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# TABLE OF CONTENTS (BY BRANCH GROUPS)

# A SOCIAL SCIENCES

THE DEVELOPMENT OF SPECIAL AND INCLUSIVE EDUCATION CONCEPTS NATALIIA LOPATYNSKA, NADIIA KRAVETS, NATALIA ANDRIICHUK, TETIANA MARIEIEVA, NATALIIA BAZYLIAK	6
THE PRACTICAL ASPECTS OF IMPLEMENTING SPECIAL AND INCLUSIVE EDUCATION IN SCHOOLS OLENA MILEVSKA, HALYNA SAVITSKA, IRYNA OMELCHENKO, VADYM KOBYLCHENKO, IRYNA KHARKAVTSIV	13
INNOVATIVE LEARNING STRATEGIES IN MODERN PEDAGOGY Yurii Kalichak, Halyna Kondratska, Alla Martynets, Olena Pysarevska, Serhii Kubitskyi, Iraida Tombulatova	17
APPLICATION OF CONTEXT-BASED LEARNING IN MODERN PEDAGOGY IHOR ANDROSHCHUK, DMYTRO POHREBNIAK, VITALII KULCHYTSKYI, LESIA ZELMAN, HALYNA KUZNETSOVA, IRYNA ZHYHORA	22
PEDAGOGICAL TECHNOLOGIES FOR DESIGNING AND FUNCTIONING AN INTEGRATED SYSTEM OF SPECIALISTS' TRAINING QUALITY CONTROL IN HEIS IHOR KOLODII, MYKOLA TSOI, VOLODYMYR ROGOZIN, SERHIY DANYLYUK, HALYNA ZADILSKA, SVITLANA OBORSKA	29
EVOLUTION OF STYLISTIC NORMS IN XX CENTURY LITERARY AND ART DISCOURSE HALYNA SIUTA, LIUDMYLA M. MIALKOVSKA, NADIIA BOBUKH, IRYNA IVANENKO, OLHA SENKOVYCH	34
SPECIFICS OF MODERN INTERNATIONAL PUBLIC LAW ON THE EXAMPLE OF THE EU COUNTRIES ELLA DERKACH, SVITLANA BONDAR, ROSTYSLAV TSIMOKHA, VITA SAVYCH, YURII BONDARCHUK	39
TRADITIONAL PEDAGOGICAL APPROACHES IN THE CONTEXT OF HIGHER EDUCATION DIGITALIZATION EMILIIA OSTAPENKO, ANATOLII KOVALENKO, VIKTORIIA MIZIUK, OLENA ZARUTSKA, OLHA ZADORINA, IRYNA HLAZUNOVA	44
PEDAGOGY OF PARTNERSHIP IN MODERN HIGHER EDUCATION RENATA VYNNYCHUK, OLENA TEREKHOVSKA, GANNA BABAK, VASYL VASENKO, OKSANA PROTAS	48
THE PLACE AND THE ROLE OF FILM TEXTS IN EDUCATIONAL DISCOURSE: LINGUODIDACTIC EFFICIENCY OLENA SHCHERBAK, HANNA TRUBA, SVITLANA KALENIUK, NATALIIA SHEREMETA, NATALIIA PONOMARENKO	53
THE DEVELOPMENT OF CHORAL ART DURING A WAR IRYNA BERMES, IRYNA MATIICHYN, HALYNA STETS, SVITLANA KYSHAKEVYCH, KHRYSTYNA PELEKH	58
LANGUAGE PORTFOLIO FOR PROFESSIONAL PURPOSES: INTERDISCIPLINARY EFFECT ON PROFESSIONAL COMPETENCE FOR PROSPECTIVE SPECIALIST IN UKRAINIAN AND CHINESE UNIVERSITIES TETIANA A. KOKNOVA, SVITLANA O. SHEKHAVTSOVA, OKSANA YE. MILOVA, VIKTORIIA S. VOLODAVCHYK, OLENA V. IABUROVA, LI LI	63
THE ANALYSIS OF PRINTING EQUIPMENT MANUFACTURING MYKOLA ZENKIN, DMYTRO MAKATORA, ANDRII IVANKO, ALONA MAKATORA	69
THE STATE OF FORMATION OF THE CULTURE OF SAFETY OF PROFESSIONAL ACTIVITY IN FUTURE OCCUPATIONAL SAFETY AND HEALTH ENGINEERS ELVIZA ABILTAROVA. OLEKSANDR RADKEVYCH	73
THE COMPETENCE MATRIX AS A TOOL TO ENSURE THE EFFECTIVENESS OF PERSONNEL DEVELOPMENT PROGRAMS IN SOCIAL ENTERPRISES HALYNA YURCHENKO, YOSYF SYTNYK	83
ECONOMIC BEHAVIOR OF CONSUMERS DURING INSTABILITY OLEKSANDR OMELCHYK, OKSANA IVANASHKO, LIUDMYLA SIPKO, ZHANNA VIRNA, VOLODYMYR SAIENKO, HANNA TOLCHIEVA	89
CONSEQUENCES OF FAILURE TO COMPLY WITH CIVIL LEGAL OBLIGATIONS DURING THE WAR YELYZAVETA KOPELTSIV-LEVYTSKA, ULIANA ANDRUSIV, MYKOLA SYIPLOKI, NATALIIA SHCHERBAKOVA, VIKTORIIA MYKOLAIETS	96
LEGAL REGULATION OF LABOR RIGHTS AND THEIR WARRANTIES DURING THE WAR Valentyna Goncharuk, inna ogiyenko, maryna shevchenko, liudmyla vasechko, oksana nazarchuk	100
THE CONCEPT OF EUROPEAN ADMINISTRATIVE SPACE AND ITS IMPLEMENTATION IN UKRAINE NADIIA KUDERSKA, ANDRII KSENZIUK, YURII KURYLIUK, SVITLANA MIROSHNICHENKO, INNA CHERNIKOVA	104

THEORETICAL BASES OF IMPROVEMENT OF MECHANISMS OF MANAGEMENT OF THE PERSONNEL OF THE ENTERPRISE LIUDMYLA VERBIVSKA, ZORIANA KOBELIA, ANTONINA VERHUN, ANASTASIIA ZERKAL, ANDRIY VIKHTIUK	107
UKRAINIANS IN THE DEVELOPMENT OF THE CULTURAL AND EDUCATIONAL SPACE OF EUROPE XVIII-XIX CENTURIES LARISA GORENKO, NATALIIA ZLENKO, ELENA MARKOVA, NATALIA BONDARENKO, MYROSLAVA FILIPOVYCH	111
TRAINING OF TEACHERS FOR THE IMPLEMENTATION OF UNIVERSAL DESIGN IN EDUCATIONAL ACTIVITIES NADIIA BYRKO, HANNA TOLCHIEVA, OLHA BABIAK, ANNA ZAMSHA, OKSANA FEDORENKO, NATALIIA ADAMIUK	117
ORGANIZATIONAL AND PEDAGOGICAL CONDITIONS FOR ARTISTIC AND AESTHETIC COMPETENCE FORMATION IN CHILDREN OF SENIOR PRESCHOOL AGE KATERYNA DEMCHYK, NATALIA MYROPOLSKA, LYUDMYLA BLYZNYUK, OLENA MONKE, VICTORIA ATORINA	126
FUTURE PROSPECTS FOR THE DEVELOPMENT OF PRO-ENVIRONMENTAL HIGHER EDUCATION OLEKSANDR POZHARYTSKYI, OLENA ILIENKO, NATALIIA VLASENKO, YULIIA KRASNOVA, OLHA BORYSENKO	133
THE DEVELOPMENT OF INTERNATIONAL LAW AND PUBLIC INSTITUTIONS IN THE CONTEXT OF CYBERSECURITY DIANA KIRIKA, NADIIA DEMCHYK, NADIIA SKLIAR, LIDIIA VDOVICHENA, OLEKSANDRA GAYEVAYA	139
REGIONAL AND GLOBAL PERSPECTIVES OF THE SUSTAINABLE ENTREPRENEURSHIP ALLA HEIDOR, NATALIYA AVRAMENKO, IHOR SMYRNOV, ANATOLII FAIZOV, LYUBOV LYTVYN	144
TARGETED GUIDELINES OF PERSONAL AND PROFESSIONAL SELF-DEVELOPMENT OF TEACHERS: IMPLEMENTATION OF THE EXPERIMENTAL PROGRAM LARYSA SUSHCHENKO, MARIYA GLADYSH, YULIIA ZUBTSOVA, OLENA ANDRYUSHCHENKO, TETIANA SOLOVIOVA, MARYNA TOMCHENKO	153
PROFESSIONAL TRAINING OF FUTURE SOCIAL WORKERS: IMPLEMENTING FOREIGN EXPERIENCE INTO THE NATIONAL HEIS PRACTICE RENATE VAINOLA, OKSANA MIKHEIEVA, ZHANNA PETROCHKO, NATALIYA MYROSHNSCHENKO, OLENA VAKULENKO	163
TRANSFORMATION OF CONSUMER MOTIVATIONS IN THE UKRAINIAN MARKET OF HIGH TECHNOLOGY PRODUCTS ALLA STAROSTINA, VICTORIA ZHURYLO, VALENTYNA SEREDA, OLENA KUZIOMA, NATALIA RUDENKO, LIUDMYLA YAROSH-DMYTRENKO	168
AESTHETIC AND ARTISTIC VALUES AS SENSORY SPIRITUAL COMPONENT OF PERSONALITY TETIANA ZHYTNIK, IRYNA YAKOVENKKO, OLGA KANAROVA, NATALIYA LEVKOVYCH	173
FORMING THE RHETORICAL COMPETENCE OF FUTURE TEACHERS HALYNA KUZNETSOVA, OLENA KORCHOVA, TETIANA ZENCHENKO, OLENA CHAIKA, NATALIIA HRYCHANYK	176
PEDAGOGICAL CONDITIONS OF TRAINING FUTURE BACHELORS OF ARTS IN LINGUISTICS FOR PROFESSIONAL TRANSLATION PRACTICE OLENA VASYLCHENKO, YULIIA KHALEMENDYK, IULIIA DEREVIANKO, VIKTORIYA SYNO, OKSANA BIELYKH	183
THE FUNCTIONING OF TERMINOLOGY IN ACADEMIC AND SCIENTIFIC TEXTS OLENA STEPANENKO, NATALIIA MUSHYROVSKA, MARIIA NALYVAIKO, OLENA BARANNYK, LARISA BOGUSLAVSKA	191
STRATEGIC GUIDELINES FOR THE DEVELOPMENT OF UKRAINIAN PARLIAMENTARISM IN THE CONDITIONS OF GLOBALIZATION VALENTYNA GOSHOVSKA, VOLODYMYR KREIDENKO, VIKTORIIA SYCHOVA, IHOR REITEROVYCH, IRYNA DUDKO	198
LEGAL PRINCIPLES OF INCREASING THE INSTITUTIONAL CAPACITY OF THE VERKHOVNA RADA OF UKRAINE LYDIIA DANYLENKO, OLEKSANDR ALIKSIICHUK, VOLODYMYR GOSHOVSKYI, TETIANA KORNIAKOVA, NADIIA MAKSIMENTSEVA	203

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

#### THE DEVELOPMENT OF SPECIAL AND INCLUSIVE EDUCATION CONCEPTS

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Abstract: Providing equal rights to education for all children, including children with special educational needs, is one of the main priorities in developing the modern educational system. The reform of the modern education system towards the introduction of effective inclusion as its essential component is confirmed by recent changes in the legislation of many countries, as well as the focus on practical activities of educational institutions of different levels, which correspond to the primary international documents in the sphere of children's rights and the regulation of the academic sphere. The transition from particular educational institutions to new programs encourages teachers to provide systematic and stable work for comprehensive education of children with special needs, monitor the dynamics of their personal qualities, theoretically understand modern approaches to learning, and analyze the results of educational activities, which has intensified the development of several concepts in this sphere. This article aims to analyze the work of scientists on the construction of modern concepts of special and inclusive education and to investigate the features of existing concepts based on the practitioners' experience in this area. Analytical methods were used to analyze the scientific literature on special and inclusive education in writing the article. Also, a questionnaire survey was used to practically find out the features of modern concepts of special and inclusive components of the educational system. According to the study results, the different scientists' points of view concerning the concept of inclusion and the current state of unique and inclusive corns of education were studied. Besides, the specialists working in inclusive classes illustrated their position on the current inclusive and particular education system development.

Keywords: inclusive education, education development strategy, child with special needs, special education, inclusive education concept.

#### 1 Introduction

Today's educational sphere affirms the basic humanistic principles of the new model of subject-to-subject relations, according to which new principles of organization and concepts of special and inclusive education are constantly being formed. Furthermore, the gradual recognition of the UN Convention on the Rights of the Child and the World Declaration on the Survival, Protection, and Development of Children in many world countries has increased awareness of the problems of children with special needs and the development of targeted measures to meet them.

The new period of global educational modernization has been marked by the realization that the main driver of any process is always the individual. The recognition of the individual in the context of human qualities, regardless of their nature, on a global scale is the main direction of society's development. Thus, the awareness of the need to develop each person's potential, identify their abilities, to meet the needs of intellectual, spiritual, moral, and physical development has led to the emergence of a new concept of inclusive education. Inclusive education promotes the implementation of one of the defining principles of state educational policy – equal access to high-quality education for all citizens, including people with special needs, and the development of an effective inclusive educational environment.

#### 2 Literature review

Providing equal access for all citizens to high-quality education despite national, social, or psychophysical differences is one of the critical issues in public education administration related to the principal value of the modern educational model – the harmonious development of each individual in society (Babii, Tsymbal-Slatvinska & Dychok, 2018).

The right of every child with special needs to be educated is enshrined in many state regulations (Wilcox, Conde & Kowbel, 2021).

According to O. Martynchuk, the educational management sphere should be considered a constantly changing system and the development of which is subject to the universal laws of dialectics (Martynchuk, 2018).

In this context, the problem of inclusive higher education, which deals with the joint learning of young people with special educational needs and other students, is particularly relevant. According to international experience, nowadays, to solve the problem of children and adolescents with special educational needs socialization, integrating children with disabilities into the educational space is actively implemented. It involves a significant update of the content, forms of organization, and learning technologies, which supports modern innovative approaches during the educational process (Hornby, 2021).

