set fire to the fortress and killed themselves. The described event supposedly marked the end of the Jewish uprising (*Zerubavel, 2013: 111*).

The Israeli-American researcher Y. Zerubavel claims, that the historical works of Josephus Flavius, which were completely ignored by the Jews in the Middle Ages and Early modern period, took a new step in Jewish national/nationalistic discourse. Josephus' story about Masada was accepted by "national historians" and the Israeli mass culture as, for the most part, reliable story, because it renewed interest to the Jewish "golden age", reinforced the importance of Jewish liberties in the past and confirmed the right of the Jewish people to the Land to Israel (Zerubavel, 2013: 111–113).

The Zionist "mythohistorian" Yigael Yadin, who was the head of the archaeological mission on Mount Masada, especially large-scale in the mid-1960s, called the mission's goal as "to see what evidence we could find to support the Josephus record" and, in fact, the results of the excavations were publicly considered as the confirmation of the reliability of these testimonies (Zerubavel, 2013: 111–114). According to Y. Zerubavel's poetic description: "The combination of a highly dramatic story from Antiquity, a remote cliff that offers a spectacular view of the Judean Desert and the Dead Sea and a large area covered by interesting archaeological ruins has contributed to Masada's evolution from a neglected story in Jewish history to a major Israeli national myth" (Zerubavel, 2013: 110).

However, the Israeli sociologist N. Ben-Yehuda notes, that the modern Masada myth is based not on the true Josephus' story (which, by the way, is not confirmed by any other historical record), but on its whitewashed for the needs of Zionism version, constructed in the 1930s–1960s by Israeli archaeologists/politicians Shmaryahu Gutman and Yigael Yadin (Ben-Yehuda, 1995: 232–236).

Following the American historians S. Zeitlin and S. Hoenig, N. Ben-Yehuda and Y. Zerubavel argue that Israeli "mythohistorians", instead of identifying those, who accepted death on the top of Mount Masada, as "sicarii" ("daggermen") – the most often used term in the primary source, usually described them as "zealots", "defenders" or "rebels" – in any case in fairly neutral or even complimentary terms, that masked their violent and terrorist activities, against Jews as well (Ben-Yehuda, 1995: 232–236; Zerubavel, 2013: 114–115).

According to Y. Zerubavel, S. Zeitlin and S. Hoenig argued that "sicarii" and "zealots" were not interchangeable terms. They describe fundamentally different, in fact conflicting groups, that followed different tactics during the Great Jewish Revolt. Sicarii were members of an extremist sect that didn't recognize any authority except God's, and their discontent was directed not at the Romans as foreign invaders and oppressors, but at everyone, including Jews, who represented authority (Zerubavel, 2013: 115).

The Israeli-American researcher J. Magness notes, that the modern myth of Masada satisfied the needs of the Zionist movement, and Masada eventually became a powerful symbol of resolute devotion to national freedom, Jewish heroism and the State of Israel. The modern myth of Masada (and, in particular, the ritual of climbing the top of the mountain, adopted by many youth and (para)military Zionist and Israeli organizations), strengthened the connection between modern Jewish settlers and Palestine/Eretz Israel, as well as accentuated the Zionist encroachments on this land at the national and international levels (Magness, 2019: 197–200).

According to J. Zerubavel, the significance of Masada as a symbol of active (and almost hopeless) resistance to a powerful enemy intensified during World War II, when the image of those events became a historical counter-model to the Holocaust. The "activist" commemorative interpretation of Masada massacre emphasized the liberation struggle of the Jewish rebels against the Roman invaders and, at the same time, downplayed the negative meaning of suicide, which was fundamentally incompatible with Jewish tradition, defining it as a patriotic sacrifice in the struggle for national freedom and pride (Zerubavel, 2013: 111–112).

J. Magness notes, that the image of heroic fighters for Jewish national freedom, who held out (although did not survive) against the mighty Roman Empire (along with the image of heroic and tragic Jewish resistance during the Warsaw Ghetto uprising), contrasted with the traditional image of European Jewry – a passive and weak “victim people” (Magness, 2019: 197–200).

J. Magness and Y. Zerubavel notes, that the words from the popular poem by the Hebrew poet Yitzhak Lamdan “Never again shall Masada fall!” – became a national slogan and a patriotic vow, which was given by schoolchildren and soldiers during ceremonies held at this place. Masada was reinterpreted as a myth of national renewal, which guarantee the survival of the Jewish people in the Land of Israel. Ultimately, after 1948 Masada became a kind of metaphor for the State of Israel – isolated, surrounded by enemies, but, unlike biblical times, “Masada shall not fall again” (Magness, 2019: 197–200; Zerubavel, 2013: 112).

According to Y. Zerubavel, the change in Israeli political reality, as a result of the trauma of the Yom Kippur War, the beginning of Likud’s dominance in Israeli political life, the war in Lebanon and the Intifada, etc., intensified the internal split in Israeli society and deep disappointment in the national myths constructed in the previous years of national development. Ultimately, a fundamentally different, “tragic” commemorative interpretation of the national myth was established in Israeli society, which shifted the emphasis from Masada as an example of the active struggle for Jewish national freedom, to Masada as one of the most traumatic events in Jewish history. In this context, the example of Masada becomes not a historical counterweight, but an analogue of the Holocaust, and ceases to be a role model, becoming one more historical warning (Zerubavel, 2013: 112).

Ultimately, according to Y. Zerubavel, “both the activist and the tragic commemorative narratives of Masada coexist in contemporary Israeli culture, supporting its meaning as a myth of major national importance (Zerubavel, 2013: 112). Whether as a role model in the activist version or as a vociferous warning in the tragic version, Masada massacre should inspire modern Israelis to take a strong stand against their enemies and to be ready to sacrifice themselves for the State of Israel (Zerubavel, 2013: 112).

#### 4. The role of “Pogroms” in Jewish public discourse

Jewish and Israeli “national mythology” has also incorporated other, completely non-biblical, traumatic plots, which have been creatively adapted to ideological needs.

From the perspective of the Zionist “mythology”, the trigger for the emergence of the Zionist movement was the wave of Jewish pogroms of 1881–1882. According to E. Smith, these events allegedly led to the foundation of the Jewish settlement movement “Hovevei Zion” (“Love of Zion”, “Palestinophiles”), which gave the start to well-organized mass Jewish settlement to Palestine/Eretz-Israel, and prompted the Odessa Jew Leon Pinsker to publish in 1882 his pamphlet “Auto-emancipation”, which became a kind of political manifesto/program of “Palestinophiles” (Smith, 1999: 217).

The American historian D. Engel notes, that there was (and still is) no fixed, generally accepted clear definition of the word “pogrom”. Often it meant fundamentally different things. However, for the purposes of our study, we will start from the definition proposed by the influential British member of parliament for Whitechapel, Sir Stuart Samuel, which, to a large extent, corresponded to the nature of public discussions of the early 20th century (Engel, 2011). Usually, “pogroms” were understood as “excesses organized by the Government against

a portion of the population, or when the authorities took no steps to restrain those perpetrating the excesses, or intervened at a period too late to be effective in preventing the loss of human life" (*Engel, 2011: 19*).

At the turn of the 19th and 20th centuries, the so-called Jewish pogroms were organically chosen to play the role of national sorrow, which, in terms of E. Renan, was supposed to evoke great solidarity. As it was argued, at least in the Russian Empire (and on its ruins), the "Jewish pogroms" were not sudden and spontaneous, but well-prepared from above, according to a certain plan.

The Israeli historian I. Maor notes, that the "Chisinau pogrom" of 1903, which in the memoirs of contemporaries was often called a "slaughter", "massacre", "murder", etc. is illustrative in this sense. The "Chisinau pogrom" was allegedly accompanied by cruelty and abuse similar to the massacres occurred during Khmelnytsky and Haidamak uprisings. This parallel was also traced in Nachman Bialik's poem "In the City of Slaughter" (which, for censorship reasons, was first published under the title "The Vision of Nemirov"). Jewish "mythohistorians" argued that the "Chisinau pogrom" was the beginning of a new stage of the "Jewish pogroms" in Russia. Allegedly, this wave of the "Jewish pogroms" was qualitatively different, both in number of victims and in its immediate and delayed political consequences (*Maor, 1973*).

According to the American-British researcher E. Judge, there was almost no doubt in the Jewish, Western, and Russian opposition press that local and central authorities were the most active organizers of the systematic incitement of anti-Semitism in Russia (*Judge, 1992: 84–91*). The famous French researcher L. Poliakov in his classic work on the history of anti-Semitism noted that, using the "Jewish pogroms", the Russian authorities tried to gain their own goals, in particular, to discourage Jews from participating in the revolutionary movement, in which Jews, quite naturally, played an important, if not a prominent, role (*Poliakov, 2003: 100–101*).

The great impact on the Jewish identity and "national myth-making" had the so-called Jewish pogroms in Ukraine in 1917–1921, which in absolute terms were considered as the largest outbreak of anti-Jewish violence until World War II. These events significantly affected Jewry not so much directly, due to a large number of victims, but rather through mythologizing of these events in the Jewish, Soviet, and World press. This wave of the "Jewish pogroms" was accompanied by the speculation that the central and local authorities allegedly not only organized, but also actively carried out these violent measures. Moreover, the very nature and scale of these "pogroms" allegedly indicated that they were not so much about the neighbourhood violence against Jews, but about the mass extermination of the Jewish population of Ukraine (*Kenez, 1992; Shtif, 2019*).

