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A SOCIAL SCIENCES

AA	PHILOSOPHY AND RELIGION
AB	HISTORY
AC	ARCHAEOLOGY, ANTHROPOLOGY, ETHNOLOGY
AD	POLITICAL SCIENCES
AE	MANAGEMENT, ADMINISTRATION AND CLERICAL WORK
AF	DOCUMENTATION, LIBRARIANSHIP, WORK WITH INFORMATION
AG	LEGAL SCIENCES
AH	ECONOMICS
AI	LINGUISTICS
AJ	LITERATURE, MASS MEDIA, AUDIO-VISUAL ACTIVITIES
AK	SPORT AND LEISURE TIME ACTIVITIES
AL	ART, ARCHITECTURE, CULTURAL HERITAGE
AM	PEDAGOGY AND EDUCATION
AN	PSYCHOLOGY
AO	SOCIOLOGY, DEMOGRAPHY
AP	MUNICIPAL, REGIONAL AND TRANSPORTATION PLANNING
AQ	SAFETY AND HEALTH PROTECTION, SAFETY IN OPERATING MACHINERY

THE ROLE OF COMMUNICATIVE COMPETENCE FOR INTERNATIONAL BUSINESS RELATIONSHIP DEVELOPMENT IN THE MULTICULTURAL CONTEXT

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Abstract: The article examines the essential features and role of communicative competence in modern international business. The increasing influence of cultural, historical, geopolitical factors and national security considerations on the landscape of international business and the interaction of existing and potential partners is described. The study also touches on the phenomenon of glocalization and its impact on international business and cross-cultural communicative competence. A three-dimensional model of cross-cultural communicative competence in international business, covering factors (dimensions) of globalization, glocalization, and national security is proposed.

Keywords: international business; cross-cultural communicative competence; globalization; glocalization; multicultural landscape.

1 Introduction

In today's increasingly linked and globalized world, cultural competence has become a must-have talent for worldwide enterprises and organizations. Cross-cultural competence is the capacity to comprehend, communicate, and engage effectively with people from various cultural origins. It entails not just understanding diverse cultures, but also the capacity to adapt and appreciate cultural differences.

In a globalized world, the connection between culture and communication has become more apparent, which has caused an increase in interest in this topic from the business community. The dominant elements of different national cultures in the process of intercultural communication influence each other and sometimes provide mutual integration, while in other cases - rejection.

Considering the above, as well as increased attention to cosmopolitanism as a philosophy of modern man, expectations for greater standardization and unification of the communication process among the world community have increased. However, globalization and the increase in the number of intercultural contacts have not yet led to the formation of universal rules of communication acceptable to all cultures, nor to the formation of a culturally homogeneous society.

International businesses face the reality of adapting both their products, their management approach and the way they do business to the cultures of the countries in which they operate. In addition, international business operating in countries with different cultures, in order to succeed, must know the current economic, social, and legal situation in each country and predict the future situation well, which is also an important component of multicultural communicative competence in the modern world [8].

Against the background of the war in Ukraine, relations with a number of countries have become significantly more complicated, thus the more urgent is the development of intercultural dialogue with strategic partners, improving mutual understanding and interaction, as well as increasing intercultural communicative competence in order to be ready to build new business relationships.

Once separated by vast oceans, our world's populations are now incredibly mobile and more connected than ever before in history. Leaders manage teams composed of representatives of different countries and cultures, located in different parts of the globe, speaking different languages, having different worldviews, beliefs, values, lifestyles and customs. But even in this interconnected world, people do not always understand each other and cannot always be understood in the process of intercultural communication. The less similar cultures are, the greater the influence culture has on intercultural communication. Therefore, knowledge of the most characteristic features of communications of different cultures can improve the effectiveness of communication in international business.

The current reality is that international business is fraught with many threats, to which TNCs are exposed much more often than firms operating only in national markets. In the theory of international business risks, first of all, it is about country risks [25]. Within the country risk, commercial risks are distinguished, namely economic, financial, currency, and political risks. The latter are divided into local, regional, international, global and special. Special political risks, in turn, are divided into macro risks and micro risks.

However, today analysts warn that due to political and economic instability in the world, the number and degree of risks changes every year. As a result of research in the field of business risks, many factors have been identified that either already threaten the activities of international corporations or may threaten them in the future [2; 3; 24]. Thus, the credit crisis, non-compliance with legal requirements, deepening recession, radical greening, cost reduction, personnel policy, strengthening the role of the state in the economy, and so on were called at one time significant risks that led to negative consequences [10; 12; 13; 17; 19]. However, a number of experts today emphasize that it is also worth paying close attention to such a factor as intercultural business communication and including it in the list of possible risks of TNCs activities [22].

Well-known economic theories have recently begun to cause distrust for the simple reason that in Asian economies these theories often conflict with cultural characteristics. This in turn can lead to completely different results than those implied by the theories. Language, as it is known, is closely related to culture as "the socially inherited set of practical skills and ideas that characterize our way of life" [18]. The use of language in speech in most cases depends on sociocultural background knowledge, and communicative connections are established between texts of business culture and everyday culture. Namely the communication process generates the rules of economic behavior [14].

Back in 2012, the British research and consulting company Economist Intelligence Unit (EIU), together with the international educational center for teaching English EF Education First, published a comprehensive study, "Competition without Borders," which was conducted among 572 executives of commercial and non-profit organizations around the world. The study showed that almost half of respondents (49%) believe that inaccuracies in translation and misunderstandings in communication not only interfere with the conclusion of international transactions, but also lead to large financial losses [1].

All these realities determine the need for a comprehensive consideration of issues of communicative competence in international business in a multicultural landscape.

2 Materials and Methods

The methodological basis of the study represents several theoretical approaches, which together make it possible to cover in detail and comprehensively the phenomenon of intercultural

communication being studied - theories of the relationship between geopolitics and economics, the theory of glocalization, cultural dimensions. The research is partly interdisciplinary in nature and accumulates scientific achievements in various fields of knowledge: communication theory, management, Political Science and World Affairs.

The work is based on laws, categories, and principles of dialectical logic. To solve the research problems, such general scientific methods as scientific abstraction, deduction and induction, systemic and comparative analysis were used.

3 Results and Discussion

Researchers have repeatedly resorted and are resorting to attempts to comprehensively describe the ethnocultural style of intercultural communication among representatives of different nations. Various criteria for the typology of cultures have been proposed. In general, the behavioral styles of representatives of different cultures are considered according to such markers as sociocultural, axiological, sociolinguistic, and psycholinguistic. A special place is occupied by intercultural communication, which studies all manifestations of culture in the course of communication from linguistic to non-verbal.