The concept of "inclusion" reflects new views not only on education but also on the place of the individual in society, gradually replacing "integration" because the combination (integration) in one place of young people with special needs and children with typical development does not mean the full participation of all children in society.

An inclusive education system is a system of educational services with a combination of special and inclusive education elements. Inclusive education is based on dialogue within the framework of partnership pedagogy, subject-subject relations with a healthy environment, and the principles of coexistence, mutual sovereignty, freedom of joint development, unity in decision-making, etc.

According to M. Shevlin and J. Banks, the organization of students with special needs for inclusive education in general education institutions and higher education institutions should take into account general and specific principles of humanistic pedagogy and psychology, the main of which are:

- social orientation:
- development of the personality of a child with special educational needs in activity and communication;
- stimulation of the personality's inner activity;
- humanism combined with high standards;
- consideration of ages and individual peculiarities;
- team-based learning;
- unity and coherence of requirements, efforts, and actions of the educational institution, family, society; legitimacy and human rights;
- responsibility for the compliance with the rules and norms concerning students with special educational needs;
- accessibility;
- combination of help and self-assistance;
- voluntariness of help acceptance;
- responsibility of the social work participants for the compliance with the ethnic and legal norms (Shevlin & Banks, 2021).

We can state that inclusion is a complex concept that includes social and educational components. General (social) inclusion arose because of society's transition to a new social policy idea based on the social model. The consequence of this development is social equality, allowing everyone, without exception, to participate in the social life with equal rights and to feel their importance (Hymel & Katz, 2019).

The term "social inclusion" came into everyday use in the late 1980s as a process that pursues people at risk of social exclusion to provide the opportunities and resources necessary for them to participate fully in economic, social, and cultural life and obtain a standard of living and well-being according to the quality standards to be achieved.

States acting on the principles of social inclusion should provide more opportunities for people to participate in preparing and making decisions that affect them and in exercising their fundamental rights (Forlin & Chambers, 2017).

It should be noted that the educational aspect of inclusion has two vectors. The first is the increase in education of all society members due to full access to educational services for all citizens. The second vector of the educational aspect of inclusion is overcoming the social isolation of people with disabilities (Rapp & Corral-Granados, 2021).

The inclusive education concept emphasizes that this type of education should be introduced, starting from pre-school educational institutions, where academic and educational activities for the younger generation are carried out. Also, this concept should continue to be implemented at other levels of education, including higher education. According to O. Haiash, the idea of "inclusive education" should be interpreted as "the purposeful development of each growing individual, regardless of their level of psychophysical development, as a unique person in an inclusive society" (Haiash, 2017).

The transition to implementing the inclusive education model is practically due to the ratification by countries of the UN Convention on the Rights of the Child. The document calls on states to align national legislation with this "General Constitution of the Rights of the Child", which proclaims the right to equal opportunity education. The legal mechanisms of the Convention are aimed at protecting children with special needs discrimination. The Convention on the Rights of Persons with Special Needs recognizes their right to education and states that to realize this right, state parties must ensure inclusive education at all levels and lifelong learning without discrimination and based on an equal opportunity (Azhazha, 2019).

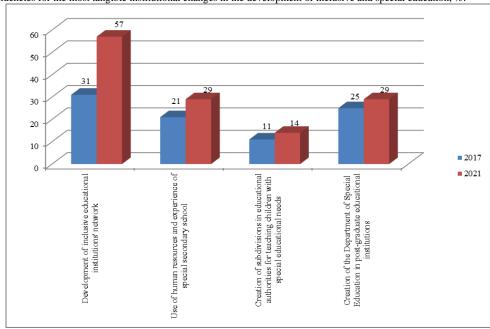


Figure 1: Tendencies for the most tangible institutional changes in the development of inclusive and special education, %.

Source: authors elaboration.

The concept of inclusive education reflects democratic ideas that making learning in inclusive educational settings makes sense for children and youth with special educational needs and other children, family members, and society at large. Moreover, such interaction promotes cognitive, physical, speech, social and emotional development of people with special educational needs, building friendly relationships, asserting tolerance and humanism in the team (Demchenko, Bilan & Piasetska, 2018). The principles of inclusive education outlined in the concept of inclusive education include:

- scientificity (construction of the educational program based on the developed theoretical and methodological foundations of inclusive education, program tools based on the results of analysis and monitoring of inclusive education, evaluation of the effectiveness of the tools used to achieve a positive result);
- consistency (ensuring equal access to high-quality education for children with special educational needs, continuity between educational levels);

- variability, corrective orientation (organization of personality-oriented educational process in combination with correctional and developmental work to meet social and educational needs, creating conditions for socioprofessional rehabilitation, integration of people with disabilities into society);
- individualization (implementation of a personal approach);
- social responsibility of the family (education, training, and development of a person with disabilities and special educational needs; creation of appropriate conditions for the development of their natural abilities, participation in the educational and rehabilitation process)
- interagency integration and social partnership (coordination of different agencies, social institutions, and services to optimize the process of school integration of people with special educational needs) (Hawkins & James, 2018), (Rose, Narayan, Matam & Sambram, 2021).

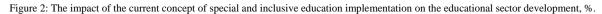
The development of modern society determines the respect for human diversity and the affirmation of the principles of solidarity and security that protect and fully integrate all groups, especially people with disabilities, into society. It is related to the definition of the primary goal of social development – creating a community for all. The basis of this integration is the holistic approach concept, opening the way to realizing rights and opportunities for everyone and, most importantly, equal access to high-quality education (Azhazha, 2019).

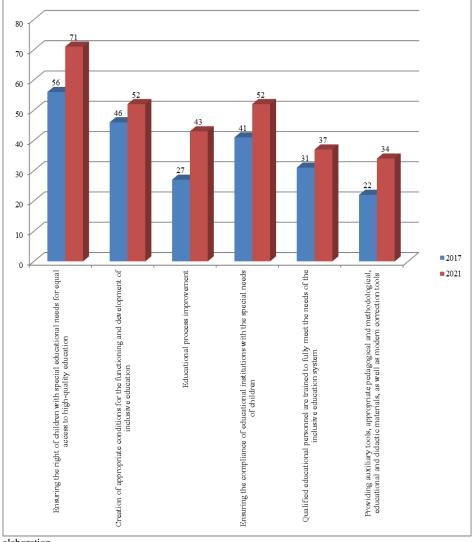
#### 3 Aims

The research aims to establish the existing features and further prospects for special and inclusive education development and concepts in the dynamics from 2017 to 2021.

#### 4 Materials and methods

The practical research of modern trends in the development of special and inclusive education concepts was conducted by interviewing 112 teachers working under inclusive conditions in 21 educational institutions of general and higher education in Kyiv, Chernihiv, and Zhytomyr regions of Ukraine. The survey was conducted in 2 stages: in 2017 and 2021 through an online questionnaire survey.





Source: authors elaboration.

### 5 Results

According to teachers of inclusive classes, the most tangible institutional changes in 2017–2021 occurred in the areas of development of a network of inclusive educational institutions, in the use of professional staff capacity and experience of special secondary school as information and methodological resource for the implementation of inclusive education, on the creation of separate structural units on the education of children with special educational needs in the educational authorities, with the most dynamic development from 2017 to 2021, according to respondents, there has been an increase in the number of inclusive educational institutions (from 31 % to 57 %) (Figure 1).

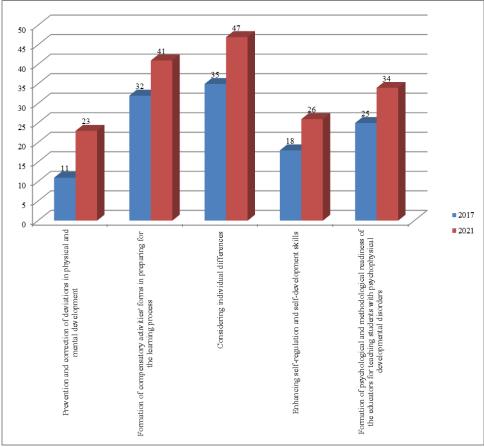
Survey participants were asked about the actual prospects impact of the current pace of development of inclusive education for the educational sphere state in the country (Figure 2).

As Figure 2 shows, according to the respondents, the concept's implementation will primarily contribute to:

- ensuring the right of children with special educational needs to equal access to high-quality education regardless of health status and place of residence;
- the creation of appropriate conditions for the functioning and development of inclusive education, provision of sufficient financial resources for the implementation of inclusive education:

- general improvement of the educational process taking into account modern advances in science and changes in the educational paradigm;
- ensuring compliance of general educational institutions;
- the training of qualified educational personnel to meet the needs of inclusive education and the creation of a system of professional development;
- provision of auxiliary means, appropriate pedagogical and methodological, visual and didactic materials.

Figure 3: The most urgent tasks at the current stage of inclusive education development,%



Source: authors elaboration.

According to the teachers working in educational institutions with an inclusive education form, the main tasks are (Figure 3):

- prevention, correction of deviations in physical and mental development;
- formation of compensatory forms of activity in preparation for learning;
- consideration of individual differences and capabilities of individuals in the learning process, the prospects of using the received analyzers;
- development of self-regulation and self-development skills through social interaction based on knowledge, skills, and language skills, especially communicative activity and creativity;
- formation of psychological and methodological readiness of the teaching staff to implement the educational standard as the final result of teaching students with developmental disabilities.

An essential step in the survey was to find out the respondents' opinions about the strategic priorities for developing special and inclusive education in the future (Figure 4).

The teachers believe that the strategic priorities for the development of special education should be:

- theoretical and methodological foundations for teaching children with disabilities in general education and providing such children with a set of psychological, social, and medical assistance;
- solving the problem of psychological and educational support for children with severe and combined disorders of psychophysical development;
- developing educational standards for preschool and secondary education for children with special educational needs of various categories;
- develop a system to support parents in the care, education, and upbringing of children with special needs.

At the same time, according to the respondents, the following activities are of great importance:

- development at the state level of mechanisms for employment of graduates with special needs per their performance;
- making and providing home compensatory technical devices for children with hearing, vision, locomotor disabilities, etc.

These activities are not an easy task; their implementation requires the joint efforts of the state, scientific institutions, public foundations, teachers, and parents.

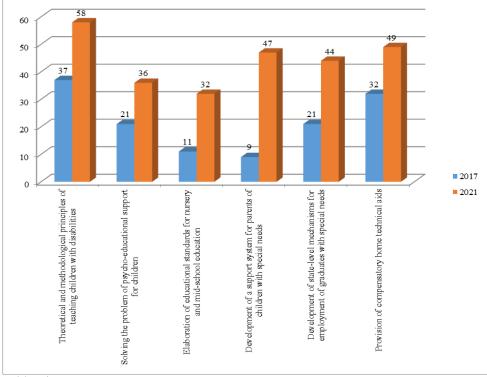


Figure 4: Strategic priorities for the development of special and inclusive education.

Source: authors elaboration.

#### 6 Discussion

Therefore, as the study of scientific literature on this topic has shown, global inclusive education was introduced quite recently. In the first half of the XIX century, the implementation of the joint education ideas for children with different educational needs in France, Austria, and Germany highlighted the advantages of this process, namely:

- a) the increase in the number of students in educational institutions;
- the active participation of the family in the education of children with special needs;
- dissemination and improvement of teaching methods for this category of children;
- saving money by reducing the number of teachers and educational institutions (Demchenko & Chyrva, 2018).

The awareness of these benefits has influenced, for example, that in Germany, between 1832 and 1834, there were courses that educated more than a hundred teachers and mentors to work with exceptional children in public schools.

In France, the inclusion development was influenced by teachers' experience of teaching this category of children in public schools, such as A. Blanche and J. Valade-Gabelle in 1858.

Later in the late XIX century, general education was introduced in most European countries. As a result, there was a growth in the number of schools and students in classes (from 30 to 80 people). However, at this time, special needs students suffered a lack of individual attention, which gradually deprived them of the opportunity to study with other children. Consequently, special education separated from general education, which happened most dramatically in the Scandinavian countries. Economic growth increased in many countries and renewed integration processes only against the background of social-democratic and liberal-democratic reforms in the XX century. Also, necessary international legal acts protecting the rights of people with special needs were adopted.

In the 1960s and 1970s, large boarding schools and psychiatric hospitals for the disabled were closed in Sweden and later in most developed countries.

A notable event for the world community was the World Educational Conference for this group of people, held under the auspices of UNESCO (1994) in Spain. Since then, the term "inclusion" was introduced into pedagogy, and the inclusive education principle was proclaimed (Demchenko & Chyrva, 2018).

Nowadays, we can confidently state that inclusive education implies the active inclusion of children with special needs in general educational institutions and the restructuring of mass education and the educational process to meet the educational needs of all categories of children (Evans, Gable & Habib, 2021).

An analysis of teacher education experiences with children with special needs in countries around the world shows that the vast majority of them have reformed special needs education, albeit with slight variations. Therefore, it is essential that in many countries, notably Finland, Belgium, France, Ireland, Spain, and Sweden, children with special needs can be educated in special schools and mass institutions (Hernández-Torrano, Somerton & Helmer, 2020).

Maintaining general and special education while creating inclusive schools is acceptable in many countries worldwide (Hilt, 2017).

As of today, the global trend in the development of the special and inclusive education concept is reflected in the improvement of the special school network, the creation of new education models and forms for people with special educational needs, opening of groups for children with special educational needs living in rural areas, expansion of the practice of inclusive and integrated education in preschool, general education and out-of-school educational institutions of children and adolescents with a need for correction in physical and (or) mental development (Kauffman & Hornby, 2020).

At the beginning of the XXI century, inclusive education is the most innovative movement in forming understanding and education of tolerance in the society in democratic countries. UNESCO defines tolerance as a moral obligation and as a political and legal imperative to respect the rights of individuals, groups, and states.

Therefore, the Declaration of Principles on Tolerance notes the need to create laws to ensure equal communication and opportunities for all groups and individuals in society. According to UNESCO, the closest steps to this are the creation of an appropriate legal framework in the countries of the world community and the protection of the socially, economically, and family disadvantaged.

The current state of society is characterized by a gradual transition from a medical model of society's attitude toward people with disabilities (in which disability is seen as an injury/disability in need of medical intervention) to a social model that assumes taking into account "special educational needs" as a problem created by society and considers social discrimination the most critical obstacle to the development of people with special needs" (Evans, Gable & Habib, 2021).