Jewish "national mythology" in this context pointed primarily to the anti-Jewish actions of "Volunteer Army", "Petliurists" and various "gangs", although, the American historian P. Kenez states, that "all armies involved in the Civil War, including the Bolshevik, were responsible for some of the anti-Jewish violence. ... Ukrainians believed Jews to be pro-Russian; socialists saw them as capitalist exploiters; and conservatives blamed them for being socialists" (*Kenez, 1992: 294*).

## 5. The "Holocaust" and its impact on Jewish/Israeli "Memory Politics"

The mass persecution and extermination of Jews during World War II is known in Jewish and Israeli "national mythology" as the "Shoah" ("Catastrophe" of European Jewry) or in the English-speaking tradition as the "Holocaust" – a term that can also be used in a broader sense.

The Israeli-American historian O. Kenan notes, that in the post-war period, the “Holocaust” quite naturally has become the most powerful “traumatic myth” – political symbol, that formed the basis of the model of the Jewish national identity in the Diaspora (primarily in the United States and other “Western” countries). And only later, due to realization of the critical dependence of the State of Israel on external support from the “Western bloc”, and necessity of compatibility with historical narratives prevalent in the Diaspora, the “lacrymoze” image of the “Holocaust” has become a part of the Jewish-Israeli model of identity (Kenan, 2003).

The Israeli-American researcher I. Avisar notes, that after World War II radical changes occurred in Israel’s attitude towards the “Holocaust” – from complete rejection to drawing clear parallels between the current state of World/Israeli Jewry and the difficult situation in which European Jews found themselves on the eve and during World War II (Avisar, 1985: 31–32).

O. Kenan emphasizes that the basic principle of the Zionist ideology was the assumption that only after returning to the ancient Jewish homeland – Eretz Israel – the Jewish people could overcome the exhausting physical and spiritual limitations that, as believed, has accompanied their stay/existence in “exile”. The “Holocaust” was certainly viewed through this prism. Allegedly, without the existence of the Jewish state and living in it, Jews would always be vulnerable to this kind of “Catastrophe”, which found its extreme version in the anti-Jewish policy of Nazi Germany (Kenan, 2003: xv-xxvi, 3–17).

The Israeli researcher Y. Weitz notes, that the ideology of “mamlakhtiyut” (“statism”), which was actively developed and implemented in Israel in the late 1940s–1950s, followed the policy of denial of the Jewish Diaspora and, instead, tried to absorb the symbols and myths that appealed to previous, supposedly more heroic periods of Jewish history. The political architects of “mamlakhtiyut” tried to cultivate the “collective memory” not on national defeats, but on national victories, in accordance to the dominant ethos of the (re)created “Jewish state”. Thus, in the late 1940s–1950s, the “Holocaust” was not yet a key element of Israeli “memory politics” – it happened somewhat later (Weitz, 2013: 142–143).

According to Israeli researcher Z. Solomon: “[In the first years after the proclamation of the State of Israel] Holocaust victims were blamed both for surviving and for not surviving. They were accused of passivity, of going like sheep to the slaughter, and staying alive by ignominiously complying with Nazi decrees” (Solomon, 1995: 218). The image of the “Jew-victim”, who, as claimed, didn’t struggle, aroused deep contempt among Israeli “old-timers” and was associated with the Diaspora Jewry – “galut” (“exile”). On this background, a symbolic image of the “Jew-rebel”, who has fought against slavish submission, was, on the contrary, glorified in every possible way and implemented into the public consciousness. A special role in the formation of corresponding attitude played the Zionist ideology, which was centered on the heroic figure of the “new Jew”, which sharply contrasted with the figure of “galut Jew”. The Zionist ethos, as a rule, portrayed “galut Jews” as humiliated, weak and miserable creatures, whose personality was distorted by centuries of persecution, while the “new Jews” has to become free people in their own land – tall, proud, just and strong. Ultimately, the Zionist ideology, which declared a radical break with “galut”, gave rise to a contemptuous attitudes towards the majority of those, who survived in the “Holocaust” (and those who didn’t survive as well). The victims of the “Holocaust” became a kind of antipode of the ideal image of the “new Jew”, on the background of which the Zionist movement tried to build its own, alternative line of Jewish history (Solomon, 1995: 217–221).

O. Kenan notes, that this dichotomy was publicly presented on March 18, 1943, by the leader of the Jewish “yishuv”, the future Prime Minister of Israel, David Ben-Gurion, at a meeting dedicated to the memory of Yosef Trumpeldor, the hero of the Battle of Tel Hai and

one of the most prominent figures in the mythology of the Jewish “yishuv”. At this memorable event, D. Ben-Gurion drew a line between the majority of European Jews, who allegedly did not know how to live and die free, and those few brave men and women, who, according to D. Ben-Gurion, were not afraid to struggle and be killed like the defenders of Tel Hai. In a similar way, the Zionist ethos and the State of Israel also managed to appropriate the “heroism” of the Warsaw Ghetto’s fighters and the Jewish fighters of the “Resistance Movement”.

Despite the fact that anti-Semitism was the main argument in favor of the Zionist solution of the “Jewish question”, it was understood as a self-evident fact, which reflected a certain historical situation, namely the servitude of the Jews in “exile”. So, it was natural that the “Catastrophe” of European Jewry didn’t initially have a wide resonance in the Zionist “mytho-history”. The “Holocaust”, as a rule, was not a separate topic of scholarly explorations or reflections, it’s image was incorporated into numerous essays and articles on Jewish history, and at the same time was presented as indisputable proof of their authenticity.

The country’s political elite, represented by the leadership of the left-wing Zionist parties, emphasized the central role of “active heroism” in commemorating the victims and events of the “Holocaust”. The heroism of the Jewish fighters of the “Resistance Movement” had to become a new symbol, a manifestation of the strength of spirit of the “new Jew”. In commemorative events, organized by the “Labor Party”, there was little mention of the mass persecution and mass murder of the Jews during World War II; instead the emphasis was on the armed struggle against the oppressors, especially on the heroic uprising in the Warsaw Ghetto.

As a result of a compromise between the “left” and “religious” Zionists, on March 21, 1951, Israeli Knesset adopted a law on “Remembrance Day for the Holocaust and the Revolt in the Ghettos”, (in 1959 amended to “Holocaust Martyrs’ and Heroes’ Remembrance Day”). This law founded Israel’s “policy of remembrance” of the “Holocaust” at least for a decade. The basic idea of this policy was to emphasize the contrast between the passivity of the majority of Jews, who “went like sheep to the slaughter”, and the “active heroism” of those few brave men and women, who resisted with weapons in their hands. However, a law and amendments to it, that clearly established mourning commemorative ceremonies and permissible practices at this day, were adopted only in the late 1950s – early 1960s (Kenan, 2003: xv-xxvi, 3–17).

Later, in the 1960s and 1970s, a number of events took place in the country, that significantly changed the attitude of Israeli society towards the “Holocaust”.

Firstly, in April-August 1961 in Jerusalem the trial of Adolf Eichmann was held, which, as O. Kenan notes, “had a ‘deeply cathartic effect’ and served as a first opportunity for many Israelis to face the past” (Kenan, 2003: 78). The trial witnesses and, in general, all those who survived in the “Holocaust” were given the opportunity to speak publicly about their traumatic experience over and over again, and Israeli society, in general, was, for the first time, ready to hear that (Kenan, 2003: 78). According to Y. Weitz, “a new legitimacy was given to the story of the life and death of the simple Jew, one of the millions, who was neither a hero nor a traitor, neither a saint nor a collaborator” (Weitz, 2013: 141).

Secondly, the so-called Six-Day War in 1967, although was quick and successful for Israel, demonstrated the complete loneliness of the “Jewish state” in the Middle East. Ultimately, the Six-Day War strengthened the Israelis sense of unity and common destiny with the Diaspora, whose identity since World War II has been built on the fundament of the “Holocaust trauma”.

Thirdly, the so-called Yom Kippur War in 1973 replaced national pride by a sense of vulnerability and insecurity for the “Jewish state”. The Yom Kippur War demonstrated Israel’s dependence on “Western” (primarily US) military aid and confirmed the necessity to maintain

good relations with the Diaspora (primarily with the Jewish community of the United States and other “Western” countries).

Thus, in the 1960s and 1970s, the attitude towards the “Holocaust” in Israeli politics and society was replaced by a more realistic perception, which brought Israel closer to the Diaspora. The meaning of the term “Jewish Resistance”, which until then meant only conscious and organized Jewish military resistance to Nazism, was significantly expanded. The reaction of Jews to Nazism began to be portrayed as mainly active, not passive, as it has been portrayed before. Allegedly, collective and individual Jewish responses to the threats and challenges of World War II, were, to a large extent, manifestations of both physical and spiritual resistance (*Kenan, 2003: 87–88*).

Finally, in the late 1970s, a right-wing Zionist party “Likud” came to power in Israel. As Israeli researcher A. Naor notes, “Likud” quite actively (and in a fundamentally different way from Israeli Labours) has used the topic of the “Holocaust” for political and ideological purposes. At the same time, the topic of the “Holocaust” has also become popular among other right-wing movements and parties of Israel, which, as considered, were (and still are) the most consistent and irreconcilable opponents of the “territories for peace” doctrine. These forces quite often use the so-called lessons of the Holocaust to claim that any losses of the territory, controlled by Israel, leads, ultimately, to a second holocaust (*Naor, 2003*). According to A. Naor: “Their logic is policy-oriented and based on a historical analogy; and by claiming that a second holocaust is either a deterministic or a highly probable result of an Israeli territorial concession, they believe to have found the decisive evidence to silence their adversaries” (*Naor, 2003: 131*).