Intercultural business interaction occurs in the environment of different cultures with their inherent characteristics. Effective management of international constructive communication and negotiation requires reliance on adequate theoretical solutions and effective organization of practical communication work. Communication between representatives of different cultures in the global world creates additional difficulties in assessing the negotiation skills, business interaction skills of communicating subjects and in modeling strategic decisions. All this suggests the need to find modeling approaches that focus on cross-cultural compatibility and better knowledge of the context of cross-cultural business interactions.

At business meetings, Americans primarily focus on the problem and strive to discuss not only general promising solutions, but also the immediate details associated with signing the agreement. Also, the high level of professionalism in the communication style of Americans is noted. In a group of American entrepreneurs, it is difficult to meet a person who is incompetent in any matter, so they demand the same professionalism from their future international partners [1].

As for the Asian region, business people in China remain reserved and do not show strong emotions and enthusiasm in any situation. Intense gestures, hugs, kisses, pats on the back and even light touches are unacceptable for them in business. In this regard, the assertive American style can be seen as very unprofessional in Eastern business culture. Also, familiar American language patterns and various idiomatic expressions will be unacceptable, such as: *Let's get going; Who wants to start the ball rolling?*, etc.

Before signing a contract, Chinese businessmen prefer to establish trusting relationships with business partners, and this takes time, so often several meetings are required before the deal is completed. Also, in China it is very important to maintain a hierarchy when entering a conference room or meeting place, so the head of the delegation must be at the head of the delegation; it is important to remember that the first person to enter the room will be perceived by the Chinese side as the leader of the group.

One should understand that the process of intercultural communication is more than just the interaction of several people, but the meeting of different cultures. The first condition of communication is the understanding that all elements of communication, from utterances to unspoken words, from facial expressions to body movements, are formed by comparing the interpretative frames of different worlds.

Communication styles also vary significantly across cultures. Their knowledge is important both for understanding the value systems of the national culture of business partners and for

eliminating cultural communication barriers. Similar communication styles in intercultural contacts promote mutual understanding, since the behavior of business partners is understandable and, to a certain extent, predictable. If the communication style of business partners is not known or understood by representatives of another culture, then behavior that differs from what is expected may be assessed as "wrong."

EIU research project leader Abik Sen attributes differences in communication skills among residents of different regions to their political and geographical characteristics. Moreover, he notes that when entering international markets, companies try to facilitate the international integration of personnel, and therefore they consider it especially important, first of all, to teach them foreign languages. 47% of managers admitted in a survey that language training is not fully organized in companies. This significantly affects the process of communication with foreign partners and leads to communication problems. About 40% believe that when recruiting personnel, insufficient attention is paid to experience and skills in working in international business circles [25].

It is difficult to disagree with this. For example, when externally observing memorized cross-cultural "prescriptions" regarding business etiquette, all the subtleties associated with the regional affiliation of the communication partner are often not taken into account. Meanwhile, it is important to understand, for example, that the Arabs consider themselves the heirs of the great civilizations of Sumer, Egypt, Babylon, Carthage, although, to put it mildly, is not entirely true, while, however, in fairness it must be said that they are the descendants of the great Arab civilization, which included elements of ancient civilizations, made an invaluable contribution to the entire human culture and brought to this day numerous monuments of history and culture of the ancient world. The history of the victorious march of the troops of the first Arab caliphs across countries and continents, moreover, richly embellished by the rich eastern imagination, contributed to the development in the minds of the Arabs of a complex of their own superiority in relation to the peoples around them, "whose ancestors were slaves of the descendants of Muhammad and Abu Bakr". This superiority complex still exists today, although it is carefully hidden and used by Arab rulers mainly for domestic political purposes [6].

But, on the other hand, the Arabs are burdened by a different complex. Firstly, it is the historical period associated with humiliating colonialism, three hundred years of subjugation to the Turks, British and French, and secondly, the existing lag of the Arab East from the post-industrial West. Infringement, on the one hand, gives rise to admiration for the power and prosperity of the West, and on the other, hostility, developing into hatred, which sometimes takes the most extreme forms of expression [15]. This fact also manifests itself in business communication with Arab partners, but lack of its knowledge can lead to critically erroneous conclusions and, accordingly, harm to business relations.

The speed of decision-making is also more a cultural feature than a characteristic of professionalism. An interlocutor who hesitates to answer is regarded by Americans as secretive, because only a reliable person is capable of answering quickly and directly. The Japanese trust those who thoroughly think through what they hear and are not in a hurry to respond. Therefore, long pauses do not bother the Japanese, while Americans always strive to fill a long pause in a conversation.

The state of uncertainty in life and business situations is understood and interpreted differently in different cultures. Thus, the British, Swedes, and Danes welcome a minimum number of laws, norms, and rules that can somehow limit the scope of the situation. These cultures are characterized by low levels of fear of uncertainty, and people feel quite comfortable in loosely structured environments. In contrast, representatives of the Portuguese, Greek, and Japanese cultures, where there is a high level of fear of uncertainty, strive to establish clear rules. This helps them avoid the emotional discomfort associated with a situation of uncertainty.

Cultural differences are also evident in the definition of social roles. The business card of a Japanese entrepreneur not only shows his or her position in the company, but also clearly defines the degree of respect that should be shown to him or her. Asian and South American countries have high power distance scores. This is expressed in the fact that the authority and correctness of the boss are never challenged, while in the USA and Western European countries it is customary to erase the status barrier. There, organizations prefer not to demonstrate power, not to emphasize official inequality and to more encourage the initiative of subordinates.

To achieve understanding, it is imperative to take into account the filter of values and perceptions of the addressee, as well as the context and interference of communication. The latter refers to national stereotypes, good or bad relationships, emotions, differences in goals, vision of the subject and the influence of the external environment. The individual behavior of communicants is also influenced by other participants in communication and the media. Accordingly, the reaction of the message recipient will not necessarily correspond to the intention of the sender. In order to transform the improbability of communication into its probability, it is necessary to take into account not only linguistic and cultural diversity, but also other factors, such as the individual and group interests of communicants, their preferences and motives. Therefore, it makes sense to increase the costs for communication participants to prepare for interaction, which can significantly help reduce the risk of communication failures.

It is interesting to trace the dynamics of size of the cross-cultural training market (see Figure 1).