The development of the social model encourages states to create a "society for all", in which, in particular, children with special educational needs will have access to a high-quality education. Thus, the development of the social model of society's attitudes toward people with special needs has enabled the development of a socially inclusive education model (Hernández-Torrano, Somerton & Helmer, 2020).

The model of socially inclusive education is based on the idea that a person with special educational needs faces challenges, therefore, has limited opportunities. The issue of solving these problems is the interaction of skills, human needs, and environmental factors. Therefore, teaching should be focused on the pedagogical support of the learning process and the adaptation of people to environmental factors. Focusing on the child's needs for educational support requires new approaches to the learning, upbringing, and development of children with special educational needs (Chambers & Forlin, 2021).

Successful implementation of inclusive education of children with special educational needs requires the solution of tasks at the state level, namely the formation of a new philosophy of public policy concerning children with special educational needs, improvement of the regulatory framework per international human rights treaties, introduction and distribution of models of inclusive education of children in pre-school and general educational institutions (Kivirand, Leijen, Lepp & Tammem, 2021).

As rightly noted by scientists, the state should take over the support of such people, which should be carried out in specific areas: educational, technical, social, cultural-territorial, psychological, medical rehabilitation, sports, and professional-adaptive (Chambers & Forlin, 2021).

Researchers view a thriving, inclusive environment along three lines:

- 1) the adaptability of the educational framework;
- 2) inclusive competence of teachers;
- 3) the competence of students.

State policy on inclusive education should be based on a new philosophy of understanding the needs of people with special needs in society, according to international experience, solving these problems. Effective management of inclusive education requires organization of inter-sectoral cooperation and coordination of cooperation between the key agencies (ministries of health, education, and science, social protection); ensuring the material provision of higher education to create psychopedagogically and physically comfortable conditions to meet the educational needs of students with disabilities; providing support

services or delegating them to other structures with consequent (Kivirand, Leijen, Lepp & Tammem, 2021).

#### 7 Conclusions

The management of the inclusive education development is, therefore, a complicated, purposeful process that provides a comprehensive approach to creating conditions for the implementation of the rights of persons with special educational needs, qualitative changes aimed at integrating students with special educational needs into the general education space, improvement of legislation on inclusive education, formation of conscious respect, the sustainable tolerant attitude of society to people with special educational needs.

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**Primary Paper Section:** A

Secondary Paper Section: AM

# THE PRACTICAL ASPECTS OF IMPLEMENTING SPECIAL AND INCLUSIVE EDUCATION IN SCHOOLS

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Abstract: The democratization of Ukrainian society is increasingly spreading the ideas of educational and personal priorities humanization. The market economy and the democratic system of socio-political development in Ukraine put forward new requirements for the education system, especially for the education of people with special needs. First and foremost, it is about guaranteeing all citizens, without exception, equal opportunity for education and further active participation in public life. Ukraine's integration into the global educational space requires constant improvement of the national educational system, searching for effective ways of improving the quality of educational services and real equal access to high-quality education for all citizens, including children with special educational needs. The implementation of inclusive education ideas today is evidence of positive changes in providing national education development. This article aims to analyze the practical aspects of special and inclusive education, reflected in the scientific and pedagogical literature, as well as to study in practice the features of these types of educational processes in general secondary education institutions. Methodology. The article was written using data from international studies, scientific publications, and the results of a survey conducted in general secondary education institutions, where special and inclusive types of the educational process are used. Results. We have identified certain features of inclusive and special education systems in general secondary education institutions and the results of a survey conducted in general secondary education systems in general secondary education institutions and the results of a survey conducted in general secondary education institutions and the most important and urgent aspects of working with children with special educational needs were determined by questioning teachers and parents of children with special educational

Keywords: inclusive education, special education, children with special needs, educational process, remedial services.

# 1 Introduction

The relevance of the raised issue lies in the fact that the ongoing reform and modernization of the educational process under the conditions of social change today requires compliance with global challenges. One of these challenges is to provide the young generation with a high-quality education based on a new philosophy, which is vital for providing opportunities for human endeavor, full of life, and a rich spiritual world. That is why there is an urgent need to address the problems of satisfying needs and identifying individual features as fully as possible to reveal opportunities and potential.

When society has reached a certain level of civilizational development, it begins to care not only about an ordinary citizen in general but also about each individual, admitting his/her individuality and inimitable personality traits. Therefore, there is a problem of inclusion both in the modern world and in the Ukrainian educational system, in other words, joint education of children with special needs together with their able-bodied peers.

The participation of a child, including a special need one, in public life has great importance for the realization of his/her dignity, the justification, and realization of his/her rights. The experience of many countries shows that the education of children with special needs can best be provided in inclusive

schools, where all children from a particular neighborhood or community are welcome. All children with special educational needs can achieve the best results in learning and social adaptation under such conditions.

#### 2 Literature review

Many educational scientists, such as Donohue D., Bornman J., Tatianchykova I., and Shyrina A., cover various aspects of teaching and educating children and youth with special educational needs (Donohue & Bornman, 2018), (Tatianchykova & Shyrina, 2021).

When considering studies of speech remedial activities in an inclusive classroom, researchers find that inclusion is, first and foremost, a properly chosen method of teaching that takes into account each child's abilities. The important thing is how happy and successful is the child while learning and how open and friendly the education applicant is, rather than what grades the child gets (Yan, Deng & Ma, 2021).

Scientists have noticed that the most effective assessment is the accumulating process of comprehensive information about the child during the learning process in inclusive education. This information can be used to identify students' strengths and those areas where they are underperforming and need support. The goal of the assessment process is to determine the current level of personal development so that appropriate curricula and activities can be planned (Magumise & Sefotho, 2020) (Subba, 2019)

Over the past few years, educational seekers, including children with SEN, can build practical skills through a cloud-based learning environment deployed on MOODLE or CANVAS platforms, where it is possible to create their distance learning course and fill it with useful material (Butakor, Ampadu & Suleiman, 2020).

The MOODLE and CANVAS platforms courses are tools to facilitate teaching and learning. These are easy, open, friendly, and secure platforms successfully used by education seekers from kindergarten and high school to university. That is because the platform is aimed at different groups. It simplifies the provision of educational information, promotes and enables active communication between pupils, monitors student progress and reporting, is designed to empower teachers and students, helps focus efforts on the creative process, and facilitates teaching and learning. However, a teacher is still the biggest influencer on students with special educational needs, or rather the manifestation of the teacher's personality: it's not just what you say, but what you think, whether you love your work, and if you see a mission in it (Kuyini, Desai & Sharma, 2020).

When analyzing the practical directions of the educational process under inclusion conditions, scientists have defined the following most important aspects as preconditions for effective logopedic work:

- organization of the remedial environment in speech therapy practice and classes (high-quality equipment in the room with mirrors, tools, toys, aids, etc.).
- planning and carrying out individual lessons, where work is done on the articulation motor skills, phonemic understanding, and the correction of impaired functions, taking into account the abilities of each child.
- planning and carrying out collective courses that involve children with the same speech impairment. The effective joint work of children is aimed at enriching the active vocabulary, developing coherent language, and sound automation (Messiou, 2017).

The work with parents of such children is an equally important aspect of inclusive education implementation, especially student-centered education. The parents of children with disabilities are usually more active than in families where able-bodied children develop. At the same time, parents of children with disabilities are informed insufficiently about the development prospects of their child. As a consequence, the educational environment often does not realize the full potential of this child (Chhetri, Spina & Carrington S., 2020).

By involving parents in the educational process, it is possible to create an individualized educational plan for their child that is suitable for everyone involved in their child's education (Perdana, 2022).

An important point is that the school involves different communication and interaction types between families and teachers. Some parents want to communicate via written communication, while others need face-to-face meetings. As families gradually gain educational experiences, this improves children's knowledge and skills and increases their self-esteem.

As Vanderpuye I., Obosu G., Nishimuko M. have noted, when families deny the need for special attention to their child, the school must be persistent and consistent, encouraging them to participate in the educational process. In this case, certain teaching methods and their consequences should be stated. Also, certain assessments and conclusions should be avoided (Vanderpuye, Obosu & Nishimuko, 2020).

The experience of teaching children in inclusive school environments shows that school teachers can help parents in many ways, such as starting conversations about topics that families hesitate to talk about. In particular, sometimes, parents of children with special needs at first hide anger, frustration, and despair. When they see that the teacher understands their background, they are willing to come into contact. It is possible to view parents as experts on their children and teachers as experts on their children's development and education. Once teachers and parents actively work together, their knowledge and resources are doubled, which has an overall positive impact on child development (Junaidi, 2019).

The use of information and communication technology in education is an important feature of the modern educational process. The use of ICT in inclusive and special education is important for many children with special needs because it allows them and their teachers to perform various activities within the curriculum and promotes equal opportunities for their development (Kurniawati, 2021).

The special training and retraining of teachers to work with children with special needs in an inclusive education context has been identified as one of the most important ways to implement the inclusive education concept.

By summarizing the work of scientists on the implementation of inclusive education, we have identified several directions for improving the level of specialists' training to work in inclusive spaces, namely:

- training of subject specialists whose professional duties include leadership that is directly related to the organization of work with children with special educational needs;
- the creation of conditions for the acquisition of inclusive competence by all future teachers (no matter what is their discipline/specialization)
- self-education and systematic professional development for inclusive education teachers (Dorji, Bailey, Paterson, Graham & Miller, 2018).

#### 3 Aims

This study aims to analyze the opinions of teachers and parents of children with special needs on the factors that contribute to the effectiveness of special and inclusive education, the shortcomings of the current system of education and training process in general secondary education institutions with inclusion, and the desired development directions of these educational types to achieve better results for children with special educational needs.

#### 4 Materials and methods

The research on effective areas of inclusive and special education was conducted by interviewing 14 teachers from the Mosaica School for Children with Special Needs, located in Brovary, Kyiv Region, Ukraine, as well as 62 parents of children who attended the school. The survey was conducted in February 2022.

The respondents were asked to determine the importance of certain survey categories for them as a percentage from  $0\,\%$  to  $100\,\%$ . After that, the average score for the group was calculated

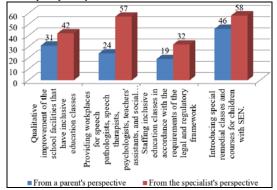
#### 5 Results

This survey allowed the priority areas assessment where transformations are most needed right now to create a more effective learning process.

Many transformations are needed within educational institutions to work effectively in an inclusive environment, namely:

- arranging school facilities to meet the needs of inclusive learning;
- providing the workplaces of specialists (speech pathologists, speech therapists, psychologists, teacher assistants, social workers) who work with children with special needs with the necessary equipment, furniture, and tools:
- ensuring the staffing of classes with inclusive education according to the regulatory and legal framework;
- introduction of special remedial classes and courses for children with special needs (Figure 1).

Figure 1: Assessment of special and inclusive education aspects that require priority transformations, %.



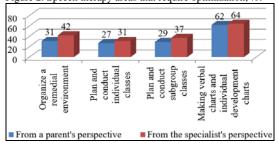
As we can see from Figure 1, providing jobs for specialists and introducing special remedial classes and courses for children are the priority areas of work from the perspective of teachers and educators working with children. Meanwhile, parents consider the aspects of room arrangement and introduction of the latest techniques and types of special remedial classes to be in the greatest need of change.

Since the speech therapy classes are one of the most effective types of work in the special and inclusive education process, the problem of disadvantages of this type of work with children with special needs is extremely important.

To increase the effectiveness of speech therapy activities, a formal assessment of all types of classes was conducted. The following areas of speech therapy activities to be optimized were identified:

- organization of the remedial environment in the speech therapy room (to equip the room with the necessary number of tools, toys, aids, etc.);
- 2) planning and conducting individual classes;
- 3) planning and conducting subgroup classes;
- to fill out a speech chart for each child, a chart of individual progress, to determine the most effective ways and methods of working with children (Figure 2).

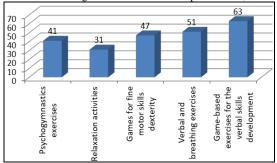
Figure 2: Speech therapy areas that require optimization, %.



The respondents named the most effective forms of work with children to improve their listening and verbal skills:

- psychogymnastic exercises;
- relaxation activities;
- game activities to develop fine motor dexterity;
- activities that include vocal and breathing exercises;
- game-based exercises to develop listening and verbal skills (Figure 3).

Figure 3: The most effective work methods for improving the verbal and listening skills of children with special needs, %.



While analyzing the results of work with children during the educational process, parents and teachers were invited to express their priorities for the optimization of education in institutions of general secondary education that use special and inclusive education forms (Figure 4).

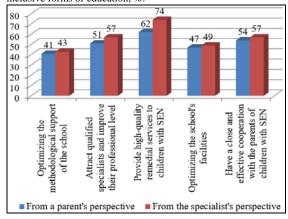
As can be seen from Figure 4, respondents consider the updating the methodological support of inclusive education, attracting newly qualified professionals and raising their professional level, providing quality corrective and developmental services to children with SEN to be in the highest demand for optimization.

#### 6 Discussion

While studying the successful practice of inclusive education, Dorji R., Bailey J., Paterson D., Graham L., and Miller J. pay attention to the conditions that need to be created to organize the educational process of children with special needs in an educational institution. These include the availability of buildings and facilities, use of appropriate forms and methods of education work, psycho-educational support, and cooperation with parents or persons acting on their behalf (Dorji, Bailey, Paterson, Graham & Miller (2018).

Instead, Kantavong P. emphasizes that the organization of inclusive education necessarily involves the provision of psychological and educational support to children with special educational needs. Therefore, remedial classes should be held in a separate room, which can be arranged for learning, play, sensory, and recreation areas (Kantavong, 2018).

Figure 4: High-priority areas of educational optimization in general secondary education institutions that use special and inclusive forms of education, %.



Analyzing the conditions for the effectiveness of inclusive education, Prodius O. notes that to ensure the educational process efficiency, the number of children in inclusive classes should be no more than 20 students, including one to three children with intellectual or locomotor disabilities or with visual or hearing impairments, or with mental developmental disabilities, etc. (Prodius, 2019).