The Israeli researcher H. Halkin notes, that the “Holocaust” is often used to justify radical manifestations of Israeli power and strength. If the “Holocaust” was a cruel attempt by “absolute evil” – Hitler’s Nazism – to exterminate the Jewish people, and if the Arab (and other Muslim) states intend to complete this task, then the survival of the Jewish people become not only a necessity, but the highest national and universal value, not only for Israelis, but for the Diaspora as well (*Halkin, 1999: 105–107*).

Thus, in our case, it is absolutely true, that “the same myth can have very different meanings according to the particular circumstances in which it operates. Political myth, as myth in general, expresses itself through variants: properly speaking, we never see a political myth at work, but always variants of it. Furthermore, what is a political myth for a certain group of people may well not be so for another, and, even for the same group, the same narrative can work as a political myth in certain circumstances but not in others” (*Bottici, 2011: 35*).

## 6. Conclusions

A special form of “modern political myths” is “historical myths”, which play an important role in nation-building process, creating a powerful illusion of involvement, even if the real or potential community is passive.

Among “historical myths” an extremely important role is played by the so-called traumatic myths, which are usually used in constructing the national identity. Moreover, it is strongly believed that common patience and common griefs unite more than common joys and common triumphs.

The awareness of the importance of “traumatic myths” lies at the heart of today’s dominant versions of Jewish and Israeli identity. In particular, Jewish and Israeli “national

mythology” has incorporated biblical and completely non-biblical traumatic plots that over time have been creatively adapted to ideological needs.

In national/nationalistic discourse the image of Jewish history is formed primarily by anti-Jewish oppression and violence. Jewish history is usually represented by series of traumatic events that flow into one another.

Moreover, this “lachrymose” view on Jewish history is not always the way to understand the most important events that happened to the Jewish people in the past, this vision of Jewish history often serves much more practical political purposes.

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**HEALTH, ENVIRONMENT, DEVELOPMENT****TRAINING COACHES IN AERIAL DISCIPLINES:  
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**Summary**

The rapid development of aerial disciplines, including aerial silks, aerial hoop, and aerial pole, has generated increasing demand for highly qualified coaches capable of delivering safe, effective, and pedagogically grounded instruction. Contemporary coach education in aerial sports extends beyond the transmission of technical skills and increasingly incorporates structured progression models, biomechanics, injury prevention, technology-enhanced teaching, and internationally recognized standards. This article examines the principal directions in the professional preparation of coaches in aerial disciplines, with particular attention to pedagogical innovations, structured progression in technical training, and the integration of international certification and safety frameworks. The analysis demonstrates that the professionalization of aerial coaching depends on a combination of progressive teaching methodologies, continuous professional development, global standardization, and collaborative knowledge exchange. These factors contribute not only to improved athlete outcomes, but also to the long-term legitimacy and sustainability of aerial disciplines within the broader field of sport and physical culture.

**Key words:** aerial disciplines, coach education, pedagogical innovation, aerial sport, international standards, professional development.

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**1. Introduction**

Aerial disciplines have evolved from niche performance practices into increasingly structured sport and fitness activities. As participation grows, the need for systematic coach education increases. Education must support athlete development in safe, effective, and innovative ways. Coaching in aerial disciplines is more than a technical demonstration. It requires an integrated pedagogical approach that combines technical instruction, methodological planning, risk management, artistic development, and a clear understanding of physical demands. These demands are associated with training on apparatuses such as silks, hoops, and poles (*International Pole and Aerial Sports Federation [IPSF], n.d.; Cirque Athletics, n.d.*).

In recent years, international organizations and educational platforms have shaped this field. Certification systems, continuing education, and shared standards have made coaching more professional. At the same time, new teaching methods have expanded the instructor's toolkit. These include video feedback, remote learning, progressive sequencing, and holistic coaching. Against this background, the article explores how pedagogical innovation, structured skill progression, and international standardization are reshaping coach preparation in aerial disciplines.

## 2. Pedagogical Innovations in Aerial Coach Education

One of the most important developments in aerial coaching is the shift toward pedagogically structured instruction rather than purely experience-based instruction. Modern coaching increasingly relies on teaching models that recognize individual differences in ability, learning pace, physical readiness, and artistic expression. This shift has strengthened the educational dimension of aerial training and has positioned coaches not only as instructors of movement but also as facilitators of long-term athlete development (*Cirque Athletics, n.d.*; *Aerial Fit Online, n.d.*).

A particularly valuable innovation is multi-apparatus training, where students practice on different types of aerial equipment, such as silks, trapeze, lyra (aerial hoop), and rope. Exposure to these various apparatuses helps students develop adaptability, broader motor awareness, and a more versatile technical foundation. For coaches, multi-apparatus preparation also improves the ability to recognize transfer effects (the way skills learned on one apparatus can aid performance on another) and to individualize instruction based on a student's strengths and weaknesses. This methodology is especially relevant in competitive and performance-oriented environments, where versatility and movement literacy (the ability to understand and use a wide range of movements) can significantly enhance both technical progression and artistic quality (*Aerial Cirque Over Denver, 2025*; *IPSF, n.d.*).

Another major innovation is the implementation of progressive skill development models—structured approaches in which students gradually build toward advanced skills. In aerial disciplines, where advanced elements (such as inverted positions, drops, and dynamic combinations) often involve substantial physical and technical risk, structured progression is essential. Students must first acquire sufficient strength, stability, body awareness (the ability to sense and control the position and movement of one's body), and technical control before moving to more demanding transitions, inversions (going upside down), drops (rapid descents), or dynamic sequences (movements requiring swinging, spinning, or momentum changes). A progression-based model supports safer learning, reduces the likelihood of injury, and improves skill retention over time. It also helps coaches organize training more rationally, ensuring that each new skill emerges from an established base rather than from premature attempts at complexity (*Aerial Fit Online, n.d.*; *IPSF, n.d.*).

Video analysis has also become an influential pedagogical tool in aerial coaching. Because many aerial movements are complex and difficult to evaluate fully in real time, recorded footage allows both coach and student to examine alignment, timing, shoulder positioning, transitions, and points of technical breakdown with much greater precision. Video reviews support reflective learning, make feedback more concrete, and provide a measurable way to monitor progress over time. In this sense, technology strengthens not only technical correction but also learner autonomy and self-awareness (*Aerial Fit Online, n.d.*; *Stacey Strange, n.d.*).

Equally important is the growing emphasis on biomechanics and injury prevention. Biomechanics refers to the science of movement and how forces interact with the body's structures. Aerial disciplines place significant demands on the shoulders, spine, grip system (muscles and techniques used to hold equipment), and core musculature. Coaches who understand anatomy, force distribution (how external and internal forces affect the body), joint stabilization (keeping joints secure during movement), and movement mechanics are better equipped to teach safely and effectively. Biomechanically informed instruction improves movement efficiency while lowering the risk of overuse syndromes (injuries caused by repetitive stress), compensatory patterns (unintended movements used to make up for a limitation), and acute injury. This is particularly important when teaching inversions (going upside down), hangs (hanging from an apparatus), dynamic entries (entering a movement sequence with momentum), and skills requiring complex loading patterns (situations in which the body endures multiple or variable forces). In this regard, coach education has increasingly moved toward a more evidence-informed model grounded in physical preparation and functional understanding of movement (*IPSF, n.d.; Circus Arts Institute, n.d.*).

Pedagogical innovation in aerial disciplines also includes creative sequencing (arranging movements in a specific order) and choreography (designing the overall artistic flow and style of a routine). Unlike many conventional sports, aerial practice often combines athletic execution with aesthetic presentation. Coaches must therefore guide students not only in isolated elements, but also in linking skills into coherent, expressive sequences. This requires an educational balance between technical discipline and creative exploration. Choreographic work develops musicality (awareness of rhythm and timing), performance confidence, transitions, spatial awareness (understanding body positioning in space), and personal style, all of which are significant in both performance and competition contexts (*Aerial Cirque Over Denver, 2025*).

Additional innovations, such as gamification and holistic coaching, further enrich the educational process. Game-based strategies may increase motivation, sustain engagement, and make progression more visible. This is especially true for younger or less confident students. Holistic coaching, meanwhile, broadens the instructional focus. It includes emotional regulation, communication, confidence, and well-being. In a physically demanding and often psychologically challenging training environment, this broader perspective is especially valuable. It supports performance, athlete retention, and the creation of a positive learning culture (*Circus Mobility, n.d.; Aerial Fit Online, n.d.*).

### **3. The Role of International Standards in Professionalizing Aerial Coaching**

The development of aerial disciplines as a legitimate sporting and educational field depends heavily on shared standards. International frameworks create common expectations for coach competencies, athlete safety, judging consistency, and ethical conduct. Without such standards, coaching practice remains fragmented and uneven. It also becomes overly dependent on local customs or individual experience (*IPSF, n.d.*).

One of the central mechanisms of standardization is the creation of tiered certification pathways. Structured certification programs provide a formal route for coaches to acquire foundational and advanced knowledge in areas such as anatomy, biomechanics, coaching methodology, competition rules, and athlete development. A level-based structure is pedagogically meaningful because it reflects the progressive nature of professional expertise: foundational knowledge must precede advanced specialization, and coaching responsibility should expand

as competence develops. Certification systems also help athletes and organizations identify qualified professionals and create greater transparency in the coaching market (*IPSF, n.d.; Circus Arts Institute, n.d.*).

Safety standards are another fundamental part of internationalization. Aerial disciplines involve apparatus-dependent training and work at height, which carry substantial risk. Rigging knowledge, equipment inspection, spotting procedures, load awareness, and emergency readiness are not optional. These are essential components of coach education. Harmonized safety protocols strengthen trust in the discipline and reduce preventable harm. They also shift coaching from an informal craft toward a professional model. In this model, responsibility, competence, and risk management are explicitly recognized (*American National Standards Institute, 2024; Aerial Arts America, n.d.*).