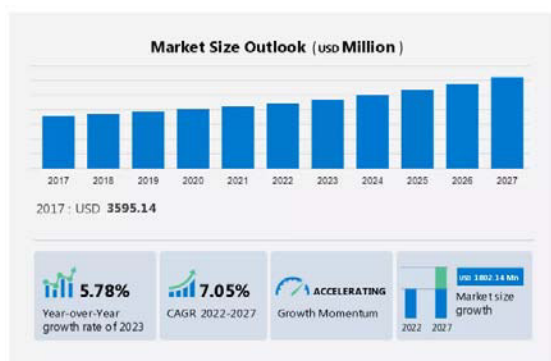


Figure 1. Size of the cross-cultural training market, with forecast [8].

As can be seen from the diagram, the size of the cross-cultural training market is showing strong growth, and this trend is expected to continue in the near future. At first glance, this should lead to improved cross-cultural interactions in international business. But the problem is that existing training programs are too “linear” and do not take into account the latent factors influencing the international business landscape. Graduates of these programs are well acquainted with the cultural dimensions of Hofstede, trained in the intricacies of business etiquette in international business, but do not think about the existence of hidden “pitfalls”, the peculiarities of the history of a particular nation and ethnic group and the traces of conflicts stretching for centuries, do not know how to think systematically and perspective, taking into account all the nuances of the situation in the field of geopolitics and national/regional/global security. Managers and owners of international businesses are forced to learn these skills only through practice and common sense management flourishes here, that has no theoretical basis or algorithms of action, which, naturally, often leads to mistakes detrimental to business.

Many large economies are closely interconnected, and since there is no expediency to wait for the end of uncertainty in the global economy, companies must be more erudite in the field of risk management, take a broader view of problems and

constantly predict the risks of future changes. In this regard, international companies should pay attention to the issues of intercultural business communication, which is often not considered by firms as a threatening factor.

As evidenced by the results of a 2016 McKinsey survey of top managers of large corporations on the topic of globalization, geopolitics is increasingly putting pressure on business. Today, top managers are more concerned than ever about the negative impact of geopolitics on the global business climate. Over the past two years before the survey, the number of respondents who consider geopolitical instability to be an important factor influencing the corporate world has doubled [15]. Managers are worried about the growing geopolitical tensions. 84% of managers are confident that this factor will have a direct impact on the commercial world in the next five years. In a previous McKinsey survey, only 61% of respondents thought so [15].

According to the majority of respondents, corporations do not make adequate efforts to reduce geopolitical risks, although they understand the scale of the threats. Only 13% of top managers said with confidence that their companies are actively addressing problems associated with growing global tensions. Analysts attribute this inaction to the lack of appropriate mechanisms in corporations: geopolitics is still not given enough attention when drawing up a company’s development strategy [21].

Today, geopolitical risks for business have increased even more. Perfect intercultural communication skills and intercultural competence play in such a turbulent environment one of the most important roles that determine not only the success, but sometimes the very survival of a business [7]. The ability to balance, to find an approach to representatives of different cultures, avoiding “sharp corners”, knowledge of the attitude towards geopolitical conflicts that is inherent in specific cultures - all these are necessary components of communicative competence in today’s international business. At the same time, it is worth remembering how quickly the picture of the world is changing and being prepared for new challenges.

It is essential that business leaders understand the context in which they exist. This is the only way they can learn to adapt to today’s conditions. In turn, the most important component of this context is culture, which, under the conditions of glocalization, has again acquired great weight.

Modern researchers of the phenomenon of globalization talk about the complex process of intertwining global trends in social development and local features of cultural development, defining this phenomenon as ‘glocalization’. The term “glocalization” was first used in the writings of Roland Robertson and entered scientific use at the end of the 20th century, by combining the two words “globalization” and “localization”. It implies that the global culture is accepted, but with significant local modifications. This model describes the mixing of cultures and peoples as the generation of cultural hybrids and new global cultural networks. Social movements and associations are growing, initiatives are being put forward, even political programs and bills are being developed in defense of folklore, one’s own local traditions, languages or dialects [26].

The glocal reorganization of physical and social space provokes the genesis of “glocal ethics” and creates conditions for the formation of the “ethos of glocal citizenship” against the backdrop of the moral crisis of the modern era. “Glocaloethics responds to the challenges of the era and demonstrates to an energetically globalizing world a new ethical matrix, which involves not so much a compilation of different cultural and anthropological models of morality (a kind of postmodern “moral pate”), but a cognitive perspective and cultural identification possibility that is fundamentally innovative for all classical ethics – ‘docking’ - the coexistence of rational morality and real mores” [26]. This is especially evident, in particular, in the revival of Islamic ethics.

It is also important to note that “government leaders have ceased to be ashamed of their connections with business and are not

emphatically distancing themselves from the business class. Some of them themselves came from the entrepreneurial environment (Trump, Macron), others have always been closely associated with it (Berlusconi, Sarkozy), while others prepared “reserve airfields” and went into business after government service (Schroeder, Blair). In modern conditions, it is considered good form for civil servants to cooperate with representatives of big business and finance, and top managers of large corporations. Rotation of personnel between the public sector and private enterprise has become the rule” [24]. The world has entered an era when the state lives not by ideological “isms”, but by the interests of national business and puts all its resources and influence at its service [6; 20]. The intensified competition between the great powers in this area, which resulted in unexpected results for the adherents of liberalism, caused a protracted crisis of globalization and an aggravation of interstate contradictions. It is not surprising that today's representatives of international business have to master the communication competencies of not only businessmen, but also politicians and diplomats. The cross-cultural component in such competencies comes to the fore.

Of course, the majority of transnational businesses do not need political upheaval, especially the ones that disrupt markets, destroy decades-long partnerships (supply chains), impose tariff barriers, introduce prohibitive sanctions, and start full-scale trade wars. However, they have to survive in this landscape.

Cross-cultural management and ethics help to take preventive measures and solve existing problems, often anticipating them. The main task of cross-cultural management and business ethics in business is the adoption of effective solutions to problems that are most adapted to situations. Various cross-cultural aspects include approaches to standards, business practices, laws of different countries, national ethics, culture, customs, management system, and socio-economic system.