Subban P. and Mahlo D. agree with the above viewpoint, emphasizing that there can be no more than two children with hearing or visual impairments or those with severe speech or developmental disabilities (significant hearing, seeing, or musculoskeletal, combined with an intellectual disability or intellectual development disorders), children in wheelchairs to work effectively in the classroom (Subban & Mahlo, 2017).

Friesen D. and Cunning D. emphasize the importance of participation of parents of children with special needs in support of school life, their willingness to promote understanding and communication of all students in school considering the special educational needs of each student to assist them as much as possible (Friesen & Cunning, 2020).

A study of current trends in inclusive and special education has shown that traditional learning in educational institutions today is undergoing significant changes at all stages of the educational process (Sailor, 2017). Exploring the trends of inclusive education, scientists have noted that mixed learning, namely the combination of traditional forms of teaching educational materials with the use of information and communication technologies, allows building an individual learning path for each applicant for education (Shulha, 2019), has recently become increasingly popular.

Thanks to modern technology, all forms of learning can be done both in the classroom and remotely but using different methods. In many countries around the world, especially in the United States, many institutions offer blended or exclusive distance learning, believing that it offers a complete education, while at the same time is more convenient for students because of its flexibility, as students can choose convenient times to study, select available learning materials, have the opportunity to take the course several times (Stepaniuk, 2019).

## 7 Conclusions

The conducted analysis of the current state of inclusive education allows us to conclude that the implementation of general pedagogical, preventive, recreational, rehabilitative, social tasks and results requires coordination of efforts of all persons involved in a holistically structured, multi-level social and educational system, for integration into the educational space and socialization of children with special needs.

Thus, an analysis of the scientists' works and practical tendencies in the sphere of special and inclusive educational space showed that the educational concept reflects one of the most crucial democratic ideas of our time – all education seekers, including children with special educational needs, are valuable and active society members. Effective education of these children in inclusive schools is extremely important both for children with special educational needs and for children with typical developmental needs, their family members, and society in general.

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#### INNOVATIVE LEARNING STRATEGIES IN MODERN PEDAGOGY

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Abstract: During the pandemic, emerge new and modified learning strategies, which actualize the research problem of innovation in modern pedagogy. The development of information and communication technologies in the educational sphere due to the needs of different participants (administrations of educational institutions, students, parents, and teachers) has led to the rapid development of digital tools and their use in learning activities. The article aimed to identify practical features of innovative learning strategies in modern pedagogy. The methodology was built on the method of content analysis of the Strategy for Development of Higher Education in Ukraine for 2022–2032, which highlighted the main conceptual foundations of innovative learning strategies in modern pedagogy provide an orientation on the research of students' innovative activities per the needs of different stakeholders, proactive learning, cooperation at the national and international levels, European standards of teaching, and student-centered learning to develop competencies of future specialists. Focusing on students and their active inclusion in learning activities using multimedia technologies (video conferences, virtual services, and platforms, knowledge control tools) will be the main strategic goal of universities. These strategies will also include the requirements and needs of labor markets, collaboration between educational institutions and the private sector to stimulate research activities.

 $Keywords: innovative \ strategies, \ learning \ strategies, \ innovative \ pedagogy.$ 

# 1 Introduction

During the pandemic, emerge new and modified learning strategies, which actualize the problem of research innovation in modern pedagogy. The development of information and communication technologies in the education sphere due to the needs of different participants (administrations of educational institutions, students, parents, and teachers) has led to the rapid development of digital tools and their use in learning activities. Strategies in education have been significantly modified through the digitalization of educational processes, and new teaching methods are emerging mainly through technological transformation. An example of changing strategies is the organization of learning activities during the pandemic at Oxford University accordingly Business Continuity Planning (BCP) framework, which combines synchronous and asynchronous learning styles, various digital technologies for the interaction of educators and students. The Oxford practice demonstrates the emergence of innovative digital learning strategies based on the virtual service Centre for Teaching and Learning (Oxford University, 2021a) and the Flexible and Inclusive Teaching model (Oxford University, 2021b), where different technologies are combined to conduct classes (Panopto, Teams, Canvas, Vevox programs). These new strategies involve course planning based on Oxford's leadership templates of hybrid, virtual, personalized courses. Innovative strategies also involve solving the problem of effective communication, interaction, interactivity, and active involvement of students in the educational process.

This article aims to identify practical features of innovative learning strategies in modern pedagogy.

#### 2 Literature review

Konst & Kairisto-Mertanen (2020) examine the evolution of a pedagogical strategy concept called innovative pedagogy based on constructivism, which involves learning and teaching in universities of applied sciences based on students' knowledge creation, and their learning models and learning strategies. In this way, students continually develop prior knowledge and skills and have the opportunity to contribute to the content of their learning through individual learning plans within educational provisions. Vannatta & Beyerbach (2000) found that university professors viewed constructivism as an effective approach to integrating technology as a learning tool, thereby increasing the skill level of its use and engaging students in meaningful learning. During the pandemic, technology-based blended learning strategies (Safar & AlKhezzi, 2013), augmented by new practices in the use of digital tools, have proliferated. Innovative blended learning strategies are studied by Petronzi & Petronzi (2020). The authors describe combinations of asynchronous (flexible, autonomous) and synchronous learning styles and collaboration between participants in HEIs. These new learning styles can be seen in the context of the concept of constructivism because the combination of independent and group work, teamwork, discussion, and debate during synchronous classes promotes active learning. Innovative learning strategies have also provided centralized technical support for teachers using a specific set of digital tools in lectures, seminars, discussions, and student collaboration within groups (Bao, 2020).

Within the concept of constructivism, new approaches to learning with technology in HEIs are emerging. Technological, Pedagogical, and Content Knowledge (TPACK) frameworks (Dysart & Weckerle, 2015) are among the approaches for educators to use technology in alignment with higher education learning and content strategies. TPACK provides a knowledge framework for educators about the use of technology during instruction (Niess, 2016).

Other key elements of innovative pedagogy in universities of applied sciences include learning processes and professional growth, which involves the students' growth through a variety of learning processes, and gradual development into qualified experts. For example, Turku University of Applied Sciences (TUAS) began implementing an innovative learning strategy in 2006 to develop the competencies students need in real life. The first Finnish innovation strategy held universities responsible for the students' competencies demanded in the labor market (Kettunen, 2011). A set of "soft skills" was included in the needed competencies in professional development. Learning strategies included research on skills necessary for the labor market, employers' expectations and requirements, and their incorporation into curricula (Marin-Garcia et al., 2016; Keinänen, Ursin and Nissinen, 2018).

Hattie, J. A., & Donoghue, G. M. (2016), based on a metaanalysis of 228 studies, identified the most effective learning strategies whose effectiveness depends on the stage of learning. The authors identified learning strategies that help students learn better (structure thinking, plan learning, set goals, monitor the process, and assess progress and outcomes). It indicates the prevalence of learner-centered and student-centered strategies in education, developing their knowledge and skills within a constructivist framework.

Boekaerts (1997) identifies three main learning strategies:

 cognitive strategies, which include processing materials to deepen understanding of the field under study;

- metacognitive strategies, such as planning to regulate learning;
- motivational strategies, which include self-efficacy to selfmotivate learning. The emergence of technology and new ways to access learning materials has led to the fourth strategy identification – management (search, navigation, assessment) (Dignath, Buettner & Langfeldt, 2008).

Davis, Chen, Hauff & Houben (2018) conducted a systematic review of scalable learning strategies (strategies that promote active learning in digital environments) based on 126 articles and determined that Cooperative Learning, Simulations & Gaming, and Interactive Multimedia are the most effective. Active learning strategies involve engaging learners and students in learning through activity and class discussion as opposed to passive listening to materials (Freeman et al., 2014). ICTs facilitate the integration of active learning strategies, including the active use of learning platforms, online services (SRS), social media, and video conferencing technologies. These digital media facilitate the implementation of active learning strategies through a gamified approach, which increases motivation, interactivity, and student engagement, and promotes productivity and performance through the ability to tailor courses to students' interests (Kopcha et al., 2016; Subhash & Cudney, 2018).

The technology implementation affects learning strategies since current strategic learning activities or educators' actions depend on the digital tool type and its use in a particular learning context. For example, the use of delivery technologies (simple multimedia) will indicate a learning strategy focused on digital content and the transfer of knowledge from the teacher to the student. At the same time, the use of technology to engage the student and the student in discussion, discussion, and teamwork, for testing knowledge means the implementation of a strategy focused on the formation of knowledge by the students themselves (strategies focused on the personality and the formation of their conclusions) (Kirkwood & Price, 2013). Therefore, educators need to perceive the use of technology as a component of student-centered learning to achieve better learning outcomes (Glassett & Schrum, 2009; Kim et al., 2013).

Thus, the literature discusses different types of instructional strategies, including technology-based innovations that modify traditional constructivist strategies. In general, learning is focused on the creation of knowledge by students within the framework of the pedagogical theory of constructivism. Therefore, innovative strategies (collaboration and cooperation, gamification, interactive multimedia) are being increasingly empirically studied in the literature.

## 3 Methodology

The study used the content analysis method of the Higher Education Development Strategy in Ukraine for 2022–2032, which highlighted the main conceptual foundations of innovative learning strategies: focus on students' research innovation per the needs of different stakeholders, student innovation, proactive learning, national and international cooperation, European learning standards, student-centered learning to develop the competencies of future professionals.

## 4 Results

# 4.1 Innovative learning strategies in pedagogy: how the pandemic affects on changes in educational activity strategies

The COVID-19 coronavirus quarantine and pandemic have forced all countries to review their learning strategies. According to the order of the Ministry of Education and Science of Ukraine from March 16, 2020, № 406 "On organizational measures to prevent the spread of coronavirus COVID-19" and the official letter from March 25, 2020, № 1/9-176 "On the specifics of the educational process during the quarantine", the educational institutions are operating remotely. Nowadays, distance education takes its socially significant place all over the world

and in all educational institutions in Ukraine. This form of the educational process is not new to our country. In Ukraine, distance learning has been actively implemented since 2002. Many universities in Ukraine implemented MOODLE software platform (distance learning management system), which allows distance learning.

Distance learning is a form of education that requires the use of modern information and communication technologies and allows learning at a distance without personal contact between the teacher and the student. Under such conditions, the emphasis on learning is shifted to the independent work of the student, and the teacher acts as the organizer of the learning process, the consultant. All this prompts the search for new means of learning that meet the requirements and needs of the educational process. Also, distance learning expands the opportunities for quality education and allows you to diversify the learning process, which is also a factor in increasing interest in the discipline and motivation.

The advantage of distance learning can be considered its flexibility – an individual approach to teaching and learning material depending on the characteristics of training, experience, and students' abilities. The convenience of studying at any time creates an opportunity for a student to independently organize a personal learning process to address the repetition of material or related disciplines. An undoubted advantage of distance learning is its cost-effectiveness. There is an opportunity to conduct simultaneous training for many people since the premises of educational institutions are not involved. Virtual mobility and the absence of borders allow you to get an education regardless of the location in any world educational institution.

Distance form of education is "an individualized educational process, which occurs mainly with the mediated interaction of remote participants of the educational process in a specialized environment, functioning based on modern psychological and pedagogical and information and communication technologies". The basis of the distance education form is a controlled intensive/purposeful self-study of the student, who can study in a convenient place, on a schedule, under the guidance of experienced teachers-mentors (without visiting the university due to pandemic). Today distance education helps students to develop such qualities as independence, mobility, and responsibility and develops self-education skills, which are very highly valued in the labor market.

The first experience of distance education under the conditions of quarantine restrictions determined the expediency and necessity of finding new educational platforms which would allow direct teacher-student contact, which would provide, first of all, assistance to a student in mastering basic knowledge, activate, and motivate creative work, acquired by students with practical activities.

The developing interactive learning strategy has been actively used in Ukrainian universities to promote the student's involvement as an active participant in the educational process. To assess the entry-level of students' knowledge, the class begins with an oral questioning and discussion of the class topic. The content chosen by the department (presentations, educational films on the topic, links to useful educational resources, and other educational and methodical materials) is freely taught by the teacher during the virtual class on a particular topic and gives current assignments to the students. It makes it possible to ensure the necessary level of students' preparedness and carry out a systematic assessment of their knowledge and current discussions on certain issues during mastering the training material. This format corresponds to the actual classroom work of the teacher and the student.

Microsoft Teams allows conducting online lectures of the highest quality and in the most efficient way. During the lessons, the instructors show the students the virtual programs on the corresponding topic of the lesson. For better mastering of the lesson's topic, situational tasks with an experimental direction are considered and discussed, as well as video clips. Computer animations and videos are also excellent means of visualizing complex learning processes. Also, participants of the educational process communicate with each other in the Microsoft Teams chat room. The final control of students' knowledge is carried out through distance learning technologies with the help of Moodle platform, which is already in operation and justified at the present moment. The students were tested, and also teachers evaluated the results of verbal answers during online lessons in Microsoft Teams. Assessment for the practical training, as an average for the performance of tasks, is put in the electronic logbook of the university's automated management system. The students are remotely held negative grades and missed practical lessons according to the schedule of debugging, which is placed in the DLS Moodle.

The main difficulty faced by the teacher when working with the group is the difference in the initial level of student preparation, which can vary significantly. The short period of study of the discipline and the high intensity of each lesson complicate the students' process adaptation with a low initial level of knowledge, which leads to a decrease in motivation to learn. Visibility and systematization of the material through diagrams, drawings, and tables facilitate the perception and memorization of difficult-to-understand material. On the website of universities, students can find theoretical material, which is placed as text materials, as well as video content and presentations on sections of different disciplines.