The integration of anti-doping principles further aligns aerial disciplines with broader international sport governance. Even when anti-doping is not the first topic associated with coach education, its inclusion reflects the field's maturation and its orientation toward fairness, athlete welfare, and ethical accountability. Coaches play an important role in shaping athlete behavior, supplement practices, and attitudes toward rules. Their education, therefore, has direct implications for the sport's ethical culture (*IPSF, n.d.*).

International standards also shape curriculum design. Shared frameworks support consistency in skill progressions, teaching language, competition expectations, and pedagogical priorities. This consistency is vital in a global field where athletes and coaches interact across countries. They do this through competitions, workshops, online learning, and certification programs. Standardized curricula make coach education more transferable. They also make athlete preparation more predictable across different contexts. At the same time, these frameworks provide a foundation for innovation. This occurs without undermining safety or technical clarity (*IPSF, n.d.; Cirque Athletics, n.d.*).

#### 4. Certification and Continued Professional Development

Initial certification alone is not enough in a rapidly evolving field. Aerial coaching requires continued professional development. Methods, safety knowledge, competition requirements, and educational technologies are constantly changing. Ongoing education ensures coaches do not remain fixed at their original qualification. Coaches continue to refine their competencies in response to new evidence and practical demands (*IPSF, n.d.*).

Advanced certification pathways allow coaches to move beyond basic instruction and develop expertise in specialized areas such as apparatus-specific methodology, biomechanics, high-level athlete preparation, and mentorship of other coaches. This is particularly important in aerial disciplines, where coaching demands may vary substantially depending on participants' age, level, goals, and physical profiles. An entry-level recreational class, a youth development program, and preparation for elite competition each require different forms of pedagogical and technical competence (*Circus Arts Institute, n.d.; Cirque Athletics, n.d.*).

Continued Professional Development (CPD) bridges the gap between certification and practice. Through workshops, courses, seminars, and digital formats, coaches stay up to date on technique analysis, injury prevention, curriculum design, and inclusive teaching. CPD also encourages reflective practice. It helps coaches evaluate their methods, update outdated approaches, and integrate new knowledge into teaching. Lifelong learning is not just desirable. It is integral to responsible coaching in aerial disciplines (*IPSF, n.d.*).

A particularly important feature of professional development is incorporating safety into ongoing learning. Because apparatuses, rigging methods, and injury-prevention knowledge may evolve, coaches must revisit safety not as a one-time certification requirement but as a permanent dimension of professional responsibility. Similarly, mentorship and peer collaboration contribute meaningfully to development by creating opportunities for feedback, exchange of practices, and exposure to alternative teaching models. Such professional communities strengthen the field by reducing isolation and fostering shared standards of excellence (*Cirque Athletics, n.d.; On Edge Aerial Dance, n.d.*).

## 5. Author-Designed Educational Platforms as a Tool for Professionalization

Alongside international certification systems, author-designed educational platforms and courses play an important role in developing aerial coaching tailored to the discipline's specific needs. One such example is PoleEducation, which may be viewed as a specialized educational resource designed to support the training and continuing development of coaches working in pole and aerial disciplines (*Kostrikova & Sova, 2026*).

The significance of such educational initiatives lies in their ability to organize hands-on coaching knowledge and convert it into easy-to-use educational material. Through structured modules, coaches can engage with topics such as step-by-step skills improvement (technique progression), how the body moves in sport (biomechanics), avoiding injuries (injury prevention), planning workouts (training methodology), and organizing class sessions (classroom

Table 1

**Example of a staged progression strategy for selected aerial pole elements within a structured coaching model**

Approximate training period	Examples of selected elements	Pedagogical focus
Base stage (1–4 weeks)	Falling Star, Spider, Front Pole Climb, Sit Tuck, Plank	Development of basic body positioning, grip familiarity, introductory coordination, and initial strength adaptation
1–2 months	Superman, Sunrise, Figure Four, Banana Split, Star-gazer	Consolidation of basic technical control, improvement of movement confidence, and preparation for transitional elements
2–4 months	Crescent Moon, Bow and Arrow, Tucked Drop, Chopstick, Barrel Roll	Expansion of technical repertoire, introduction of more complex transitions, and development of coordination under increased load
4–8 months	Dynamic from Spider, Jump from Falling Star, Machine Gun, Back One-Arm Stand, Butterfly	Progression toward dynamic execution, increased strength demands, and refinement of technical stability in advanced skills
From 6 months	Superman V, Dangerous Bridge, No-handed Chopstick, Split Flag, Phoenix	Development of advanced technical control, greater emphasis on strength endurance, and preparation for higher-complexity elements
Over 6 months	One Arm Front Somersault, Horizontal Split <math><180^\circ</math>, Fonji, Deadlifts	Mastery of highly demanding elements requiring advanced strength, coordination, control, and consistent technical readiness

organization). In this way, educational platforms complement formal certification by addressing the daily teaching situations coaches encounter (*Kostrikova & Sova, 2026*).

Furthermore, platforms such as PoleEducation help disseminate methodological standards within the professional community. They enable broader access to educational content, support consistency in coaching approaches, and create opportunities for both novice and experienced instructors to deepen their competencies. This is particularly relevant in disciplines where the pace of development often exceeds the availability of formal academic or institutional training opportunities (*Kostrikova & Sova, 2026*).

From a pedagogical perspective, such platforms reflect an important shift toward more structured and professionalized coach education. They reinforce the idea that high-quality coaching in aerial disciplines requires not only technical mastery but also methodological literacy, safety awareness, and the capacity to design progressive, educationally meaningful learning experiences (*Kostrikova & Sova, 2026; IPSF, n.d.*).

To illustrate structured progression in coach education, Table 1 presents a staged strategy for mastering aerial pole elements across approximate training periods. In this context, 'static positions' refers to stationary holds on the pole, while 'dynamic and strength-dependent skills' denote aerial movements that require significant motion and physical strength. The model demonstrates how technical content can be sequenced from basic static positions to more complex, dynamic, and strength-dependent skills (*Kostrikova, 2026*).

As shown in Table 1, structured progression is pedagogically valuable. It allows coaches to align technical tasks—specific drills or exercises—with the athlete's current level of readiness. This approach reduces the risk of premature advancement and maintains methodological consistency, ensuring a logical and uniform training approach. The full expanded progression matrix may be presented in an appendix or supplementary material (*Kostrikova, 2026*).

## 6. Structured Progression as a Methodological Basis of Technical Training

A particularly important contribution of educational platforms in aerial disciplines is the development of structured progression systems for mastering technical elements (i.e., specific movements or skills unique to aerial practice). In contrast to the unsystematic accumulation of tricks (unrelated moves learned without structure), a progression-based methodology organizes learning by increasing levels of complexity (difficulty of movements), physical demand (required strength and endurance), and coordination challenge (precision and synchronization needed). Such systems are pedagogically valuable because they help coaches sequence instruction to support safety, technical quality, and long-term athlete development (*Kostrikova, 2026; Kostrikova & Sova, 2026*).

Figure 1 presents a structured progression model for selected aerial pole elements across approximate training stages. The diagram illustrates a step-by-step increase in technical complexity (involving movement precision and skill difficulty) and physical demand (including strength and endurance), beginning with basic introductory positions and progressing toward advanced strength-dependent and dynamic elements. Each stage is associated with a specific training period, examples of representative elements, and a corresponding pedagogical focus. The model emphasizes that skill acquisition in aerial pole should follow a sequenced, safety-oriented pathway, with technical development aligned with athlete readiness (coordination, strength, and mastery of prerequisite skills). Thus, the figure demonstrates structured progression as a methodological foundation for effective coaching practice in aerial disciplines (*Kostrikova, 2026*).



**Fig. 1. Structured progression model for selected aerial pole elements. Source: developed by the author based on the study materials.**

Kostrikova (2026) has published a structured progression model for selected aerial pole elements as an open educational resource, providing coaches with a visual and methodological framework for sequencing technical development in coach education.

The approximate development strategy presented in the source material illustrates this principle by arranging aerial elements across successive time-based stages, from basic entry-level positions to more advanced dynamic and strength-dependent skills. Even though the exact pace of progression may vary depending on the athlete’s age, conditioning, previous experience, and practice frequency, the broader methodological idea remains clear: technical mastery in aerial disciplines should be built through staged advancement rather than random skill acquisition (Kostrikova, 2026).

This approach has several practical advantages. First, it allows coaches to align technical tasks with the athlete’s current physical readiness. Second, it makes it easier to monitor progress and identify appropriate prerequisites for more difficult elements. Third, it supports safer coaching by reducing the chances that students attempt advanced movements without enough preparation. Finally, it contributes to methodological consistency across different coaches and training contexts. This is especially true when used within broader educational systems such as PoleEducation (Kostrikova, 2026; Kostrikova & Sova, 2026).

Coaches should regard structured progression not merely as a planning convenience, but as a core methodological principle in coach education. This principal links pedagogy, safety, biomechanics, and technical development into a coherent instructional framework, thereby strengthening the professional foundation of aerial training (Kostrikova, 2026).

## 7. Technology, Accessibility, and Emerging Directions

Technology has become increasingly important in aerial coach education. Online learning platforms, live remote instruction, recorded demonstrations, and digital libraries have expanded professional development for coaches. This matters for those who lack regular access to in-person training centers or international workshops. Geographic isolation and unequal access to expertise have historically limited professional growth (*Aerial Fit Online, n.d.*; *IPSF, n.d.*).