In addition, today there is an increasingly close convergence of industrial espionage and political espionage, and the so-called “magic weapon” [5] is being increasingly successfully used by China. The strategy of “magic weapon” is to buy up the assets of high-tech companies (especially those that are at least indirectly related to the military-industrial complex), energy and infrastructure companies abroad, with the aim of acquiring political influence through economic leverage. China is now even stronger than it was before the pandemic, and is now one of the fastest growing economies in the world [27], which allows the “magic weapon” strategy to be actively practiced. Some countries, including New Zealand, have already recognized this problem and have taken unprecedented measures. In particular, in December 2018, the GCSB (Government Communications Security Bureau) prohibited PRC telecoms firm Huawei from participating in the 5G setup for New Zealand's largest telecommunications provider, Spark, citing national security concerns [4].

In October 2023, the Five Eyes alliance's domestic intelligence chiefs warned firms of a “sharp rise” in hostile state attempts to steal intellectual property. MI5 director general Ken McCallum, along with his counterparts from the Australian Security Intelligence Organisation (ASIO), the Canadian Security Intelligence Service (CSIS), the Federal Bureau of Investigation (FBI), and the New Zealand Security Intelligence Service (NZSIS), warned that “across all five of our countries, we are seeing a sharp rise in aggressive attempts by other states to steal competitive advantage” [16].

The occurrence and rising dominance of trade blocs is reducing the typically deep and fast-growing trade routes between China and the United States and the European Union. Five growing global trade dynamics will shape the globe in the next decade. As the global economy responds to chronic economic and geopolitical pressures and shocks, the conventional trade routes that defined the world map are being rebuilt, with trade blocs playing an increasingly important role. Furthermore, total global commerce is rising at a slower rate than the global economy, signaling a fundamental change away from the trade-led

globalism that has prevailed since the Cold War's conclusion. According to a new BCG report, worldwide commerce in goods is expected to rise at an average pace of 2.8% per year until 2032, compared to a projected 3.1% growth rate in global GDP during the same time (See Figure 2) [11].

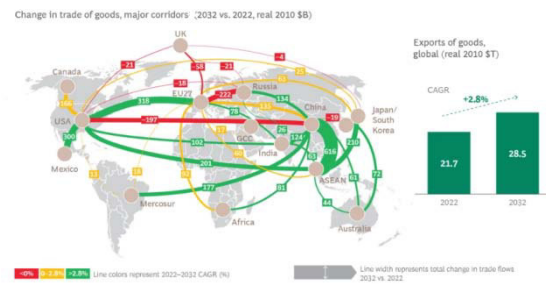


Figure 2. Forecast on trade flows reshaping by 2023 [11].

Of course, in such conditions, the complexity of the task of effective and safe intercultural interaction and communication in international business increases significantly, acquiring a multidimensional character, where national security becomes one of the dimensions. Schematically, cross-cultural communicative competence in international business today can be represented as a coordinate system (Figure 3).

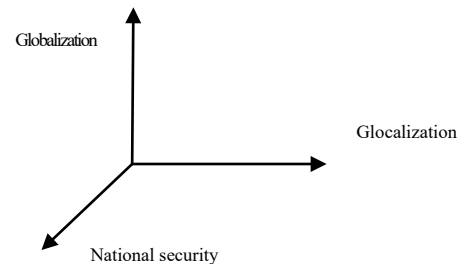


Figure 3. Dimensions of cross-cultural communicative competence in international business

Cohen distinguishes two paradigms of negotiations and business interaction: American and Eastern [1]. In addition, negotiations and various meetings and gatherings form the basis for cross-cultural business interactions.

The American culture of business interaction and negotiation is based on a verbal, explicit, low-context communication style. Cultures with low contextuality are characterized by: 1) direct and expressive speech; 2) limited attention to the use of nonverbal forms of interaction in communication; 3) a clear and accurate assessment of all topics and issues raised; 4) interpretation of reticence as insufficient competence or lack of information; 5) open expression of dissatisfaction [1]. This paradigm is based on the principles of “I can do” and “Give and take.” In business interactions and negotiations, representatives of the American paradigm, seeing the benefits of ‘give and take’, can do many things that were not fully included in the business meeting agenda, as well as negotiate things other than what was originally intended. During negotiations, solutions are constantly sought with the negotiating partner, since it is believed that both parties should be motivated to solve problems just as they are interested in making a profit. Time for representatives of this paradigm is always of real value, especially for representatives of the United States.

The Eastern paradigm of negotiations and business interaction is based on various negotiation characteristics. It is dominated by an internal, high-context communication style. High contextual cultures are characterized by: 1) unexpressed, hidden language, multiple pauses with multiple meanings; 2) orientation towards non-verbal communication and the ability to “speak with eyes”; 3) accurate, detailed transmission of information; 4) avoiding open display of dissatisfaction and anger in various conditions. The Eastern paradigm is characterized by the fact that business interaction,

negotiations, and decision-making occur to a much greater extent on the basis of collective opinion rather than personal attitudes. Establishing and strengthening personal relationships during business interactions and negotiations is considered a very important aspect of communication. In this paradigm of intercultural communication, great importance is attached to history, flow of the meeting, atmosphere, patience and tolerance. An agreement can only be reached after good relations have been established and without rushing to complete negotiations. This paradigm is represented by countries such as Japan, China, etc. [27].

Today, against the backdrop of the processes of globalization and glocalization, there is a convergence of these paradigms, including and especially under the greatly increased influence of geopolitical factors and "hybrid peace". However, this process has not yet received proper scientific understanding.

Johnson et al. back in 2006 rightly claimed that "despite the mounting volume of academic research on cultural issues in international business, firms appear not to be doing enough to prepare managers for the international business environment" [14, p. 526]. The same authors stress that, despite the apparent relevance of cross-cultural communicative competence in the study of international commerce, there is no consensus on what constitutes cross-cultural communicative competence. Second, there are very few in-depth examinations of this competence in international business.

According to Devenyl, "the concept of cultural intelligence refers to "a person's ability to adapt effectively to new cultural contexts" [9, p. 57].

It seems that in order to solve the accumulated problems and contradictions, it is possible and advisable to use a transcultural approach that expands the framework of traditional liberal doctrine and is more responsive to the realities of "behavioral" economics. This transcultural approach requires a rethinking of established methodological foundations and the development of a fundamentally new conceptual apparatus for studying the problems of globalization. In our opinion, it can be most fully and adequately implemented within the framework of a relatively new scientific direction - synergetics. Namely the transcultural approach most fully reveals the real determinants and mechanisms of national competitiveness, since in addition to the macroeconomic or microeconomic parameters itself, it takes into account its most important components such as institutional culture, national business culture, and management ideology. Cross-cultural integration is carried out both at the national (compatibility of national business cultures) and corporate (compatibility of organizational cultures) levels. All integration transactions are based on one general principle - obtaining a synergistic effect when integration brings additional value to the company.