# 4.2 Future transformations of innovative learning strategies in pedagogy

On April 14, 2022, on the Cabinet of Ministers of Ukraine website, there was published the order of February 23, 2022, № 286-p "On approval of the development strategy of higher education in Ukraine for 2022–2032 years". The strategy implies goals and objectives as part of the higher education system reform. Within the set goals, the tasks related to the development and implementation of innovative strategies of training in pedagogy should be highlighted (Ministry of Education and Science of Ukraine, 2022a):

- A. The goal "Management efficiency in the higher education system" implies the following tasks: modernization of the network, enlargement of higher education institutions, and support of research universities. It means that learning strategies should focus on research and collaboration within the newly enlarged network of institutions.
- B. The goal "Trust of citizens, state and business in educational, scientific, innovative activities of higher education institutions", which provides for the following objectives: expanding the scope of external independent evaluation, targeted placement, and competition; promoting research and consulting for business by institutions of higher education; creating conditions for the development of public-private partnerships in higher education; implementing effective mechanisms for identifying violations of academic virtue and procedures for academic accountability. It means transforming learning strategies and shifting the focus to student innovation, proactive learning.
- C. The goal "Provision of quality educational and scientific activity, competitive higher education", which provides for the following tasks: support of national and international students' academic mobility, as well as referrals to foreign universities; providing particular support for residents of the temporarily occupied territories, vulnerable and disadvantaged groups; creating special conditions for those entering with outstanding achievements; promoting the use of innovative technologies and the latest learning tools in the educational process, the development of research infrastructures. These tasks directly imply the use of innovation in university teaching strategies and the strengthening of cooperation on an international scale.

- D. The goal of "Higher education internationalization in Ukraine", provides for harmonization of the structure of higher education per the obligations of the member countries of the European Higher Education Area; development of the national system of qualifications; simplification of procedures for the recognition of foreign educational qualifications. These tasks indicate the importance of the European standards of education, which assume the borrowing of the educational activities' strategies of the leading EU countries. Higher education institutions will form learning strategies to develop the skills needed to live and work in a multicultural environment that will attract foreign students to the quality of education and learning conditions.
- E. The goal "Attractiveness of higher education institutions for learning and academic careers", which will include:
- adherence to student-centered approaches in the organization of the educational process;
- expansion of cross-enrollment, general, interdisciplinary, and dual programs, dual and other forms of education;
- development of general competencies, legal culture, motor activity, sports, and student competitions;
- development of management training programs for executives and prospective leaders in higher education (personnel reserve), trainings to support reforms;
- 5) conducting communication campaigns to support the reforms in higher education system, etc.

These goals indicate a shift in emphasis towards active learning strategies, where students are the main center of the education system, whose competencies must be developed in the learning process. The goal achievement will include the following results:

- student-centered learning will allow higher education applicants to form their own sets of competencies, and adult education will become a conscious need for development;
- working conditions, opportunities for personal and professional development, and inclusion in social processes will ensure a highly attractive academic career;
- higher education administrators will ensure exemplary management and achievement of goals.

Attention should be paid to the operational goal "Preparation of specialists in demand: The system of higher education satisfies the needs of the economy in qualified specialists", which provides for the formation of a system for monitoring the supply and demand for specialists with higher education at the labor market; formation of priorities for training specialists with higher education, in particular IT specialties, based on labor market monitoring; providing first jobs for graduates with higher education at the expense of the budget This means taking into account the needs and requirements of the labor markets for specialists during educational training, which will affect the training strategies. It should be noted that, in the Ukrainian educational practice, there are similar cases of taking into account the requirements of the labor market in the IT sphere (Ministry of Education and Science of Ukraine, 2022b).

Separate attention is paid to the goal "Modern knowledge-intensive knowledge: Scientific research and innovations determine the content and development of educational programs", which involves the introduction of research results (creative achievements) in educational programs; creating conditions for higher education applicants to participate in scientific research, initiation, and implementation of innovative projects; promoting the use of innovative technologies and the latest learning tools in the educational process, the research process development (Ministry of Education and Science of Ukraine, 2022b).

#### 5 Discussion

The pandemic caused by the coronavirus spread (SARS-CoV-2) has caused significant changes in the higher education organization and the innovative strategies implementation and teaching methods to ensure student achievements. In the new educational environment, distance or online learning has become the new norm, and higher education institutions are addressing the challenges of actively transitioning to a digital learning environment and updating their digital infrastructure (Schneider & Council, 2021). As a consequence, learning strategies built on a combination of digital technologies and the use of digital tools in the educational process are increasing significantly (Goudeau et al., 2021). According to UNESCO, unprecedented disruptions in the delivery of educational services through COVID-19 have affected more than 220 million students in higher education worldwide (2021).

Synchronous and asynchronous learning styles are evolving at major world universities, providing elasticity to the educational process. At the higher education level, the administrations organize flexible personalized learning, providing instructors with a list of technologies for learning according to the classes type (lecture, seminar, individual work, group work). Students have the option of synchronous or asynchronous viewing of learning materials. Teachers are allowed to form electronic quality material thanks to the list of online learning support technologies.

Technological and technical support for a digital learning model is based on an inclusive, flexible approach that provides unified teaching and learning for students:

- developed digital templates for different types of traditional classes (lectures, small group work, individual consultations, laboratory work);
- 2) developed digital tools for conducting learning activities;
- developed a unified procedure for support and accompaniment of teachers and students;
- approval of asynchronous and synchronous stages of learning within different disciplines.

In this case, learning strategies become more flexible, and the flexibility of distance learning was provided by:

- the ability of the teacher to determine, combine the proposed digital learning tools (Panopto, Canvas, Teams, Vevox):
- the ability of the teacher and students asynchronously to conduct certain stages of learning activities (for example, viewing presentational learning materials).

#### 6 Conclusions

Innovative learning strategies in modern pedagogy provide orientation on the students' research innovative activities per the different stakeholders' needs, students' innovative activities, proactive learning, national and international cooperation, European learning standards, and student-centered learning to develop future specialists' competencies. A student-centered and active involvement in learning activities using multimedia technologies (video conferencing, virtual services and platforms, knowledge control tools) will be the main strategic goal of universities. These strategies will also consider the requirements and needs of labor markets, cooperation between educational institutions and the private sector to stimulate research activities.

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**Primary Paper Section:** A

**Secondary Paper Section:** AM

#### APPLICATION OF CONTEXT-BASED LEARNING IN MODERN PEDAGOGY

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Abstract: At the present stage of modernization of higher education in Ukraine, practice-oriented training systems are becoming increasingly important, allowing organizing the educational process in institutions of higher pedagogical education, taking into account the specifics of the future profession. Modern pedagogical education has been changing its vector from training a teacher-specialist who can only reproduce the traditional model of pedagogical activity, to training a competent professional teacher who is able to build one's own professional activity in accordance with the actual conditions and work requirements. One of the most productive in this direction is context-based learning, during which occupational and social content is studied through the language of individual sciences and with the help of the entire system of traditional and new forms, methods and means of training, as well as the activities of the future teacher are modelled. At the same time, currently, the significant factor is the presence of differences in the skills acquired during the educational process and the requirements of practical work, which is due to the contradiction between the content, forms, conditions of cognitive activity and future professional activity. The purpose of the academic paper lies in identifying the basic trends and establishing the features of the application of context-based learning in modern pedagogy. In the process of writing the academic paper, an analysis of the scientists' works from different countries of the world was made, and the results of a questionnaire survey of teaching staff engaged in training activities in institutions of higher, vocational and special secondary education were studied. Based on the results of the research conducted, tendencies in studying the context-based approach by modern teachers and scientists were traced, as well as the results of the questionnaire survey of teachers regarding the factors influencing the success of the context approach, the most important prereq

Keywords: context-based learning, modern pedagogy, innovative learning, context-based approach to the learning process, context educational environment, lecture of context type.

#### 1 Introduction

Within recent years, scientists have developed a number of modern approaches to training future teachers and educators of higher educational institutions to work on adaptive, communicative and problem-oriented methods. Contemporary issues of higher education are best solved with the help of context-based learning, thanks to which the future teacher is able to comprehend how to reconcile a number of theoretical and practical models of the past, cognitive activity in the present and modelling of professional situations in the future. Therefore, in the modern conditions of modernization of higher pedagogical education, fundamentally new requirements have been established for training modern teachers as highly qualified specialists of the new formation, namely: active, creative, capable not only of reproducing information, but also of nonstandard pedagogical activity, those that can change, generate, develop, implement and disseminate innovative ideas, search for new tools and methods of advanced training based on the use of modern technologies.

Within the framework of the modern process of upgrading higher education in Ukraine in the direction of its humanization and focus on the "personal dimension", practice-oriented educational systems are becoming increasingly important, allowing improving the educational process in higher educational institutions, taking into account the specifics of future professions. Context-based learning is the most productive in this regard, forasmuch as it involves overcoming a number of contradictions that exist in traditional higher education and lead to such shortcomings as lack of professional motivation, formality of knowledge, inability to apply them in practice, the duration of the transition from student thinking to high-quality professional activity, etc.

#### 2 Literature Review

A modern specialist of any profile should be professionally mobile, in demand on the labour market, and sociable. This requirement for specific training of young professionals is the result of constant changes in various areas of the life of today's society and the growing need to adapt to innovations (Gencel, & Saracaloğlu, 2018).

The goal of the pedagogical educational institution lies in training specialists with a high level of knowledge and sufficient handling competence in the pedagogical field (Cox, 2017).

Currently, in society's best interest it is advisable to change the direction and priorities, modify and modernize education, update its content, teaching and educational technologies, forms of organization and the educational model itself. However, these requirements for training students of higher pedagogical educational institutions do not fully correspond to the modern labour market. The teacher should master such professionally important qualities as: communicative competence, high level of intellectual development, social adaptability, stable neuropsychological stability, etc. (Rashawn, Sacks & Twyman, 2017)

Along with this, the teacher should adhere to a clearly defined professional standpoint, which is the basis for the professional formation and development of a specialist; it directs the individual to professional creative self-fulfilment and self-development. For this reason, when training a teacher in the system of higher education, it is necessary to pay particular attention to the formation of a stable professional standpoint of the future teacher (Weiland, 2018).

In order for the future teacher to realize the importance and social nature of his profession, it is necessary to use innovative educational technologies that will not only help equip students with more effective theoretical knowledge, but also contribute to the formation of professional skills (Yefremova, 2020).

Particular emphasis should be paid to the process of gradual transition from cognitive form within the walls of the higher educational institution to the main forms of professional activity, namely, from pedagogical and cognitive activities of an academic nature to quasi-professional activities (role-playing and business games), including specialized pedagogical and professional activities through educational - industrial practice, internship. According to this approach, fundamental disciplines are proposed to be taught within the framework of professional activities, minimally using the practice of academic presentation of scientific material (Kolb, 2017).

Pedagogical education at the present stage is in the process of reforming; it is constantly looking for new ways to align the content with individual needs for each speciality and international standards. New realities put forward new

requirements towards the quality of education, in particular, the universality of teacher training, the improvement of his professional culture, as well as his adaptation to social conditions, the personal orientation of the educational process, and its computerization (Donovan, T., Bates, T., Seaman, Mayer, Paul, Desbiens & Poulin, 2019).

An innovative educational and nurturing process is "a series of consistent, purposeful actions aimed at updating it, changing the purpose, content, organization, forms and methods of teaching and education, aimed at adapting the educational process to new social-historical conditions" (Bersin, 2017). The introduction of concepts of innovative learning is based on thorough innovative investigations developed in domestic and foreign pedagogical science over the past years.

Currently, a number of studies of world scientists are aimed at identifying the leading organizational forms of context-based learning, such as lectures of contextual type, business games as forms of context learning.

M. Grimus proves the usefulness of introducing virtual benchscale laboratory work as an innovative form of context learning, within which, through a certain didactic complex, the social and professional competencies of a future specialist are formed (Grimus, 2020).

Currently, a number of methods have been developed for the systematic selection of forms of the educational process based on the theory of context-based learning; the expediency of choosing methods of context learning based on technical qualifications, curriculum and classification of active learning methods has been substantiated (DeMink-Carthew, Olofson, LeGeros, Netcoh, & Hennessey, 2017).

A lecture of the context type, as one of the forms of context-based learning, has its own features and advantages that distinguish it from a traditional lecture. According to the viewpoint of R. Bolstad, the lecture of the context type is aimed at achieving three goals, namely: mastering theoretical knowledge, development of theoretical thinking, the formation of cognitive interest in the content of the subject and motivation of future professional activity (Bolstad, 2017).

The fundamentals of context-based learning technology are as follows: the concept of context as the influence of the content of the student's future professional activity on the process and results of his educational activities; activity approach to learning, generalization of experience using various forms and methods of active learning (Auer, Guralnick & Simonics, 2018).

The scholars consider context-based learning in the investigations as a system for implementing a dynamic model of the student's actions, namely: from actual learning (for example, in the form of lectures) to quasi-professional (game forms, special courses) and pedagogical and professional (research work) (Tiko, 2017).

From among the latest developments on the context-based issue outlined, the scientific works of C. Ukala and O. Agabi are especially significant, considering context-based learning as an educational system and a technology. The researchers define the concept of "context-based learning of future teachers" as a system that models the professional and social content of his future professional activities aimed at reproducing the professional and social contexts of effective future professional activities of school teachers (Ukala & Agabi, 2017).

In the theory of context-based learning, three models of education are distinguished, which are determined by the specifics of the process of preparation for professional activity, namely:

 the semiotic model of learning takes the form of oral or written texts with theoretical information. The units of the education seeker's activity in the framework of this model

- are language action and demonstration of acquired skills of solving standard problems (algorithms), the nature of the student's educational activities in accordance with this model is mostly reproductive;
- the simulation training model is a specially modelled situation of future professional activity, which requires analysis and decision-making based on theoretical information. The unit of the student's activity in this case is a professional action, the main purpose of which is the practical transformation of professional situations; the type of activity is a partial search, reproductive and creative;
- the model of social learning is a problem situation or a fragment of professional activity that is analysed and transformed by students into a form of joint activity. The basic unit of the student's activity is social-pedagogical action, and the type of activity is mostly creative.

J. Tondeur considers the theoretical and practical fundamentals of context-based learning within the framework of a pedagogical master's program. The scientist notes the basic principles of context-based learning as follows: psychological and pedagogical support of personal participation of students in educational activities; consistent modelling of the holistic content, forms and conditions of future professional activity in the students' educational activities; search for ways to solve meaningful issues of education when they are used in the educational process, the correspondence of the forms and methods of educational activity of the education seekers to the goal and content of education; subjectivity of teacher-student relations; effective student-student relationships; pedagogically meaningful combination of new and traditional pedagogical techniques, open learning, etc. (Tondeur, 2018).

It should be noted that scientists often outline the problem situation to be the fundamental unit of the content of education in context-based learning, especially in the process of training specialists in primary education. For instance, N. Myronchuk believes that a system of carefully planned problem situations allows dynamically developing the content of training, defining the scope of actions for modelling professional activity and creating opportunities for integrating knowledge in various disciplines (Myronchuk, 2018).