Digital tools also support more individualized and data-informed coaching. Video analysis, remote feedback, and, in some contexts, wearable monitoring technologies can help strengthen observation and decision-making. These technologies do not replace pedagogical judgment, but they can enhance it. They make invisible aspects of performance more visible and support systematic tracking of progress. The broader implication is that aerial coaching is becoming more analytically grounded while keeping its artistic and experiential character (*Aerial Fit Online, n.d.*; *Stacey Strange, n.d.*).

Another important emerging direction is the emphasis on inclusivity and accessibility. As aerial disciplines continue to expand, coach education must respond to a more diverse participant base in terms of age, physical capacity, background, and training goals. Inclusive coaching requires methodological flexibility, sensitivity to individual needs, and the ability to adapt instruction without compromising safety or progression. This trend suggests that the future of aerial coaching will depend not only on technical sophistication but also on the capacity to create supportive and accessible learning environments (*Circus Mobility, n.d.*; *Cirque Athletics, n.d.*).

## 8. Conclusion

The professional preparation of coaches in aerial disciplines is increasingly shaped by the interaction of pedagogical innovation, structured progression, and international standardization. Contemporary coach education includes far more than technical instruction: it encompasses progressive sequencing, biomechanics, injury prevention, technological competence, creativity, ethical responsibility, and continuous professional development. These elements together form the basis of a more mature and sustainable coaching model (*IPSF, n.d.*; *Kostrikova, 2026*).

Pedagogical innovations such as multi-apparatus training, video analysis, holistic coaching, and systematic progression help coaches respond more effectively to the complex demands of aerial practice. At the same time, international standards in certification, safety, curriculum design, and ethical governance create the consistency necessary for long-term professionalization. The field is moving toward a model in which coaching is understood as an evidence-informed, ethically grounded, and continuously developing profession (*Aerial Fit Online, n.d.*; *Cirque Athletics, n.d.*; *IPSF, n.d.*).

Future development in aerial coaching should therefore prioritize three interconnected goals: strengthening high-quality coach education, expanding access to continued professional development, and refining international standards in ways that preserve both safety and innovation. Through these efforts, aerial disciplines can continue to grow as a credible, accessible, and professionally supported area of sport and movement culture (*IPSF, n.d.*; *Kostrikova & Sova, 2026*; *Kostrikova, 2026*).

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**MENTAL DEVELOPMENT OF PERSONALITY IN ONTOGENESIS:  
GENERAL PSYCHOLOGICAL REGULARITIES  
AND PATHOPSYCHOLOGICAL DISORDERS**

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**Summary**

This article examines the mental development of personality in ontogenesis through the lens of general psychological regularities and pathopsychological disorders. The study is based on the understanding that personality development is a continuous, stage-by-stage process shaped by the interaction of biological prerequisites, social environment, education, upbringing, and individual activity. Particular attention is paid to the general psychological patterns of personality formation, including the staged nature of development, the growing role of self-consciousness, thinking, self-regulation, and the influence of socialization on the formation of the self-image and adaptive behavior. The paper also analyzes personality development as a multi-dimensional process involving intellectual, emotional, behavioral, and value-based transformations across different age periods. In addition, the article considers the risk of pathopsychological disturbances that may arise under unfavorable developmental conditions. It is emphasized that emotional instability, maladjustment, behavioral dysregulation, and disturbances in interpersonal functioning may result from the interaction between age-related developmental tasks, individual vulnerability, and adverse social influences. Special focus is placed on childhood, adolescence, and youth as the most sensitive periods for mental health disturbances. The article concludes that the study of mental development in ontogenesis requires an integrated approach combining age psychology, personality psychology, and pathopsychology in order to understand both normative developmental patterns and the mechanisms of their disruption.

**Key words:** age-related dynamics, self-regulation, socialization, self-consciousness, maladjustment, emotional well-being, behavioral dysregulation, risk factors.

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## 1. Introduction

The mental development of personality in ontogenesis is a complex, continuous, and multidimensional process that unfolds throughout the entire lifespan. At each age stage, age-specific psychological formations emerge, the ways of interaction with the social environment change, and the mechanisms of behavioral self-regulation become more differentiated. Therefore, the study of personality development in ontogenesis requires consideration of the sequence of age stages, their qualitative specificity, and the nature of personal transformations that occur over time (*Gerald & Richard, 1967*).

In psychological science, mental development is traditionally associated with stage-related dynamics, uneven developmental tempo, and dependence on the leading conditions of socialization. At different stages of ontogenesis, emotional functioning, self-consciousness, behavioral regulation, and the system of relations with the surrounding world manifest themselves in different ways. Age acts not only as a chronological indicator but also as an important determinant of the forms through which personality adapts to the demands of the social environment. At the same time, personality formation takes place through the constant interaction of biological prerequisites and social influences. In early development, a decisive role belongs to the family environment, emotional contact with adults, upbringing style, and the internalization of basic moral norms; later, the importance of the educational environment, peer relations, group status, and the mastery of socially approved forms of behavior increases (*Huesmann, 2017*).

A major theoretical issue in contemporary psychology is the multidimensional interpretation of personality itself. Despite the existence of numerous approaches, personality is generally understood as a socially conditioned system of psychological qualities formed in interaction with other people and manifested in behavior, activity, values, and socially significant actions (*Moskalets, 2020; Komarnitska & Komarnitsky, 2025*). In this context, the analysis of general psychological regularities of personality development becomes the necessary basis for understanding the mechanisms of normal age-related development as well as the origins of pathopsychological disorders that may arise under unfavorable developmental conditions.

Thus, the relevance of this topic is determined by the need to examine personality development in ontogenesis in the unity of normative regularities and possible developmental disturbances. The purpose of this article is to analyze the mental development of personality in ontogenesis, to identify its general psychological regularities, and to characterize pathopsychological disorders that may emerge under adverse biological, psychological, and social conditions (*Andrusyshyn, 2022; Komarnitska & Komarnitsky, 2025*). The scientific novelty of the article lies in the integrated analysis of personality development in ontogenesis through the combination of general psychological and pathopsychological perspectives. The study systematizes the main regularities of personality development and clarifies the conditions under which age-related developmental difficulties may transform into pathopsychological disturbances.

## 2. General Psychological Regularities of Personality Development in Ontogenesis

Personality development cannot be reduced to the accumulation of separate psychological traits. It is more appropriate to consider it as a restructuring process, where new formations emerge while previous ones are transformed or integrated into more complex systems. Such changes occur unevenly: periods of relative stability alternate with phases of rapid transformation, which confirms the stage-related nature of ontogenetic development (*Gerald & Richard, 1967*).

One of the key patterns observed in ontogenesis is the increasing role of self-awareness. At early stages, behavior is largely externally regulated, whereas later it becomes progressively mediated by internal standards, personal meanings, and reflective processes. This shift does not occur automatically; it depends on both social interaction and individual activity, which are emphasized in contemporary psychological approaches to personality development (*Rybalka, 2018*).

It is also important to note that biological predispositions create only a framework for development. They do not rigidly determine the outcome. Under similar biological conditions, different social environments may lead to significantly different developmental trajectories. This supports the idea that personality formation is the result of continuous interaction between internal and external factors rather than a product of a single determinant (*Huesmann, 2017; Komarnitska & Komarnitsky, 2025*).

From this perspective, socialization plays a dual role. On the one hand, it ensures the acquisition of norms, values, and behavioral patterns. On the other hand, it creates conditions for the development of individuality, since the person selectively interprets and internalizes social experience. This position corresponds to the understanding of personality as a socially mediated system of psychological qualities manifested in activity and interaction (*Moskalets, 2020*).

Another essential regularity lies in the role of developmental conditions. The immediate environment, interpersonal relations, and cultural context significantly influence the emergence of new personal formations. When these conditions are insufficient or unstable, the development process may become distorted, leading to maladjustment or delays (*Komarnitska & Komarnitsky, 2025; Khokhlina, 2016*).

Thus, personality development in ontogenesis should be viewed as a dynamic and multi-dimensional process that unfolds through the interaction of biological prerequisites, social environment, cognitive development, and individual activity. Such an approach makes it possible to better understand both normative developmental trajectories and their variability.

### 3. Factors and Mechanisms of Personality Formation

An important place in the study of personality development is occupied by the analysis of the factors and mechanisms that determine its formation. In psychological science, personality is understood as a socially conditioned system of mental qualities that is formed in the process of interaction with other people and manifested in behavior, activity, values, and socially significant actions. Despite the diversity of theoretical approaches, most researchers agree that personality cannot be reduced either to biological prerequisites or to external social influences alone; rather, it emerges through their complex interaction (*Moskalets, 2020; Komarnitska & Komarnitsky, 2025*).

Within different psychological paradigms, the mechanisms of personality formation are interpreted in different ways. In the psychoanalytic approach, development is associated with the adaptation of natural drives to social demands; in trait theories, it is connected with the gradual formation of stable individual psychological characteristics; in social learning theory, it is explained through the acquisition of patterns of interpersonal interaction; and in the humanistic tradition, it is viewed as the process of selfhood formation and self-realization. Such diversity of approaches confirms the complexity of personality as a psychological phenomenon and indicates the need for an integrative perspective on its development.

One of the key factors in personality formation is heredity, which creates the natural basis for development. However, hereditary predispositions do not determine the final structure of personality by themselves. Their realization becomes possible only through activity, communication, and the assimilation of social experience. Thus, biological prerequisites should be considered not as a ready-made determinant of personality, but as a potential that is actualized under specific social and psychological conditions (*Komarnitska & Komarnitsky, 2025*).