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Primary Paper Section: A

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MODERN TOOLS TO ENHANCE THE EFFECTIVENESS OF DISTANCE LEARNING IN CONDITIONS OF DIGITALIZATION

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Abstract: At the stage of reorganization of the external and internal policies of educational process in Ukraine, there is an active search for the country's rightful place among the international community, the construction, and strengthening of new relations in Europe which leads to the need to address issues and create conditions for the quality preparation of future educators capable of utilizing digital technologies in distance education. The aim of the research is to analyze and practically implement the methodological component to enhance the levels of digital competence of specialists in the conditions of distance education, prepared to carry out future professional activity. The research utilized methods such as analysis, comparison, systematization, classification, generalization, and experimentation, as well as methods of mathematical statistics. The concept of "digital competence" has been defined, its structural components have been identified, and a methodology for forming the digital competence of future professionals in the pedagogical sphere has been developed and implemented. During the research at the Oleksandr Dovzhenko Hlukhiv National Pedagogical University, at the Faculty of Technological and Vocational Education, a methodological toolkit has been developed for forming digital competence, namely: the implementation of its components with selected methodologies for their formation, allowing the improvement of the educational process in Ukrainian higher education institutions. Following the research, prospective directions for improving the methodology of forming digital competence by developing its components have been formulated. The prospects for further research involve studying the possibilities of applying digital technologies in the preparation of specialists, starting from preschool educational institutions and ending with higher education institutions.

Keywords: higher education; future educators; distance education; digitalization; digital technologies; digital competence.

1 Introduction

The rapid pace of technological innovation has led to the widespread adoption of digital technologies worldwide. Global digital trends are forming how modern education is reformed. The globalization of higher education necessitates the active integration of digital technologies into the educational process for preparing future specialists. The peculiarities of the development of the modern digital generation is its integration into the global space. The development of digital competence is a crucial direction today, influencing the quality preparation of highly skilled specialists. In the context of today's digital society, there is a daily utilization of a vast amount of information, including "big data," artificial intelligence (AI), virtual and augmented reality technologies (VR, AR), quantum technologies, and "distributed ledger systems" [1; 18].

The digitalization of higher education holds a significant place on the path to the effective development of the digital society and digital economy in Ukraine and worldwide. The relevance of this issue is substantiated by legislative documents at the national level, namely, "Ukraine 2030E – a country with a developed digital economy" and others. The Ministry of Education and Science of Ukraine has presented the project "Concept of Digital Transformation of Education and Science for the Period until 2026" for public discussion, which serves as a comprehensive strategic vision for the digital transformation of the education and science sectors in the future [20; 27; 12].

Today, an increasing number of professions requires high levels of digital competence from specialists and proficiency in cutting-

edge technologies. Therefore, the issue of qualitatively updating the content of higher education becomes highly relevant. Higher education should take a proactive stance and explore new ways of preparing future specialists by incorporating digital technologies [4].

As distance education has actively developed worldwide, there has been a significant acceleration in the growth of the EdTech sector, which constitutes a part of the educational system that evolves in the direction of a symbiosis between traditional online education and the utilization of simulation methodology. The use of electronic tools and distance learning platforms impacts the quality of the educational process and requires higher education institutions and academic staff to possess relevant competencies in employing digital technologies for remote learning of highly qualified specialists [21; 25; 16].

The aim of the article is to explore the relevance and prospects of implementing modern tools to enhance the effectiveness of distance education based on digitalization principles in today's context.

The tasks that need to be solved in the process of conducting the research are substantiated:

1. Conduct an analysis of the current state of the methodology for organizing distance education in higher education institutions in Ukraine in the context of digitalization.
2. Develop a methodology for improving distance education in the conditions of digitalization.
3. Identify the components of forming the digital competence of professionals.
4. Implement the methodology for enhancing the effectiveness of distance education in the conditions of digitalization.

Solving these tasks in the research process will enable the construction of the educational process in Ukrainian higher education institutions in a distance format more effectively, taking into account the requirements for specialists in the pedagogical field in the labor market.

2 Method

In the process of experimental research, the following methods have been used: analysis, synthesis, comparison, systematization, classification - to conduct a theoretical analysis of problems aimed at researching the use of modern digital technologies in the conditions of distance education, as well as philosophical, psychological, pedagogical and methodical literature based on state general conditions binding standards of higher education, educational programs for training future specialists in the field of pedagogy; working curricula, educational and methodological complex of professional disciplines for various specialties; summarizing the experience of using digital technologies in institutions of higher education; experiment: ascertaining, formative and control to check the proposed methodological system aimed at increasing the levels of formation of digital competence in the conditions of distance education in institutions of higher education.

The experimental research has been conducted at the Glukhiv National Pedagogical University named after Oleksandr Dovzhenko during the academic years 2022-2023. The sample size consisted of 86 prospective educators. The control group included 42 respondents, while the experimental group involved 44 participants, comprising 46 females and 40 males. The results of the experimental research have been evaluated based on high, medium, and low levels.

At the declarative stage of the experiment, a cohort of respondents was identified, all of whom were in similar

conditions (course of study, educational program, etc.). A survey was conducted to diagnose the awareness of future educators regarding digital technologies and their utilization. An analysis of literature sources on the research problem was carried out, and a methodological toolkit was selected to support the idea of incorporating digital technologies into the educational process, the best practices in the methodology of applying digital technologies were examined.

A comparative analysis of the scientific foundation related to the research problem was conducted, involving the systematization, classification, and synthesis of theoretical data. A methodology for fostering the digital competence of future specialists in the context of distance education at higher education institutions was developed. Its components were identified as motivational, cognitive-operational, informational, and reflexive.

At the formative stage of the experiment, specialized methods of forming digital competence components were implemented in the experimental group in conditions of distance education in institutions of higher education at all stages of the experiment. Based on the analysis of experimental data, it can be concluded that during the formative stage of the experiment, the levels of digital competence among future specialists in the context of distance education at higher education institutions increased, which allows us to assert the effectiveness of the outlined methodology.

At the control stage, an analysis of the obtained results was carried out, and qualitative and quantitative indicators of the pedagogical experiment were processed using the Wilcoxon-Mann-Whitney criterion, results were generalized, conclusions were drawn, and prospects for further research were outlined.