#### 3 Aims

The purpose of the research lies in establishing the features of the components of the context-based approach and outlining the practical aspects of its application in the practice of teachers of institutions of higher, vocational and general secondary education

# 4 Materials and Methods

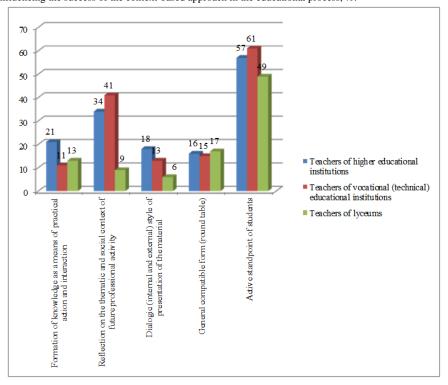
The practical study of the application of context-based learning in modern pedagogy was carried out by interviewing 118 teachers conducting training activities in the following establishments, namely: higher educational educational institutions (Vinnytsia Mykhailo Kotsiubynskyi Pedagogical University, Ternopil Volodymyr Hnatiuk National Pedagogical University, Drohobych State Pedagogical University of Ivan Franko), vocational (vocational and technical) educational institutions carrying out training of specialists in working specialities SVTEI "Snovske Higher Vocational School of Forestry", SVTEI "Chernihiv Vocational Construction Lyceum", SVTEI "Chernihiv Higher Vocational School of Consumer Services"), and teachers of lyceums (Chernihiv Lyceum № 32, Kyiv Lyceum № 142, Kyiv Lyceum "Euroland"). All institutions on the basis of which the questionnaire survey was conducted are located in the territory of Ukraine.

The survey was conducted through an online questionnaire, during which the respondents were asked to answer 4 questions, evaluating each of the answer options as a percentage, after which the average value of the answers of all survey participants was calculated per respondent.

#### 5 Results

Based on the results of the questionnaire survey of teaching staff, the most significant factors influencing the success of the context-based approach in the educational process were identified (Figure 1).

Figure 1: Factors influencing the success of the context-based approach in the educational process, %.



According to the results of the questionnaire survey, the most important factors for teachers of vocational schools were the reflection on the thematic and social context of future professional activity and the active position of students, which was assessed at 61 % by this category of respondents.

For teachers of higher educational institutions, the most important factors are the active position of students and the formation of knowledge as a means of practical action and interaction.

Studying the prerequisites for the introduction of contextual education in the professional and pedagogical training of teachers, the following outcomes were found (Figure 2).

As it can be seen from Figure 2, the most important prerequisites for the effective implementation of context-based learning, according to respondents' viewpoints are as follows: the mastery of interactive methods of work, the formation of positive motivation, awareness of the goals and objectives of learning by the education seeker, which encourage his self-improvement, creating a real problem situation for future professional activity, which will ensure the process of professional development of the individual, organizing the consistent implementation of a multilevel education system in order to form one's own attitude to the problem, substantiate one's own standpoint and develop a methodological base by mastering various methodological methods for solving simple problems.

Taking into consideration the importance of interactive methods in the educational process as an important tool for context-based learning, respondents were asked to choose the most effective interactive tools that, from the point of view of the survey participants, are the most effective in achieving learning outcomes (Figure 3).

As it can be observed from Figure 3, the most effective tool for learning, from the point of view of respondents of all three categories, is the modelling of pedagogical situations. At the same time, educational and pedagogical imitation, role play and "brainstorming" are also effective.

In the course of the survey, it has been revealed that, according to the respondents' viewpoints, it is possible to develop professional competence within the framework of context-based learning with the help of a system of stimulating the effectiveness of educational activities, which consists in the use of various means of encouraging an increase in the practical effectiveness of teaching.

Assessing the effectiveness of the educational process, which focuses the attention of future and current teachers not only on the assimilation of scientific and educational information in accordance with the national standard, but also on the creative application of knowledge in practice using special creative research tasks, the respondents were asked to choose a list of approaches contributing to effective learning (Figure 4).

The research has revealed that such tools are as follows: the use of non-standard methods and techniques of teaching, analysis of curricula, programs and textbooks in terms of the requirements of pedagogical innovation, comprehension of new information in terms of tactical and strategic goals of learning, forming one's own standpoint by reading and discussing literature, writing works, selection of materials on innovative pedagogical approaches, under the guidance of masters of pedagogical work.

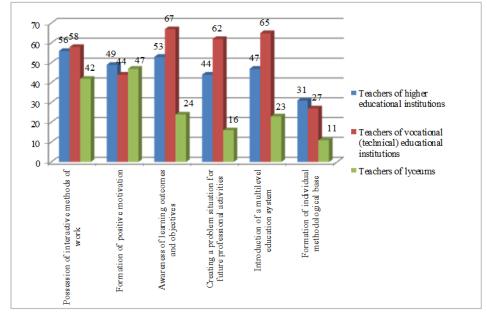
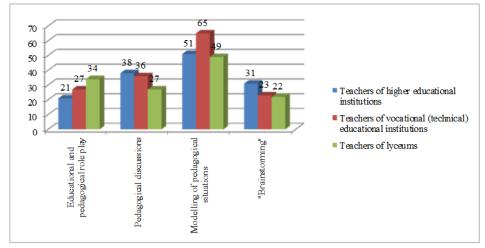


Figure 2: Prerequisites for the introduction of contextual education in the professional and pedagogical training of teachers, %.

Figure 3: Interactive tools that are the most effective for achieving learning outcomes under conditions of applying context-based learning, %.



#### 6 Discussion

Thus, the analysis of special scientific and psychological and pedagogical literature attests to the fact that the context-based learning technology is the guiding idea of modernizing higher pedagogical education, designed to monitor and reproduce social experience through pedagogical and problem situations that model a process similar to the work of a teacher, the unity of professional, social and psychological contexts. Context-based approach is aimed at improving the skills of teachers, increasing the quality of pedagogical training and promoting competitiveness in the labour market.

According to the viewpoint of N. Myronchuk, properly organized quasi-professional activity as a form of context learning is a transitional link between educational and professional activities of students. As the author notes, quasi-professional activity plays a special role in the pedagogical process in the process of training teachers. It is based on the technique of context modelling as a purposeful operation and

includes three contexts: substantive, social and psychological. The essence of quasi-professional activity lies in the fact that it takes place in real conditions and ensures the unity of educational and practical processes. In general, future labour activity directs students to setting goals, analysing and assessing problem situations, self-assessment of professional activities, building interaction models, understanding the content of activities in the variability of pedagogical training (Myronchuk, 2018).

Context learning in pedagogy, as in other fields of activity, may contain an educational text in the form of sign systems (hence "sign context-learning"), containing information to be studied. However, the feature of context-based learning lies in the fact that information structured mainly through tasks and problem situations represents true information about future professional activity (hence the name "sign-context learning"). The concept of "context" indicates the degree of personal involvement of the student in the processes of cognition and its relationship with professional activities (Weber-Lewerenz, 2022).

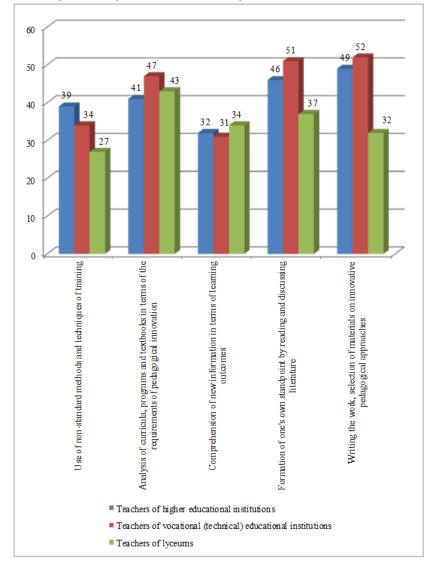


Figure 4: Approaches contributing to increasing the effectiveness of learning under conditions of the context-based learning process, %

According to the viewpoint of M. Baran and M. Sozbilir, context-based learning should be organized in compliance with the requirements as follows:

- adherence to the principle of semiotics the ordering of symbolic information;
- psychological and didactic organization of the process, which facilitates the assimilation of educational material;
- scientific character the discipline should reflect scientific training
- compliance with the established general requirements for the implementation of professional activities that create a meaningful activity context (Baran & Sozbilir, 2017).

The idea of context learning has a number of advantages that are important for training specialists in any field. However, the training of teachers, according to this approach, has particular features, forasmuch as the professional sphere of the teacher's activity is represented by three main blocks, namely: theoretical knowledge, methods of activity, the formation of social maturity (acquisition of individual values, own worldview, morality, responsibility in the process of education) (Weber-Lewerenz, 2022)

From the standpoint of the context-based learning theory, we have identified the problematic areas of traditional training of future teachers as follows:

- in theoretical training: the problem of choosing the optimal, systematically organized set of learning content necessary for future professional activity;
- in activity training: the problem of the advantage of focusing on the acquisition of theoretical knowledge over their practical application in future pedagogical work;
- in the process of social maturity formation: the problem of lack of purposeful development of social-moral and civic qualities of the future teacher (Bersin, 2017).

A feature of training students in pedagogical institutions of higher education is that when conducting educational activities, students prepare for professional work, the main content of which lies in organizing educational activities of students in similar forms. At the same time, within the framework of training in a pedagogical educational institution, students obtain the necessary knowledge in academic disciplines, and to a much lesser extent, future teachers acquire skills related to practical professional activities. Practical experience, combining theoretical knowledge and practical skills, is gained in the process of applying existing knowledge and performing professional duties (Rashawn, Sacks & Twyman, 2017).

The success of the teacher's activity as a specialist depends on the extent to which the level of theoretical training of the specialist and his professional orientation are related to the challenges of practice. The formation of the student's personal qualities will make it possible to more effectively carry out activities in order to educate the younger generation.

Taking this into consideration, L. Kolb notes that the understanding of educational material by both teachers and students should be based on a reflective understanding of contexts in which specific educational material can be used in educational practice, thus, implementing the updated concept of "context educational environment" (Kolb, 2017).

According to the viewpoint of H. Yefremova, the context educational environment involves the use of context textbooks. The scholar believes that a textbook of the context type is a pedagogical system created on the principles of context-based learning. It is a subsystem of a holistic system of subject teaching, which is designed to depict the future professional activity of the student in its technical and social aspects through context" (Yefremova, 2020).

Therefore, the context form of learning has key advantages ensuring the effectiveness of the learning process, namely:

- the student is in an active engagement from the very beginning;
- such kind of the learning process contains all the opportunities for joint decision-making;
- knowledge is acquired by students in the process of solving simulated professional situations, determining the development of cognitive and professional motivation of the future specialist, the personal significance of the learning process;
- a combination of individual and collective forms of student's work is used, which allows developing the business and communicative qualities of the individual;
- a model of "subjective" relations between a teacher and a student is introduced, contributing to the formation of "subjective position", the ability to reflect (Yefremova, 2020).

Thus, according to the basic provisions of the technology of context-based learning, when working with students of a pedagogical university, it is necessary to try to model the professional and social content of professional activity in the educational process.

For context-based learning to be effective, it should meet the requirements as follows:

- to provide meaningful and contextual reflection of pedagogical activity in the form of students' educational activity;
- to combine different forms and methods of training, taking into account the didactic principles and psychological requirements for the organization of the educational process;
- to use the modularity of the system and its adaptation to the specific conditions of training future teachers;
- to ensure the growing complexity of learning content and forms of context-based learning from the beginning to the end of the holistic learning process (Tondeur, 2018).

Subject to the above-mentioned requirements, the construction of the educational process of pedagogical educational institutions on the basis of context learning will bring the educational process closer to the practical implementation of the methods, forms and principles of pedagogy and make the transition from educational to professional activities gradual and consistent with the purpose of the pedagogical educational process (Grimus, 2020).

# 7 Conclusions

Thus, context-based learning is a type of building an educational process in which the professional and social content of the future professional activity of education seekers is consistently modelled using the entire system of traditional and new forms,

methods and tools of training. The conducted analysis has revealed that this approach to the organization of the educational process has significant advantages, namely: the real "humanization of education", the use to the full extent of the entire potential of students, providing the opportunity to master the curriculum in the process of analysis and solving students' simulated professional situations, a combination of individual and collective forms of students' work.

Therefore, in the process of context-based learning, the main contradiction of modern higher pedagogical education is resolved, namely, the discrepancy between the requirements of the society towards the professional competence of future specialists and the level of their training in the educational system. After all, in the process of changing the forms of students' activity in context education and the corresponding forms of organization of training, the content of future professional activity is gradually reproduced and an effective general and professional development of the specialist takes place.

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**Primary Paper Section:** A

Secondary Paper Section: AM

# PEDAGOGICAL TECHNOLOGIES FOR DESIGNING AND FUNCTIONING AN INTEGRATED SYSTEM OF SPECIALISTS' TRAINING QUALITY CONTROL IN HEIS

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Abstract: In the modern pedagogical practice, based on high-tech and sociocultural approaches to the system of specialists' training quality control, the student is an active individual, capable of self-organization and self-control, producing ideas and problem-solving. However, the classical university models of quality control are not adapted to the changes in university education and require reform, which determines the relevance of this paper. This study aims to establish the pedagogical regulations for designing and functioning of the education quality control system. Also, we should determine the assessment of the university administration and students with the presented new comprehensive system of specialists' training quality control using the pedagogical training system (PTS) and monitor the progress of the quality control system. An experiment is a primary method in the work. We collected all the data by evaluating the PTS by the educational process participants and the quality department specialists, which required the application of the survey method. The study also used the method of observation, analysis, and synthesis. The central hypothesis assumes that PTS designing and functioning pedagogical technologies should be high-tech and correspond to the university mission and strategy, requiring continuous improvement. As a result, the effectiveness of pedagogical infrastructure as the core in the designing and functioning of education quality systems should be considered in the development and improvement of new management systems for the specialists' training in university education. Further perspective is the research and analysis of improved technologies of functioning of integrated education quality control systems, the search for effective pedagogical technologies of education and process design.

Keywords: Education Quality Management, higher education, management, pedagogical technologies, designing, Quality of Education, education institution.