No less important is the influence of the social environment, which provides the individual with models of behavior, norms, values, and opportunities for entering the system of social relations. The family, educational environment, peer group, and broader cultural context shape the conditions under which personality develops and acquires social experience. Through communication, imitation, role-taking, and the internalization of others' evaluations, the individual gradually constructs a self-image and develops the capacity for social functioning. In this sense, socialization acts as one of the main mechanisms of personality formation, since it ensures the inclusion of the individual in the system of social meanings and interpersonal relations (*Rybalka, 2018*).

An important mechanism of personality formation is the development of self-consciousness, which enables the person to become aware of one's own qualities, abilities, motives, and place in the system of social relations. As ontogenetic development proceeds, self-consciousness becomes more differentiated and reflective, which creates the basis for self-control, self-regulation, and purposeful self-development. In this context, the formation of personality is inseparable from the development of thinking, because it is through thinking that a person critically comprehends life experience, evaluates one's own actions, overcomes internal limitations, and constructs an individual life strategy. Therefore, intellectual development should be regarded as an essential condition for personal maturity and inner organization (*Rybalka, 2018*).

A separate role in personality formation belongs to upbringing as a purposeful and socially organized influence on development. The psychological significance of upbringing lies not only in the transmission of social norms and approved patterns of behavior, but also in the activation of mechanisms of self-control, self-regulation, and self-improvement. Under the influence of upbringing, personality development acquires direction, consistency, and internal coherence. For this reason, upbringing should be considered one of the decisive factors of personality formation, since it creates the conditions for the emergence of new personal formations and supports the individual's movement toward higher levels of self-organization (*Komarnitska & Komarnitsky, 2025*).

Thus, the factors and mechanisms of personality formation should be understood as a complex system of interrelated biological, social, cognitive, and educational influences that operate throughout ontogenesis. Personality is formed through the interaction of hereditary prerequisites, environmental conditions, socialization, self-consciousness, thinking, and upbringing. Such an understanding makes it possible to consider personality development as a dynamic and multidimensional process in which both external influences and the individual's own activity play a decisive role (*Khokhlina, 2016*).

#### **4. Pathopsychological Disorders in Personality Development**

A logical continuation of the analysis of the mental development of personality in ontogenesis is the consideration of those disturbances that arise under unfavorable conditions of personality formation and complicate harmonious human functioning. In this context, mental

health acquires special significance as an integral characteristic reflecting not only the absence of mental disorders, but also the individual's ability to maintain inner balance, adapt to change, interact constructively with the social environment, and realize personal potential. Therefore, mental health should be regarded as one of the basic conditions for full personality development at all stages of ontogenesis (*Maksymenko, Rudenko, Kushnerova, & Nevmerzhytskyi, 2021*).

Throughout the life span, the individual passes through a number of age stages, each of which is accompanied by specific psychological formations, crisis phenomena, and adaptive challenges. Under favorable conditions, these changes perform a developmental function; however, when internal vulnerability is combined with adverse external influences, they may acquire a destructive character. In such cases, the risk of pathopsychological disorders increases, manifesting in emotional instability, difficulties in behavioral regulation, reduced adaptive capacity, disorganization of interpersonal contacts, and deformation of personality development as a whole (*Antypin & Savchenko, 2024; Yevtushenko, 2023; Pavlyk, 2022*).

The pathopsychological approach makes it possible to analyze not only already formed disorders, but also early signs of maladjustment that emerge during age-related development. Its importance lies in the possibility of distinguishing normative crisis manifestations from symptoms that may indicate deepening psychological distress. Emotional fluctuations, protest reactions, or communication difficulties accompanying certain age periods do not always have a pathological meaning. At the same time, under conditions of chronic stress, psychotraumatic influence, lack of support, or disruption of significant social ties, such manifestations may transform into stable destructive tendencies (*Oliylyk, Bilyy & Shepel, 2025; Maksymenko, Rudenko, Kushnerova, & Nevmerzhytskyi, 2021*).

Childhood and adolescence are particularly vulnerable periods for the emergence of pathopsychological disorders. In childhood, the foundation of mental well-being is emotional security, stability of the immediate environment, reliable attachment to significant adults, and favorable upbringing conditions. Insufficient emotional contact, lack of support, psychotraumatic events, or prolonged experiences of danger may negatively affect the formation of basic trust in the world, the sense of safety, and the capacity for emotional self-regulation (*Antypin & Savchenko, 2024; Mikheyeva, 2022*).

In adolescence, the risks to mental health increase substantially, since this period is connected with the formation of identity, autonomy, self-esteem, and a new system of social relations. At this stage, instability of the emotional sphere, intensified peer pressure, inner conflicts, and difficulties of self-acceptance may contribute to the emergence of aggressive, self-destructive, isolative, or other maladaptive forms of behavior. In such cases, it is important not only to register external behavioral manifestations, but also to interpret them as possible indicators of deeper disturbances in personality development and mental functioning (*Maksymenko, Rudenko, Kushnerova, & Nevmerzhytskyi, 2021*).

In youth and early adulthood, mental health is closely related to the ability for self-realization, responsible life choice, the building of meaningful interpersonal relationships, and the preservation of inner integrity. However, social instability, uncertainty about the future, information overload, experiences of loss, or chronic psychological tension may provoke anxiety, depressive, and exhaustion-related states. In the absence of sufficient personal resources and external support, this complicates the process of growing up and negatively affects personal integration (*Karamushka, 2022*).

An important factor in the emergence of pathopsychological disorders is stress, especially when it is intense or prolonged. In the psychological dimension, stress arises when external demands exceed the individual's adaptive capacities. Long-term psycho-emotional overload

depletes inner resources, lowers working capacity, increases irritability, causes emotional instability, apathy, and depressive reactions, and may also be accompanied by sleep disturbances, somatic discomfort, and behavioral disorganization. As a result, both mental and physical well-being deteriorate, while the risk of maladjustment significantly increases (*Oliylyk, Bilyy & Shepel, 2025; Arslan & Allen, 2022*).

It should also be emphasized that in contemporary sociocultural conditions, pathopsychological disturbances in personality development are determined not only by individual characteristics or hereditary predispositions, but also by a set of external factors, including war-related events, economic instability, social tension, information oversaturation, and the lack of a safe environment. Under such conditions, stress resistance, emotional maturity, adequate self-esteem, developed self-regulation skills, and the presence of a supportive social environment acquire particular significance. These resources reduce the probability that age-related difficulties will transform into stable disturbances of mental functioning (*Karamushka, 2022; Stoliarchuk, Serhieienkova & Khrypko, 2022; Savchuk, B., Borys, U., Sholohon, L. et al, 2022*).

Thus, pathopsychological disorders in ontogenesis should be understood as the result of a disturbed balance between age-related developmental tasks, individual personal resources, and the conditions of the social environment. Their timely identification requires consideration of the age norm, the dynamics of mental development, the emotional state, behavioral characteristics, and the context of the life situation. For this reason, prevention, early psychological diagnosis, and systematic support of the individual should be regarded as necessary conditions for preserving mental health and preventing destructive changes in the process of ontogenetic development.

## 5. Conclusions

The analysis carried out in this study allows us to reconsider personality development in ontogenesis as a complex and неоднорідний процес, у якому поєднуються стабільність і зміни. Development unfolds through the interaction of biological, social, and individual factors, none of which can be regarded as dominant in isolation.

It can be argued that the most significant transformations occur at the points where external demands exceed the individual's current adaptive capacities. In such situations, development may follow different trajectories: either constructive (through the formation of new regulatory mechanisms) or maladaptive (through the emergence of persistent disturbances).

Particular attention should be paid to early identification of risk factors. Preventive measures, in our view, are more effective when they are focused not only on eliminating negative influences but also on strengthening personal resources, including self-regulation, emotional stability, and reflective capacity.

Thus, the integration of general psychological and pathopsychological approaches makes it possible to better understand not only how personality develops, but also why this process sometimes becomes disrupted.

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## CONCEPTUAL MODEL OF INDIVIDUALIZATION BASED ON STRENGTH, SPEED, AND COORDINATION CHARACTERISTICS

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### Summary

The study for the first time identified and classified a complete group of seven typical fighting styles in modern freestyle wrestling: "power", "game", "distance-tempo", "clincher", "hold-tempo", "high-reliability", and "even-developed". Each style is represented through a complex of model characteristics that combine five fundamental groups of parameters: morphological features (mass-height indices and body proportions), psychological qualities (creativity, discipline, psycho-emotional stability), the level of special physical and technical-tactical fitness, and kinematic characteristics of a competitive match (reliability of attack and defense, effectiveness in standing and parterre positions). A theoretical model of style genesis was scientifically substantiated, explaining the formation of new combat manners through the emergence effect when combining and dominating certain motor qualities in combination with the athlete's physique and psyche. It was established that transitional forms of styles are formed due to the transformation of basic properties, where success is achieved through specific compensatory mechanisms and the realization of individual advantages.

It was proven that the "favorite technique" constitutes the core of the individual style structure, the choice of which directly correlates with the topography of muscle strength and anthropometric parameters. A method for the objectification of technical mastery control was introduced using patented training devices. The device for practicing the "rolling turn" (nakat) allows for a quantitative assessment of the mannequin's compression force, maximum torque, and execution time, while the "shvung" device provides measurements of explosive power, force, and speed of preparatory actions. A strategic three-stage individualization algorithm was proposed: the stage of predisposition detection (up to 1 year), the stage of style formation (4.5–5.5 years), and the stage of perfection throughout the entire sports career. Objective criteria for predicting development were established: a correlation coefficient  $r > 0.3$  indicates a predisposition to a style, while  $r > 0.5$  indicates its final formation. The effectiveness of the approach was experimentally confirmed: in the experimental group, the number of wrestlers with a high degree of style formation increased by 52.4%, and the average degree of compliance with model fitness profiles increased by 45.2%. The reliability of the method was confirmed by its coincidence with expert evaluations of leading coaches in 94.4% of cases.