3 Results and Discussion

The implementation of Industry 4.0 principles in Ukraine contributes to the active digitalization of education. The necessity of digitalizing education is driven by the formation of the digital economy, as its active development depends on having specialists prepared to operate within contemporary ideologies and technologies. The digitalization of education aims to ensure its continuity and individualization (Framework of digital competences for citizens of Ukraine, 2023).

In accordance with the demands of the modern labor market, employers put forward new requirements for the content and process of professional training of future specialists, who must possess deep professional knowledge and skills, be capable of creatively solving tasks, strive for self-improvement, and be ready to find ways to solve problems regardless of individual circumstances, to work with various forms of labor organization and production in tough conditions of competition, the ability to develop a special strategy of professional thinking, behavior and activity [20].

The concept of "digital competence" encompasses the ability to navigate the information space, conduct searches for necessary information, and utilize it according to personal needs and the requirements of the modern high-tech information society [14].

Digital competence is essential for individuals not only in their professional activities but also in everyday life, as demanded by both digital society and the economy.

The preparation of future specialists with a high level of digital competence is a necessary component of professional training, enabling them to perform their professional duties more effectively by aligning with the demands of the labor market and the digital society [23].

Ensuring the development of digital skills in future specialists in the field of education is a primary requirement for the advancement of Ukraine's digital market. Digital skills serve as the foundational prerequisite for the development of all other priorities in harmonizing digital markets between EU countries

and Eastern Partnership, as outlined during the ministerial meeting on the topic of the "Digital Community."

The framework for digital competence, established in 2013 and updated since then, encompasses 21 learning outcomes across 5 domains: information literacy, including content management; communication and collaboration, as well as societal participation; creation of digital content, incorporating ethical principles; security; and problem-solving [5].

To determine the levels of development of digital competence in future educators, the project "Description of the Digital Competence of a Pedagogical Worker" serves as the foundation. This method for assessing the levels of digital competence for pedagogical specialists has been developed in accordance with the Concept of Development of Pedagogical Education, European framework documents on digital competence – DigComp 2.1: The Digital Competence Framework for Citizens with eight proficiency levels and examples of use, Digital Competence Framework for Educators (DigCompEdu); Report developed by participants of the Erasmus+ project "Modernization of Pedagogical Higher Education by Innovative Teaching Instruments" (MoPED). It is based on the assessment of indicators of information, computer, communicative literacy, media literacy, and attitudes towards technology.

The digital competence of an educational professional is described across five directions:

1. Educator in the Digital Society.
2. Professional Development.
3. Utilization of Digital Resources.
4. Teaching and Assessment.
5. Formation of Digital Competencies in Education Seekers. [3; 28; 13].

By utilizing digital technologies in the context of distance education, higher education learners have the opportunity to acquire 21st-century soft skills necessary for their future professional activity. These skills include critical thinking, communication skills, leadership qualities, emotional intelligence, positive thinking, teamwork, and self-organization.

To ensure the competitiveness of specialists in the labor market, it is essential to cultivate technical, soft, and social skills that can adapt to the evolving demands of the workforce. Investments in skill development are a critically important factor for a country's economic growth and competitiveness. At the same time, a persistent challenge for governments in many countries is striking a balance between specific and foundational skills tailored to particular professions. Qualified and mobile workforce stands as a key element in the competitiveness of any company and plays a crucial role in the economic growth of a country [8].

The OECD 2030 Educational Compass distinguishes between three types of skills (OECD, 2018) [27]:

- Cognitive and metacognitive skills, encompassing critical and creative thinking, as well as self-regulation.
- Social and emotional skills, covering empathy, self-efficacy, responsibility, and collaboration.
- Practical and physical skills, involving the application of new information.

Among the key skills that a modern specialist in the field of education should possess are: comprehensive problem-solving, critical thinking, mobility, creativity, leadership qualities, time management, coordination with others, emotional intelligence, judgment and decision-making, service orientation, negotiation skills, and cognitive flexibility.

The most effective system of the 21st century aimed at training and continuous support of highly qualified specialists is distance learning. It is a global telecommunications infrastructure designed to create systems for mass continuous self-learning and

universal information exchange (Geng; Law; Niu, 2019; Hermann; Pentek; Otto, 2019).

Distance learning models include: externship-based learning, autonomous educational institutions, autonomous learning systems, informal and integrated distance learning.

Elements that ensure the quality functioning of distance learning include: distance courses; websites and web pages; email; forums and blogs; chat and ICQ; tele- and videoconferences; virtual classrooms, and more [16].

Since distance learning in the era of digital technologies is gaining popularity, in the future it can take a separate place as a form of education among full-time, extramural, evening and externships.

Today, distance education built on digital technologies has several advantages, namely: accessibility, low cost, convenience, democratic "teacher-student" communication, use of comprehensive software and leading educational technologies, individualized learning process, and the ability to choose one's own pace of learning [10; 2].

In Ukraine, the organization of distance learning is regulated by the Order of the Ministry of Education and Science of Ukraine dated April 25, 2013, No. 466, "On the Approval of the Regulation on Distance Learning." Distance learning should be understood as a learning process based on an individualized approach to acquiring professional competence. It relies on the interaction of participants in the educational process who are located remotely from each other in a specialized environment. The functioning of this environment is carried out through the use of modern digital technologies.

The concept of "distance learning" encompasses a system of technologies through which students can acquire the necessary professional, specialized, and digital competencies. It is aimed at ensuring interactive interaction between higher education learners and educators, as well as fostering independence in the learning process. Distance learning technologies in education contribute to cost reduction for conducting training; simultaneous education of a large number of higher education learners; improvement of the quality of education through the use of modern tools, extensive electronic libraries, and the creation of a unified educational environment [15; 25].

With the help of distance learning, higher education learners have the opportunity to utilize unconventional sources of information, enhance the effectiveness of independent work, create new conditions for creativity, and acquire professional skills, and educators can implement fundamentally new forms and methods of teaching.

The study proposes to include the following aspects in the concept of "digital competence of the future professional":

- Understanding the essence and impact of digital technologies on the development of the educational process in the university;
- Mastery of modern software tools;
- Knowledge of algorithms and mechanisms for the application of digital technologies;
- Ability to carry out and evaluate one's activities using digital technologies [24; 17].

Based on the theoretical analysis of literary sources, it has been established that the digital competence of future professionals consists of the following components:

- Motivational;
- Cognitive-activity;
- Informational;
- Reflexive.

The motivational component includes interests, needs, understanding of the purpose of digital technologies in the

educational space, motives for the professional activity of the future specialist in the pedagogical field, which is oriented towards the goal, process, result of improvement and self-development in the field of digital technologies, interest in current trends.