# 1 Introduction

A socio-cultural approach to learning is essential in present-day university education. It should be modern and meet the demands of the educational market, where students can independently solve open problems, freely use different sources of information, and all the variety of educational platforms, i. e., actually create new knowledge. These shifts in university education impose new requirements on university management and administrators for designing and functioning quality control in education. Classical models of learning design and their development are becoming more versatile, indirect, and focused on organizing the conditions for joint activities of all participants in the educational process, where cause-and-effect determination is only one of the components. Pedagogical design technologies must consist of technical, social, epistemological, and cognitive components. The successful functioning of the education quality control system should depend on the continuous development and monitoring of improved PTS technologies. Indeed, it defines the problematics of many current studies in pedagogy and educational management (Etzkowitz et al., 2019).

Many studies also consider the role of e-learning content in university education, which is a crucial tool for evaluating all reforms and improvements in the university's training quality and effective operation.

A comprehensive quality control system helps measure teachers' and students' training levels and constantly monitors changes in teacher and student satisfaction, their attitudes towards the university, and its brand image (Cheng, Ming Tam, 1997).

It opens up opportunities for the introduction in the educational process based on the democratization of new pedagogical technologies for designing systems of education quality control.

Traditional systems of education quality control rely primarily on the final assessment of students' performance, the level of methodological skills, teachers' proficiency, and the executive capacity of the administration (O'Mahony, Garavan, 2012; Centobelli et al., 2019). However, the proposed innovative integrated systems with a pedagogical component allow for an improvement of the specialist's training quality control and consider all areas of growth and development of university activities (Ricci et al., 2019). In the modern educational paradigm, university management should be concerned about the volumes and final results presented in the knowledge assessment form and democratization and expanding the framework of specialist training quality control in HEI. At the same time, this is a prospect for further research towards finding comprehensive administration systems that involve pedagogical design technologies.

#### 2 Aims

This study aims to establish a pedagogical framework for the designing and functioning of the quality control system in university education and determine the assessment of the university administration and students of the presented new comprehensive system of specialists' training quality control using the pedagogical training system (PTS).

There are the following tasks to be accomplished to achieve the aim:

- to establish the main components of pedagogical technologies for the designing of educational quality control systems;
- to evaluate the AS (academic staff) according to the quality evaluation system of training specialists at the university and the technologies of control, which are used by the control authorities;
- to monitor the quality control system progress.

#### 3 Literature review

The theory and practice are actively considered in the pedagogical paradigm (Giones, 2019) in designing and functioning educational process quality control systems, focusing on the principles of management systems formation and the future specialists' quality training. In addition, the problems of seeking quality management systems in education have theoretical research fields (Guerrero et al., 2019) and practical projects (Etzkowitz, 2019).

Various aspects of being comprehensive educational management systems have been considered in multiple studies. Chuchalin & Zamyatin (2011) consider the problems of democratization of methodologically normative documentation and ways to encourage teachers to apply innovation, research, and pedagogical learning technologies. Smuts et al. (2017) analyze technological barriers in the students' educational process in an online learning environment. A separate topic became the study of changes in pedagogical processes under pandemic conditions, advantages and disadvantages of distance learning technologies, and ways of systemic quality control of

HEIs specialists' training under these conditions (Paľová & Vejačka, 2020). Pakhomova et al. (2021) analyzed the situation of innovation processes within HEIs within the context of implementing ICT-based student learning. We should also mention the research on assessment systems for e-courses (Suradi, Kahar & Jamaluddin, 2018) and consider the evolution of university education quality culture through the concept of sustainable development as a learning component (Rahnuma, 2020). Finally, the authors presented factors for improving the education quality system and ways to assess them in universities (Vykydal et al., 2020).

Among the theoretical studios, some papers consider the concept of "educational process quality" and "assessment", where the main was the interpretation of assessment as a process of collecting and analyzing information to determine the level of educational services quality and achieve academic goals, the ability to resort to effective solutions (Cheng et al., 1997; Rybnicek et al., 2019). Furthermore, the study of integrated education quality control models has consistently remained a broad field for academic development. The current pedagogical and managerial paradigm analyzes the mutual influence of educational service quality and participant satisfaction with the university's educational process (Chaudhary, Dey, 2021).

The theoretical research should be further implemented and used to implement pedagogical design technologies in educational quality control systems and lead exploration towards finding optimal models for organizing effective quality control of future specialists' training in HEIs.

#### 4 Methods

Implementation of the pedagogical experiment was applied several empirical (diagnostic) methods, a questionnaire (written form), a survey, and an observation method. In addition, the data were analyzed using statistical analysis tools.

The study was conducted during the 1st semester of the 2021–2022 academic year at the Kharkiv National University of Economics, named after Semen Kuznets. The experiment involved representatives of the administration, dean's offices, academic staff, quality department employees, and technical staff of pedagogical and training systems (PTS) site support service at KhNUE named after Semen Kuznets (63 people).

Respondents were surveyed using Google Drive forms. The experiment considered the experience of people involved in the research conducted in our project. We used the basic concepts of this methodology. Considering the research goals, we analyzed the specifics of the respondent's evaluation of the education quality control system functioning and the respondents' evaluation of the pedagogical technologies involved in the education quality control system.

At the I stage we determined the central points of the pedagogical experience. Questionnaires drawn up to implement the research goal were adapted to the professional characteristics and demands of AS and university management. The survey was conducted in privacy, and all participants agreed in written form to participate in the experiment. The research team guaranteed anonymity. Survey materials were not made public outside the research work.

At the II and III stages, respondents were interviewed on the evaluation of the reformed and functioning control system (PTS) by the administration and quality control department, and AS on the assessment of the quality control system of educational services, university training, control technologies used by the administration as a source of methodological and pedagogical control. As a result, the research group established changes in the level of attitude assessment to innovations in terms of quality control of future specialists' training and assessing the level of technical support and digital literacy of the education participants.

We should note some disadvantages and difficulties identified during the experiment: the research team had the position of a passive observer; time constraints did not allow for in-depth qualitative research, so it was impossible to identify the causes of changes in the respondents' preferences and assessments.

#### 5 Results

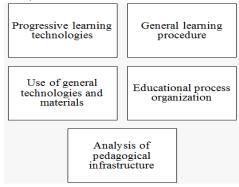
HEIs quality management systems use the concept of TQM (Total Quality Management). It is an HEI quality management system aimed at developing its scientific and methodological support. The concepts of such systems are built on several components. First of all, the American educational philosophy (Malcolm Baldrige National Quality Award) is based on the priority of management system operation, student-oriented approaches, academic productivity, and constant maintenance of a high satisfaction level of this management system by all participants in the educational process.

This article describes an essential part of the PTS management system — EFQM (European Foundation for Quality Management). This philosophy considers the provision of a partnership policy between staff and management, where there is constant communication and analysis of students, faculty, administration activities, and results and the provision of the necessary educational resources as the core components.

Stage 1. At this stage there was training of the experiment participants according to the rules of use, structure and features of the model of training quality control implementation, as well as presented features of university planning, control and management within this system. There were a constant series of face-to-face and remote consultations, training events to master all participants of PTS training and administration. During the experiment, a technical helpdesk was introduced to assist in the operation of the system.

The represented model of an integrated approach to the education quality control system at the institution considers the results and performance levels of all training and administration participants only at the final stages – at the end of the semester, module, or topic. However, the control during the implementation and design of the educational process is provided. In this way we can see a holistic picture of how effective the educational process was. The obtained results are analyzed and certain components of the system are changed, weaknesses are canceled, the necessary for improving the education quality control are formed.

Figure 1: The main components of pedagogical technologies of designing educational quality control systems (author's elaboration).



In other words, the determining components of pedagogical design technologies of educational quality management systems in controlling the specialists' training level are intensive involvement of progressive teaching technologies, reforming the general teaching order, systematic use of educational and methodical technologies and materials, selection of convenient and suitable specialty of the educational process organization, constant monitoring of the pedagogical infrastructure.

At the II stage of the experiment, after the training activities to work the system (PTS), all participants in the educational process were involved in PTS. We also surveyed the participants in the educational process to assess the effectiveness of the reformed control system. This stage includes the first assessment

of the feasibility of changes and reforms that have been introduced in the education quality control system (PTS). It also monitors the satisfaction with the educational services quality level and motivation to use the system. All calculations are made in percentages.

Table 1: Educational participants' evaluation of the implementation of the reformed control system (PTS) on the education quality (author's technology).

J	Question	Yes	No	Don't know
1	Does this university's proposed quality control model meet your ideas about democracy and openness as stated in its charter?	45	35	20
2	This HEI that uses the updated PTS system makes it possible to give feedback to the administration and the student community.	30	40	30
3	Have you had a positive change in the quality and effectiveness of the learning after working 2 months with the system?	48	27	25
4	Do you feel the external control is influencing the changes taking place at the university?	20	37	43
5	Do you have free access to PTS, as well as to developing labs, co-working and libraries?	50	25	25
6	Thanks to the system, are you able to assess the teacher's qualifications and express your opinion about the learning process?	50	32	18

As we can see, the most positive was assessed the democracy as a pedagogical technology of management system design. In paragraphs 5 and 1 (Table 1), overall, 47 % of students considered it in this way. On the other hand, the slightest response has caused the theses about the external control effectiveness (paragraph 4) – only 20 % of students had positive responses.

Stage III. In the final stage, we repeated the final questionnaire. The changes in the respondents' evaluation of the expediency of implementing modern quality control systems in the educational process determined the attitude toward systematized planning, control, and management of HEIs. In addition, the survey demonstrated changes in the administration and students' attitudes toward the democratic foundations represented in the university control system of the educational process. Again, we made the calculations in percentages.

Table 2: Educational process participants' evaluation of the implementation of the reformed control system (PTS) on the education quality (author's elaboration).

№	Question	Yes	No	Don't know
1	Does this university's proposed quality control model meet your ideas about democracy and openness as stated in its charter?	65	18	17
2	This HEI that uses the updated PTS system makes it possible to give feedback to the administration and the student community.	28	50	22
3	Have you had a positive change in the quality and effectiveness of the learning after working 2 months with the system?	52	35	13
4	Do you feel the external control is influencing the changes taking place at the university?	32	38	30
5	Do you have free access to PTS, as well as to developing labs, co-working and libraries?	55	32	13
6	Thanks to the system, are you able to assess the teacher's qualifications and express your opinion about the learning process?	65	33	7

In general, the number of positive evaluations of the innovative changes introduced into the educational process quality control implementation model is 55 % of the respondents. The number of positive assessments increased on average by 10 %. Respondents gave the most favorable review of the teachers' methodological skills and qualifications (65 %) and believed that

the European educational institution standards for the democratization of education quality control are being met.

In the III stage, we conducted a survey of AS on their involvement in the education quality control system of specialists training.

Table 3: AS (academic staff) evaluation of quality assessment system of university training specialists and control technologies used by control bodies (author's elaboration).

Control type	Evaluated by colleagues	Evaluated by students	Evaluated by administration
Survey of students on my teaching activities	20 %	67 %	13 %
Relevance and completeness of my classroom content	43 %	38 %	48 %
External results of my students' knowledge	13 %	62 %	61 %
Self-evaluation of my work (reports, portfolios, public lectures)	58 %	64 %	55 %

As we can see from the results, more than 60 % of teachers talked about the democracy and openness of pedagogical technologies and the design of education quality control systems (high self-assessment criterion). For academic staff, in turn, was important the students' opinion on the methodological skill, technology, and teaching quality (67 %). The administration, in turn, highly evaluates the students' performance.

Everything mentioned above indicates a comprehensive activity to democratize the quality control systems of education, focus on high qualification of the teaching staff, and openness to all educational process participants.

6 Discussion

Pedagogical technologies for designing and functioning a comprehensive system of education quality control, according to some researchers (Kuzmina et al., 2020), involve the use of hightech and innovative models of assessing the specialists' training quality in higher education institutions, dictated by the need for solutions (Khalil, 2021; Dolan, 2019).

Several studies have measured innovative and pedagogical technologies for checking the specialists' training quality system. It is an essential indicator of the success of a holistic learning quality system. Quality control technologies together ensure the learning quality, student performance, and their

ability to be innovators both in learning and in further professional activities. For example, for teachers in the Czech Republic, the main types of innovations are knowledge innovations, teaching methods and technologies, and teaching tools: 49,8% of students learn at a highly innovative level (knowledge and methods). In Poland, this index was 63,9%. The number of young professionals (graduates) who play a significant role in presenting innovations in professional activity is 80,8% in the Czech Republic, 62,99% in Hungary, and 67,9% in Poland. According to our study, 55% of the respondents have a positive attitude towards the democratic components of a comprehensive system of education quality control, and 60% of teachers are focused on professional innovation and self-assessment.

The researchers of management systems in education (Hsu et al., 2016) have evaluated how to measure the students' and teachers' learning quality depending on the context, innovative methods, high technology, and human-centered pedagogical approaches. They concluded that several digital education control models (Input, Process and Product, Total Quality Management) effectively improve quality assessment (Scherman, Bosker, 2017; Nurmanov A., 2020). In our study, the involvement of pedagogical technology in designing a comprehensive quality management system relies on a educational comprehensive and systematic approach adopted by 55 % of respondents in total. This approach proved to be effective and efficient, being in line with the European education philosophy. At the final stage of the experiment, the approval of the innovative system of education quality control increased by 10 % on average, where we should pay more attention to the resource base of the university and the teacher's pedagogical

Comprehensive systems of university education quality control via high technology (TQM approach - Total Quality Management) ensure the functioning of a highly innovative learning and management environment (Kolodii et al., 2021). In comprehensive studies of the theory and practice of the management systems' involvement in the HEI training quality control system, there is a tendency to increase attention to the management of the overall educational process quality (Yaro et al., 2016) and consideration of the socio-cultural and general education component of pedagogical design technologies (Perronet, 2018). However, we should take individual specificity, characteristics, professional university and development strategy into account for creating a compelling set of tools for controlling the future specialists' training quality.

The effective use of pedagogical design technologies in educational activities involves forming and strict adherence to a set of priority goals:

- obtaining deficit positions;
- internal administration;
- HEI's resource management;
- constant focus on learning strategies;
- meeting the labor market needs.