**Objective.** The research aims to develop and scientifically substantiate a holistic system of individualization for wrestlers' preparation, based on the dialectical unity of an athlete's natural predispositions and the requirements of modern competitive activity under conditions of constant intensification of Olympic sports and frequent changes in competition rules.

**Conclusions.** Implementation of a holistic individualization system based on typical styles allows for a transition from a subjective search for a fighting manner to a scientifically managed process of training. This ensures the maximum realization of the wrestler's natural

potential, minimizes errors in the selection of promising cadet and junior athletes, and significantly increases wrestlers' competitiveness in elite sports.

**Key words:** wrestling, individualization of training, fighting styles, model characteristics, favorite technique, management system, correlation analysis, training devices, long-term preparation.

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## 1. Introduction

In the modern system of sports science, the theory and methodology of individualized athletic training remain among the most pressing areas of research. Today, the issue of individualizing training for wrestlers has become significantly more acute due to the intense commercialization of Olympic sports and constant changes to competition rules aimed at increasing the spectacle, intensity, and dynamism of matches. Modern wrestling has become a highly intense activity that places critical demands on all aspects of an athlete's specialized training.

Improving the effectiveness of the training process is possible only through strict individualization of its management. This is particularly significant in freestyle and Greco-Roman wrestling, where high results can be achieved through substantially different approaches to conducting a match, making it practically impossible to create a single model of the "ideal wrestler." Furthermore, the limited opportunities to select promising children in the club force coaches to adopt an individualized approach to each talented athlete.

The theoretical and methodological foundations of managing the sports training process are viewed in modern sports science as a systematically organized process of planning, monitoring, and adjusting the training impact on the athlete using feedback mechanisms.

Ukrainian researchers S. V. Latyshev (*Latyshev, 2014*), Y. V. Tropin (*Tropin, 2019*), T. O. Bompa (*Bompa & Buzzichelli, 2019*), G. G. Haff (*Haff & Triplett, 2016*), and M. H. Stone (*Stone et al., 2007*) have addressed technical and tactical preparedness, individual wrestling styles, age-specific characteristics, and factors influencing wrestlers' success. Recent studies focus on athletes' functional capabilities, anthropometric traits, and details of their competitions when optimizing their technical and tactical arsenals.

In combat sports research, the studies by E. Franchini, B. Miarka, and W. Błach (*Błach, et al. 2021*) are important because they analyze technical and tactical training, taking into account the athlete's profile, match structure, and competition specifics. K. Sterkowicz-Przybycień (*Sterkowicz-Przybycień, et al., 2011*), K. Škugor (*Škugor et al., 2023*), and O. R. Barley (*Barley et al., 2021*) discuss age differences, functional abilities, and factors influencing young athletes' success. E. Franchini, D. A. S. Soto (*Soto & Franchini, 2020*), and W. Wasacz (*Wasacz et al., 2022*), explore optimization of technical and tactical arsenals using athletes' anthropometric, biomechanical, and weight characteristics.

Despite considerable scientific progress, comprehensive knowledge of individualized wrestling training remains undeveloped. Most studies are fragmented and focus mainly on elite athletes. Key gaps include: no scientific methods for early identification of young wrestlers' style predisposition; no clear link between individual style stages and long-term training phases; and no unified concept that connects natural aptitudes with modern competitive demands in a coherent management system.

This leads the coach and athlete to search for an individual style, often spontaneously and through trial and error, which significantly reduces the competitiveness of wrestlers on the international stage.

**The aim of the study** is to develop and provide a scientific and methodological justification for a comprehensive, individualized training system for wrestlers, based on identifying each athlete's natural inclination toward one of seven typical wrestling styles.

**The relevance of this research** topic stems from the need for a fundamental reevaluation of athlete training approaches in the current context of Olympic sports development.

**The research topic**, which significantly complements current approaches, involves moving away from the search for a single model of the "ideal wrestler" toward managing training through the dialectical unity of the athlete's natural qualities and the demands of modern competitive activity. Unlike existing fragmented studies, our research considers individualization as a complex open management system encompassing the entire process of long-term improvement – from early identification of aptitude to the conclusion of a sports career.

To achieve these objectives, the research employs a **variety of methods**: system analysis and synthesis, modeling, analysis of competitive activity, correlation analysis, and expert assessment.

## 2. Presentation of the main research material

In modern freestyle wrestling, it has been shown that high athletic performance can be achieved across various styles; therefore, a standardized "ideal model" of a wrestler does not reflect the actual diversity of competitive activity. Within the framework of the concept of individualized training for wrestlers, S. V. Latyshev substantiated the proposition regarding the existence of typical styles of combat, which are formed as a result of the combination of anthropometric characteristics, the level of development of motor skills, psychophysiological characteristics, and the specifics of executing technical and tactical actions in competitive conditions. That is why the individualization of wrestling training should be based not on average standards, but on identifying an athlete's dominant qualities and their targeted improvement (Latyshev, 2014).

Analyzing the competitive performance of highly skilled wrestlers has enabled the identification and theoretical substantiation of seven typical wrestling styles. Every highly skilled wrestler can be assigned to one of these styles: "power wrestler," "game wrestler," "long-distance tempo wrestler," "grappler," "grip tempo wrestler," "highly reliable," and "well-rounded" (Malinskyi, 1999).

Each style is defined by dominant motor qualities, body type, and psychological traits:

**"Power-type"**: marked by strong maximum and explosive strength, short stature, and resilience.

**"Skill-oriented"**: defined by high coordination, flexibility, intellect, and creativity.

**"Long-distance sprinter"**: noted for highly specialized endurance.

**"Close-range fighter"**: shows flexibility and strength endurance in close, non-standard positions (Latyshev, 2014).

The developed theoretical model indicates that new typical styles are formed from the basic styles: "Power Player," "Playmaker," and "Pace Setter." When the characteristics of one basic style decrease and those of others increase in a certain ratio, a new style emerges. This is an emergence effect, where new advantageous qualities appear.

When the specific features of the basic styles are minimally expressed, a “balanced” style emerges, in which success is achieved through “signature” moves and counterattacks perfected to the point of automaticity (*Latyshev, 2014*).

A key tenet of modern methodology is that a wrestler’s individual style is not limited to a set of techniques, but rather constitutes a comprehensive system of technical and tactical actions, behavioral responses, and methods for utilizing functional capabilities in specific match situations. In this context, a promising approach is one in which the core of individualization is not an abstract “universal technique,” but rather the set of actions most effective for the athlete, developed with consideration of their morphofunctional, psychophysiological, and coordination characteristics. This approach is consistent with studies that consider model characteristics of technical-tactical readiness, sensorimotor reactions, and functional state as the foundation for differentiated management of the training process (*Latyshev, 2014*).

The age-related aspect of individualization becomes particularly significant. For young wrestlers in preliminary training groups, models of physical fitness characteristics have been proposed that can serve as a basis for evaluating and adjusting training interventions. This allows the training process to be constructed not only on the basis of chronological age or athletic rank, but also on the actual level of development of key qualities, functional state, and readiness to master more complex technical and tactical actions (*Cieśliński et al., 2021*). Thus, a modern system for managing wrestlers’ training must combine analysis of fighting style, fitness model characteristics, data from ongoing monitoring, and stage-by-stage adjustment of training methods, ensuring more precise individualization and enhancing the effectiveness of long-term athletic training.

In contemporary research on the theory and methodology of sports wrestling, the individualization of training is considered a key condition for improving the effectiveness of the training process. Ukrainian researchers argue that a wrestler’s success is determined not only by their overall level of physical fitness but also by the alignment of training methods with their individual technical-tactical, psychophysiological, and morphofunctional characteristics. In particular, in the works of S. Latyshev, individualization is linked to the development of a wrestling style, while in the studies by Y. Tropin (*Tropin, 2019*), L. Podrygal, N. Boychenko, R. Pervachuk, and V. Romanenko, it is linked to the construction of model characteristics of wrestlers’ physical, technical-tactical, and sensorimotor fitness (*Latyshev et al., 2014*).

One of the most extensively studied areas is stylistic differentiation among wrestlers. S. Latyshev’s study introduces a training program designed to help each wrestler develop an individual style. The experiment included 51 wrestlers aged 16–17: 21 in the experimental group and 30 in the control group. The experiment lasted 2.5 years. This is important because it shows that style can be shaped over years of training, rather than simply described as an athlete’s current characteristics (*Latyshev, 2014*).

In parallel, recent research in wrestling supports the use of model characteristics as a tool for managing training. For qualified wrestlers, models of physical fitness have been developed, as well as models of technical and tactical readiness, which take into account the specifics of competitive activity and orient the training process not toward an average “ideal,” but toward genuinely meaningful indicators of effectiveness.

A separate area of research focuses on the sensorimotor reactions and specific perceptions of wrestlers of different styles. The works of Y. Tropin, V. Romanenko, R. Pervachuk, and their co-authors demonstrate that differences among athletes extend beyond strength, speed, and endurance to include reaction characteristics, perceptual accuracy, and the processing of motor information (*Tropin, 2019*). This broadens the understanding of individualization: it must

include not only the selection of exercises but also consideration of the athlete's psychophysiological profile.

Ukrainian authors have found differences in competitive activity structures among various age groups of wrestlers. Relative age effects are more evident at the cadet level and tend to disappear at the adult level. This means trainers should consider both an athlete's current athletic performance and their stage in long-term training when individualizing methods (Table 1).