The cognitive-activity component provides for the completeness, depth, and systematicity of the future specialist's special knowledge of digital technologies, which make it possible to ensure the organization of the educational process with the use of digital learning tools; the possibility of applying skills and abilities regarding the use of digital technologies in professional activities; it is a means of knowledge, development of digital competence, self-improvement, as well as an opportunity to establish communication between all participants of the educational process in the institution of higher education and beyond.

Informational component involves fostering the development of information culture in future educators, the ability to navigate in the information space, and utilizing digital technologies in the process of searching and processing information.

Reflexive component involves the ability to self-regulate and self-assess one's own activity.

In order to determine the levels of formation of components of digital competence among future specialists in the conditions of distance education, an experimental study was conducted during the academic years 2022–2023 at Hlukhiv National Pedagogical University named after Oleksandr Dovzhenko on the Faculty of Technological and Professional Education.

During the ascertainment stage of the experiment, a set of methodological tools was designed, aimed at increasing the levels of formation of digital competence of specialists in the pedagogical field at different stages of the experiment. The author's methods were implemented in the experimental group by creating artificial conditions for conducting the experiment.

A comparative analysis of the scientific base on the research problem, systematization, classification and generalization of theoretical data has been carried out; modeling the methodology of training specialists in the pedagogical field according to the outlined components, namely: motivational, cognitive-activity, informational and reflective.

The sample size was 86 future teachers. 42 respondents were involved in the control group, 44 respondents in the experimental group, including 46 women and 40 men. At the ascertaining stage of the experiment, an analysis of literary sources on the research problem was carried out, best practices in the application of digital technologies were studied, and object-oriented software was selected to support the idea of using digital technologies in the educational process.

During the exploratory experiment, a group of respondents in similar conditions (course of study, educational program, etc.) was identified. Surveying was conducted, based on which the awareness of future educators regarding digital technologies and methods of their use was diagnosed. The results of the conducted research allowed obtaining objective data on the levels of formation of digital competence among future educators. The level of formation of digital competence is understood as an indicator describing the ability of future educators to actively apply digital technologies in the educational process.

The study proposes to correlate competencies at three levels of experience in accordance with the scored points, namely:

- High (67-100 points - 3rd level) - characterized by the ability to apply digital technologies in full scope (including creating a digital product);
- Medium (34-66 points - 2nd level) - possesses knowledge of digital technologies but applies them only partially;

- Low (0-33 points - 1st level) - has knowledge of digital technologies but cannot correlate knowledge components with professional tasks.

We conducted a survey to check the awareness and use of digital technologies in the educational process by students and future teachers. The processed results have the following indicators: adaptive learning (12%), virtual classroom (9%), MOOCs (8%), synchronous and asynchronous learning (7%), blended learning (6%), flipped classroom (flipped learning) (5%), self-directed learning (8%), learning management system (4%), "Cloud" learning (5%), mobile learning (5%), course management system (CMS) (9%), e-Learning (7%), 1:1 technology (4%), gamification (9%).

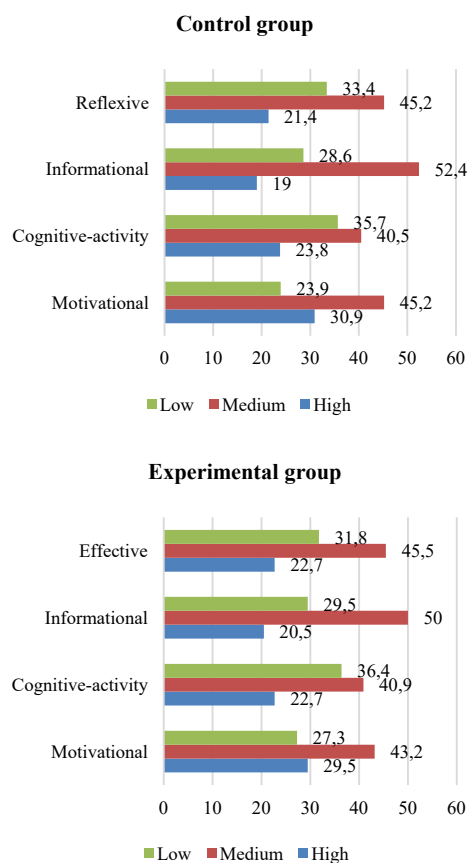
The obtained results of the study demonstrated the need for the development of students' digital competence. Synchronous and asynchronous learning, mobile learning, "cloud" learning" and blended learning are very convenient tools for organizing the educational process.

An important role in the study of the disciplines of the professional cycle is played by project activities, which make it possible to develop a set of skills for using digital technologies: information search, communication, synchronous and asynchronous communication, organizing joint activities, exchanging information and materials, conducting online surveys, creating a web portfolio and multimedia presentation of project results, creation of an electronic educational resource as a product of project activity.

To determine the levels of formation of the components of digital competence, a survey was conducted according to the author's questionnaire, which included four blocks of questions according to the outlined components, namely: motivational; cognitive-activity; informative reflexive.

In general, the data of the conducted survey show that students positively evaluate the possibilities of using digital technologies in education.

The results of the research at the ascertainment stage of the experiment are presented in Figure 1.



"Source: compiled by the author"

Figure 1. Results of diagnostics of the levels of formation of digital competence of future specialists in the field of pedagogy in the conditions of distance education in institutions of higher education at the ascertainment stage of the experiment in the control and experimental groups.

According to the results of the survey, it can be concluded that the respondents who belong to the first level - low, scored the lowest number of points. They realize that digital technologies have a high potential and want to learn them for further application in their future teaching practice, and they also occasionally use digital technologies in classes. Respondents belonging to the 2nd group (medium level) possess digital technologies at an average level. Students of the 3rd group showed a high level of mastery of digital technologies. They have a whole set of digital strategies and know how to choose the best of them for a particular situation, and they are always up to date with innovations.

At the formative stage of the experiment, specialized methods were implemented in the experimental group for the formation of digital competence components at all stages of the experiment. To determine the features of the formation and development of the motivational component of the digital competence of future specialists in the field of pedagogy in the conditions of distance education in higher education institutions, the degree of motivation, the desire for self-development and self-improvement, the author's questionnaires and clarifying interviews were used.