Table 1

**Mapping of the main areas of research on the individualization of wrestlers' training**

<b>Authors</b>	<b>Research Focus</b>	<b>Brief Summary</b>	<b>Practical Significance</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
S. Latyshev	Individualization of training in freestyle wrestling	Developed and substantiated a program for the individualization of training and an approach to shaping an individual style of contest performance in wrestlers.	Makes it possible to design training programs that take into account the athlete's individual strengths.
Yu. Tropin, M. Latyshev, et al.	Model characteristics of technical and tactical preparedness	Investigated model indicators of wrestlers' technical and tactical readiness and their relationship with competitive performance.	Can be used for monitoring and adjusting technical and tactical training.
Yu. Tropin, V. Romanenko, R. Pervachuk, et al.	Sensorimotor reactions and psychophysiological indicators	Examined sensorimotor reactions and specific perceptual abilities as components of the wrestler's individual profile. This is only partially confirmed: the general research direction is supported, but not the exact wording of the earlier claims.	Provides grounds for taking psychophysiological characteristics into account when selecting training means and methods.
Yu. Tropin, L. Podrihalo, N. Boychenko	Physical fitness and model characteristics	Studied wrestlers' physical fitness and model benchmarks for athletes of different qualification levels.	Allows for a more objective assessment of a wrestler's readiness and helps plan individualized training loads.
I. Cieśliński et al.	Success factors of elite wrestlers	Identified key determinants of success, including anaerobic power, strength endurance, reaction speed, special endurance, and technical preparedness.	Helps clarify which qualities should be developed individually to achieve high-level performance.
B. Miarka	Technical-tactical and physiological demands of competitive wrestling	Analyzed the technical-tactical and physiological demands of wrestling bouts.	Makes it possible to combine technical-tactical preparation with the real demands of competitive performance.
T. Ambroży et al.	Analysis of technical-tactical mastery	Demonstrated that bout analysis and the calculation of technical-tactical performance indicators form part of coaching control.	Provides a tool for ongoing assessment of the effectiveness of a wrestler's actions.

Continuation of table 1

1	2	3	4
K. Škugor et al.	Success factors in young wrestlers	Investigated the determinants of success in young wrestlers and showed that medalists demonstrated better indicators of certain motor qualities, whereas anthropometric differences were not always decisive.	Important for the individualization of young athletes' training, as performance depends not only on body build but also on the level of special preparedness.
M. Marković et al.	Special work capacity and testing in wrestlers	Examined the sensitivity of field tests for assessing the special work capacity of wrestlers of different performance levels.	Suggests that tests should be selected not formally, but according to the athlete's level and the objectives of assessment.
O. Folhes et al.	Influence of skill level and weight category	Analyzed how competitive skill level and weight category affect wrestlers' technical effectiveness and psychophysiological responses.	Confirms that individualization should take into account not only style, but also weight category and athlete level.

A review of contemporary scientific literature shows that individualizing wrestlers' training is a multi-component system. Here, performance is not determined by a single isolated factor. Instead, it results from the interaction of fighting style, physical fitness, technical and tactical repertoire, sensorimotor reactions, morphofunctional characteristics, and the athlete's age-related traits. In the works of S. Latyshev (*Latyshev, 2014*), individualization is associated with the development of a typical wrestling style and the creation of training based on the wrestler's individual profile. Meanwhile, studies by Y. Tropin, N. Boychenko, L. Podrygal, V. Romanenko, and their co-authors specify this approach. They do so by using model characteristics of the physical, technical-tactical, and psychophysiological preparedness of wrestlers at different skill levels (*Tropin, 2019*).

Foreign studies complement these findings, showing that competitive success in wrestling is linked to a combination of anthropometric parameters, specific work capacity, strength and anaerobic capabilities, as well as the ability to effectively execute technical and tactical actions under competitive stress (*Miarka, 2016; Kostrikova, 2025*). For a scientific analysis of the individualization of training, it is advisable to identify the key components that are most frequently considered in Ukrainian and foreign works as decisive for the development of a targeted training process. These components, their content, and their practical significance for managing wrestler training are systematized in Table 2.

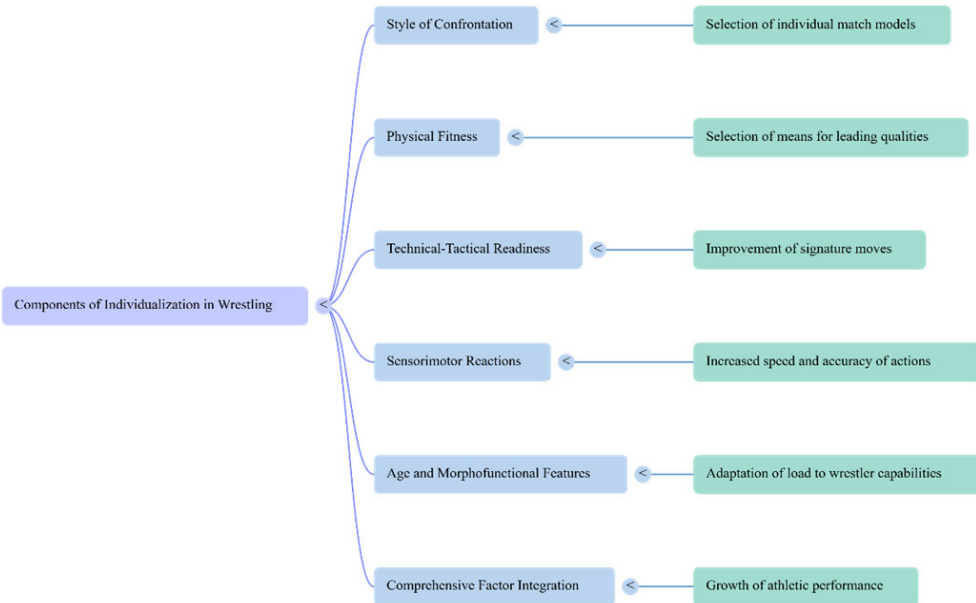
A summary of the analysis of the scientific literature indicates that the individualization of wrestlers' training is a multifaceted process that considers the athlete's stylistic, physical, technical-tactical, psychophysiological, morphofunctional, and age-related characteristics. Their interrelationship and significance for the design of the training process are presented in Fig. 1.

As shown in the diagram, the individualization of wrestlers' training is based on a careful consideration of a set of interrelated factors that determine the effectiveness of the training process and the success of competitive performance. These include, first and foremost, the style of wrestling, the level of physical development, the specifics of technical and tactical

Table 2

**Key components of personalized training for wrestlers, as identified in recent studies**

Component	Content	Significance for the Training Process
Style of contest performance	A set of individual ways of conducting a bout	Makes it possible to select special training means according to the wrestler's type
Physical fitness	Strength, speed-strength, coordination, and endurance indicators	Used for monitoring, comparison, and adjustment of training
Technical-tactical preparedness	Effectiveness of actions, variability, and the ability to apply techniques in a bout	Helps individualize the technical arsenal
Sensorimotor reactions	Reaction speed, accuracy of perception, and specific responses	Deepens the psychophysiological basis of individualization
Age- and stage-related characteristics	Different structures of performance efficiency across age groups	Makes it possible to adapt evaluation criteria to the stage of preparation



**Fig. 1. Main Approaches to Tailoring Wrestling Training**

preparedness, sensorimotor characteristics, morphofunctional parameters, and the athlete's age-related characteristics (Blach et al., 2021). The interaction of these components forms the wrestler's individual profile, which must serve as the foundation for planning and organizing training. Taking this profile into account allows for the rational selection of training methods and means, the determination of optimal training load parameters, ongoing monitoring of training progress, and timely adjustments to the training program. This creates the conditions for the targeted development of the athlete's key qualities, the compensation of weaknesses, and the improvement of the overall effectiveness of their athletic training.

### 3. Conclusions

The analysis of scientific literature, the synthesis of practical experience, and research findings lead to the conclusion that individualizing wrestlers' training is a key challenge in modern theory and methodology of competitive wrestling. Despite a significant body of scientific work, information on individualized training has long been fragmented and not integrated into a unified system. The systematization of this knowledge has enabled combining an athlete's natural aptitudes with the demands of modern competitive activity into a coherent mechanism for managing the training process.

An important scientific result was the substantiation of the concept of typical wrestling styles. It has been established that in sports wrestling, achieving high athletic results is possible through various match formats, which preclude the existence of a single universal model of the "ideal" wrestler. Within this approach, seven typical styles of wrestling were classified: "power-type," "game-type," "long-distance tempo-type," "grappler," "grip-type tempo-type," "highly reliable," and "well-rounded." It has been proven that each of these styles is formed by a combination of the athlete's dominant motor qualities, physical characteristics, and psychological traits.

During the study, the phased nature of the individualized training process was identified. Three strategic stages were identified: identifying a predisposition toward a specific style, forming the style, and refining it. This sequence ensures the logic and continuity of the training process at various stages of long-term athletic training—from initial specialization to the level of high athletic mastery. Of particular importance is that individualization is viewed not as a one-time corrective measure, but as a continuous process that accompanies the athlete throughout their career.

Therefore, individualizing wrestlers' training should be understood as a holistic system. This system combines assessing natural aptitudes, identifying stylistic characteristics, developing an individual technical and tactical repertoire, monitoring fitness, and adjusting the training process to match modern competitive demands. This approach enables the athlete to fully develop their potential and achieve consistent, high-level results.

**Prospects for further research** should primarily focus on refining the scientific and methodological foundations of the stage of athletic mastery, when an individual's style has already been formed and requires further adaptation to competing against opponents of various tactical types. This is particularly relevant for the final stages of Olympic cycles, where the result depends to a large extent on the athlete's ability to adaptively implement their style under complex competitive conditions.

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