It is proposed to activate the potential of using digital technologies by specialists in the pedagogical field, namely by introducing: integration trainings (reflective, with elements of digital innovation); the use of doping methods aimed at forming the ability to maintain confidence during the use of innovations in the educational process (lecture, open class, etc.); the use of methods and techniques for the development of pedagogical self-

presentation skills (development of pedagogical portfolios, improvement of one's own pedagogical skill based on the use of digital technologies, etc.) [22].

The formation of the cognitive-activity component of the digital competence of future specialists in the field of pedagogy in the conditions of distance education is proposed to be carried out according to the method of posing problematic questions, by developing the author's special course "Digital technologies in education", which includes interactive methods; digital and multimedia technologies; hypertext and Internet technologies; technologies of virtual information space; cloud technologies; Web technologies; telecommunication technologies; SMART technologies. The definition of the content of the tasks took place taking into account the principle of complex differentiation for groups of students and was based on the implementation of indicators of the formation of digital competence of future specialists in the field of pedagogy in the conditions of distance education in higher education institutions.

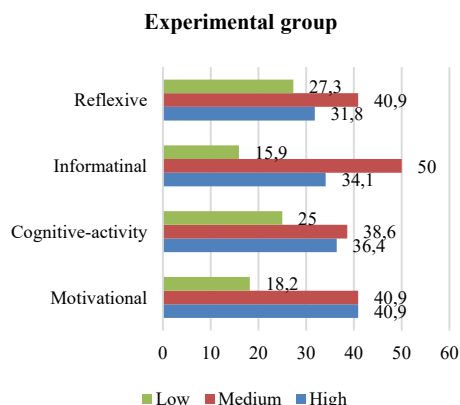
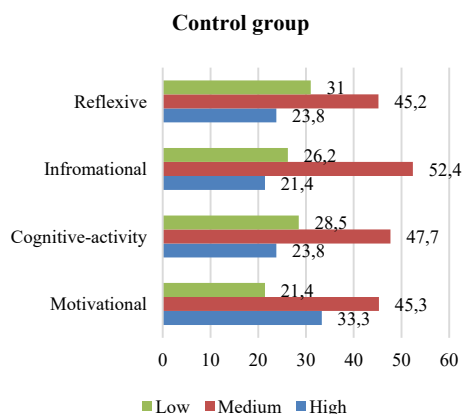
In order to exclude randomness in the assessment of the levels of the studied definition in conflict issues, there was a need to conduct an interview, during which students of education must answer questions and perform tasks, based on the results of which conclusions can be drawn about the level of development of each component.

The informational component of the formation of digital competence of future specialists in the field of pedagogy in the conditions of distance education in higher education institutions is proposed to be implemented through the development by future specialists in the field of pedagogy of a package of methodical materials for the chosen discipline of professional direction using digital technologies (lectures, practical work, tasks for independent work, etc.).

The implementation of the reflexive component is envisaged through the active development of students' ability to self-analyze, control, and evaluate the levels of their own professional culture, which ensures self-regulation of the educational activity of pedagogical specialists.

It is proposed to use the method of writing self-reviews, training activities, development of lateral (non-standard) thinking; use of strategic self-improvement techniques; method of problem-reflective dialogue and polylogue, reflexive-business games, as well as the method of positional discussion.

The obtained data results at the formative stage of the experiment are presented in Figure 2.



"Source: compiled by the author"

Figure 2. Results of diagnostics of the levels of formation of digital competence of future specialists in the field of pedagogy in the conditions of distance education in institutions of higher education at the formative stage of the experiment in the control and experimental groups

As we can see from Figure 2, after providing a formative influence in the experimental group, the group of 3rd level learners experimenting with digital technologies in different contexts and with different goals, integrating them into everyday life, purposefully selecting digital technologies and materials for specific situations, and trying to understand has significantly increased in the experimental group with the advantages and disadvantages of different digital strategies.

Therefore, in the course of researching the levels of formation of digital competence of future specialists in the field of pedagogy in the conditions of distance education in higher education institutions, we can state that the majority of respondents have formed its average level. This level of digital competence of future teachers characterizes the adequacy of the use of digital technologies in the educational process and contributes to its effectiveness. However, the research revealed certain problems that hinder the effective use of digital technologies by teachers in the educational process. First of all, these problems are related to the low level of material and technical equipment of classrooms (computers, tablets, interactive whiteboards, stable access to the Internet, specialized software) and the lack of systematic provision of the educational process with modern methodical materials.

According to the results of the analysis of experimental data, it can be concluded that at the formative stage of the experiment, the level of formation of the components of digital competence of future specialists in the field of pedagogy increased under the conditions of distance education, which allows us to speak about the effectiveness of the outlined methodology.

Thus, the use of blended and distance learning allows the educational process to be carried out at a modern level, taking into account the requirements of today.

4 Conclusion

In the course of the study, it was concluded that the qualitative formation of digital competence of future specialists in the field of pedagogy in the conditions of distance education in higher education institutions should be based on the principles of using digitalization tools.

The concepts of "digital technologies" and "digital competence" were defined. Prospective directions for improving the process of raising the levels of digital competence of future specialists in the field of pedagogy in the conditions of distance education in higher education institutions have been formed.

In the process of conducting the experiment, it was established that the level of formation of digital competence in the conditions of distance education in higher education institutions is mainly at medium and low levels.

Such a tendency requires the creation of the necessary methodological toolkit, which will serve to increase the effectiveness of training specialists in the pedagogical field, as a result of which they will develop digital competence.

The components of digital competence in the conditions of distance education are determined, namely: motivational, cognitive-active, informational and reflexive.

In the process of research, the organizational and methodical models of distance education were singled out, namely: externship-type education; autonomous educational institutions; autonomous educational systems; non-formal, integrated and distance learning.

The generalized data of the results of the experiment after the application of the proposed methodology allow us to draw conclusions about the effectiveness of the implemented methodological tools. In this regard, the policy of educational institutions of Ukraine should be aimed at updating the methodology of training specialists in the pedagogical field on the basis of digitalization of higher education.

We see the direction of further research in the development of modern educational programs of an international level for specialists in the field of pedagogy, which provide for the possibility of improving qualifications abroad and implementing the results of own research. Scientific research, as well as the conclusions formulated on its basis, can be used as an effective basis for improving the training of specialists in the pedagogical field in higher education institutions on the basis of digitalization, finding ways to increase the level of their digital competence, using the experience of foreign countries, introducing digital resources for the organization of scientific - research projects in the context of higher education, conducting professional activities at a high level, taking into account the requirements of the labor market; deepening the study of the structure of digital competence of educators in professional training.

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Primary Paper Section: A

Secondary Paper Section: AM