#### 7 Conclusions

Despite using different pedagogical technologies in European education to create and function a comprehensive system of specialists' training quality control, a relatively high number of students with low interest in success, and insufficient familiarity with different types of pedagogical technologies of education quality control is determined. Therefore, each educational institution should choose a convenient system for implementing and functioning the specialists' training quality control system. And this system should meet the strategy of the institution and the directions of its development, educational mission, and goals, and the best way on this plane is to use pedagogical technologies of design in a complex. Pedagogical technologies in the quality control system are provided by a system of different control forms by both internal and external stakeholders; the system of administrative quality control

through various forms of participation of participants in the educational process and administration.

Firstly, this study aimed to establish the defining components of pedagogical technologies and the design of educational quality management systems. Therefore, it is primarily the control of the specialists' training level, intensive involvement of progressive teaching technologies, reforming the general teaching order, systematic use of shared teaching and methodological technologies and materials, the choice of the educational process organization system, and continuous monitoring of the HEIs' pedagogical infrastructure.

Secondly, the experiment found that the reform per the needs of the labor market and basic European educational standards design quality control of university training is positively evaluated by staff and administration. At the end of the experiment, PTS support increased by 10 %, and in general, respondents approvingly considered the quality control of the educational process effective.

The comprehensive system presented for consideration is intended to become a part of the European system of pedagogical technologies of design and effective operation of specialists' training quality control systems.

Further research projects related to the successful functioning of integrated systems in the education quality at all levels should be organized, collect data and analyze the results of research projects.

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## Primary Paper Section: A

Secondary Paper Section: AM

#### EVOLUTION OF STYLISTIC NORMS IN XX CENTURY LITERARY AND ART DISCOURSE

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Abstract: Increased attention to evolutionary changes in literary language results from active attempts to fit the national language and culture into the world's cultural diversity. Ukrainian literary language is not only a synchronic and diachronic type of system, which demonstrates the constant development of art, intellect, and mentality, but in a broader sense, it is the basis for the formation of national consciousness. This article aims to establish the conceptual and temporal evolution of stylistic norms in the writings of Ukrainian authors of the XX century. The research methodology is based on an integrated approach: the comparative method and literary works analysis - to analyze the literary works by Ukrainian authors of the XX century; to determine the parameters and dynamics of changes in the stylistic artistic norm. The hypothesis is that the language norm is a cognitive reference point in the formation and functioning of the stylistic artistic artistic norm is caused by the ability of the literature as an art form to respond promptly to the development of speech consciousness and artistic concepts, author's thinking, and reader's visions. The dynamism of the stylistic artistic norm is rooted in the ability of the poetic word to constantly evolve in parallel with the evolution of authors' and readers' consciousness. In the future, we should investigate evolutionary changes in the stylistic system of the Ukrainian literary language, dictated by worldview and artistic shifts in the linguistic consciousness and philosophy of the artistic method of authors and their audiences.

Keywords: Linguistic norm, stylistic artistic norm poetic, language, postmodern discourse.

## 1 Introduction

Awareness of structural and functional features at the level of stylistic norms and categories has a heuristic nature, which is necessary for the study of the literary language system. Therefore, the type of stylistic norm is a methodologically important element of the linguistic research of the author's text. When defining the concept of "stylistic norm", many researchers point to differential characteristics, such as relevance, permanence, invariability, and acceptability. Such features are combined with the definitions presented by linguists (Stavitskaya, 2010), where the style is presented as a type of activity, speech thinking, and speech behavior, implemented in different situations of collective-conscious communication, compliance with the conditions of communication in different cultural scenarios (Yermolenko, 2007). This definition focuses on describing the essence of the linguistic nature of style.

Each style is characterized by its own set of norms and restrictions, particular, logical, and understandable within the field of use of this style. Each position is tested for reproducibility, stability, and combinability and must have a historical perspective and conceptual integrity in development. The interpretation of the stylistic norm as a topical issue of modern linguistics considers the norm as a regulatory principle that nominates the construction of the text in a particular functionally communicative (Edlichka, 1987) field. Yermolenko (2007) also notes that the stylistic norm regulates the rules of language units' use, having a specific functional and stylistic coloring, which may be characterized by additional expressive and emotional content within the stylistic system of literary language.

A critical component of the "style" concept is the stylistic artistic norm, which acts as a normative principle for the artistic style, a historically established functional variation of literary language (Gregoriou, 2020). The stylistic norm also determines the time, ideological and thematic content. From this perspective, conducting comparative studies of language-forming practices makes it possible to establish the changes in the stylistic norms system. From this angle, art language is presented as a heterogeneous linguistic and aesthetic phenomenon, where there are an aesthetic dominant and directions. Each direction is based on different creative standards and principles of text construction.

They are based on different creative standards and principles of text construction, compared with which it is possible to state the longevity of tradition or the development of new poetic norms. At the same time, they overlap in many aspects, creating a common space and general trends of vocabulary change, thematic expansion of the author's vocabulary, and syntactic diversity of texts. These parameters establish the non-discreteness of the stylistic artistic norm in a complex display.

#### 2 Aims

This article aims to establish the conceptual and temporal evolution of stylistic norms in the works by Ukrainian authors of the XXth century. The research aim implies the solution to the following tasks:

- to establish the factors of stylistic norm dynamism of the postmodernist art language;
- to determine the features and semantic cores of neologisms' use in the author's poems;
- to elaborate specific features of imagery formation within the limits of the stylistic norm of artistic style.

# 3 Literature review

The literature review on the study of stylistic norms in the literary and artistic discourse of Ukraine in the XXth century takes place in many directions. Each research direction is based on different linguistic approaches, research objectives, methodological basis, and principles describing the text as linguistic data.

Several works study the categorical status of the stylistic art norm. Montes-Alcalá C. (2015) identified that the diversity, expressiveness, and rich imagery of literary language are created on the background of the rich and different writers' creativity. Thus, there is a constant interaction between linguistic resources and their literary embodiments. There is continuous work on the formation of the stylistics' terminological corpus. Such concepts as the poetic norm, aesthetic norm, functional norm, etc., are concretized (Tymochko, 2010). The operation of such concepts allows stating the development of poetic vocabulary norms, which includes investigations in the field of aesthetic, phraseological, phonological, and syntagmatic-syntax levels in the development of poetic vocabulary (SIUTA, 2017).

Some studies focus on the aesthetic essence of the art norm as linguistic data. It is revealed along with the accepted canons of the literary norm (Vokalchuk, 2008). The status of the artistic norm is exposed as a linguistic and aesthetic phenomenon on the background of similar aesthetic formations correlated to the linguistic norm. Speech norm becomes a cognitive reference point for parameterizing the style norm using linguistic positions.

Linguistic studies have also investigated the correlation of stylistic norms and literary norms from extra-linguistic positions: specificity, cultural patrimony, moral and value social priorities (Khoroshun, 2015; Gavins, 2012). The intralingual factors determining the style and directions of literary norms

development of artistic style also deserved attention: norms of word usage and the state of literary language development. In several studies, the category of the artistic norm has been presented as a changeable notion, a historical category, subject to changes under the transformations of literary tradition, currents, art schools, and individual styles (Yermolenko, 2006).

The research on the diachronic level was conducted through the analysis of lexical images and semantic plans, which chronologically preceded the aesthetics of certain artistic principles and figurative formations (Stamou, 2014). The notion of the "belles-lettres norm" is interesting from the position of specifying the artistic style norms. These are neutral norms linking the literary and art language.

#### 4 Methods

A complex of methods was used for the effective conduction of the study. The research methodology is based on a complex approach: comparative method and literary works analysis – to analyze the literary works by Ukrainian authors of the XX century, their art, and cultural and ideological attitudes, which are embodied in the verbal forms.

Semantic-component analysis was used to determine the parameters and dynamics of changes in the stylistic artistic norm at the level of changes in semantics and representation of substantive and ideological shifts in postmodern poetry.

The descriptive method characterizes the central theoretical positions in modern stylistics, language theory, and literary studies. The aims and goals of the research imply the use of this method at the observation, interpretation, and classification stage of linguistic material to describe linguistic units to denote the semantics of the qualitative category. The descriptive method is supplemented with the elements of comparative analysis to determine the standard and distinctive features of the linguistic means of expressing the semantics of the qualitative category in synchronicity. The complex of logic and psychological methods in research of connection of linguistic units and categories contents with thinking units (correlation of word and concept), the system of semantic-component analysis methods (for determining structural components of verbal units meanings), functional method (for research of primary and secondary functions of all linguistic means of quality category semantics expression) have been used as well.

#### 5 Result

The substantive basis of the language artistic style includes a conscious orientation to the creative assimilation of the "new experience" of texts. As for the artistic method of postmodernism, this experience was taken to assimilate and rework previous eras, cultures, authors, etc. Such a guide to postmodernism works' aesthetics and stylistics (late XX century) were realized as an individual and fictional norm of artistic language. Radical expansion in the field of semantic and evaluative transformations as a principle of artistic creativity allowed a significant expansion of subjects, contents, forms, and linguistic experiments as references to the texts of previous cultures' citations. That is why the dynamism of the stylistic artistic norm is so necessary for the postmodern era. It is possible to determine its stability level only by analyzing the levels of linguistic data existence.

It is also necessary to identify a special systematicity in the approaches of postmodernism to artistic works. It establishes a separate cultural paradigm and modifies due to the construction of authorial systems. It uses cultural tradition and presents temporal and spatial realization of the declared contents set.

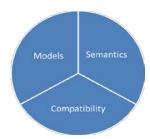
Stability and variability are also separate parameters of the stylistic art norm. It is the level of tradition and innovation intensity operating, the justification of this norm's spatial and temporal indicators.

Figure 1: Factors of postmodernism stylistic norm dynamism of artistic language.



The criteria of norm variability can be seen in the actualization of universal concepts and precedent phenomena (archetypes, symbols, etalons, stereotypes) that can be used. For example, the representation of Ukraine as a homeland is, first of all, the archetype of agrarian mentality: the sun, water, trees, and land. Thus, semiotic oppositions of native – alien, true – false, good – evil are actualized. The dynamics of changes in the image systems nominating such positions, variability in combinability, systems of images and symbols, ways of their verbal embodiment and demonstrate the shift in the norm. The transformation of images describes configurations in stylistic norms.

Figure 2: Parameters of changes in the stylistic art norm.



In the XX century, due to the pluralistic nature of the postmodern artistic method, artistic images in their linguistic embodiment began to be modeled in different ways, used to define different semantics, represent different meanings, and artistic meanings to the system of traditional images in the national literature. For example, the use of ideological stereotypes, represented in metaphorical forms: mother Motherland; political party- sun/conscience. Equally used in Soviet Ukrainian poetry are expressions, stamps, clichés, and quotations (to be a wheel and a cog; to learn, learn and learn again; we will go the other way; a spark will kindle a flame; a five-pointed star will set the fire). The ideological bias of such a style is defined in Ukrainian Soviet poetry of that time: For the new Prometheus / Thy fire is not extinguished in the haze / The five-pointed star / Sun shines on the earth (Rylsky).

Shifts in the sociopolitical situation in the country have radically changed axiological messages at the level of stereotypes and precedent phenomena. The history of how the set of images and symbols accepted in society has changed is called the history of poetic language. Thus, the paradigmatic row: sun, flame, conscience, stars – radically changes its sound from political and propaganda attributes to intimate lyrics: The nights were shining, the days became dark. Not once did fate swing the scales. The words like the sun went down inside of me. The untold remains untold (Kostenko Lina); The poet and the harlot walked between earth and heaven. He wore a tailcoat, and she wore a burlap skirt. And such dreams they saw that there were jealous of the stars (Andrukhovych).

We should note that the terminologization of the "stylistic artistic norm" concept will allow us to determine the breadth of its boundaries and carry out a detailed description of its levels in

the linguistic and stylistic system. Thus, we get a complete picture of Ukrainian literary language history.

Let us consider one of the significant levels of such a system the creation of individual style (idiostyle) is an essential norm of the characteristics of XX century poetic discourse. The synthesis of the formal-pragmatic and semantic aspects in a single lexeme creates a neo-lexeme, creative, intensive, and individual formation. But, first, it is the result of creative searches of respective authors, who use new stylistic resources of poetry to create unique contents and universal word-formation models.

Occasional nomination is an unusual, expressively and evaluatively colored word accompanied by the violation of word-formation laws and linguistic norms.

Occasionalism within art literature determines the authors' focus on the features and originality of speech expression. It is the work with the inner form of words, the creation of new semantics, semantic and grammatical shades of meaning.

The enrichment of Ukrainian literary language vocabulary of the

XX century also took place at the expense of standard and actual for poetic word-formation morphological models and ways of derivation: suffixless way, affixation, compiling words, bases, etc. For example, the poetic vocabulary of the Sixtiers is actively enriched by neo-lexes that use the prefixal mode of word formation: will splash with leaves wildly on the brushwood; Autumn winds are hungry hounds (Pavlychko https://mdeksperiment.org/ru/post/20200603-moya-lyubov-usohladerevina); and we, exalted by the Lord's palm, as if we had broken away from the fall, ascend into the exaltation of the darkness, which will not fail us, will not scold us, and will not extinguish the barn candle (V. Stus, litmisto.org.ua/?p=27369). As can be seen from the texts, neo-lexes are formed in a prefixed way with the help of po-, nad-, vi-, pa-, pro-. Additionally, the transition to other language parts above (adverbialization), and hungry (verbalization) can be used. Such approaches to

neologization as a stylistic device significantly distinguish the artistic style from other functional styles of the Ukrainian

language. Word creation for individual style in poetry is an indicator of compliance/non-compliance with word-formation,

stylistic and aesthetic norms, priority in a given literary current

at the moment of the development of literary thinking, and the

language system as a whole.

Noun word formation is also actively used in poetic discourse, where literary and stylistic norms are introduced. For example, the use of foreign parts of the word quasi, anti, micro-: Micro-Sodom, a curtained Gomorrah, Wake up, people, do you hear, it's trouble! (Kostenko Lina); This I know, and I bow down my head. In the anti-World, I'm a star, In the anti-people I love my people (Kostenko Lina). Neo-lects can also use the not- (prefix not-) and verbalization in order to create new contents: their unsatisfied ones hurt just as much as unsatisfied they should run away to the uninhabited sands with naked prairie (Andrukhovych, 2012); My paths are not measured, my mountains are not weighed, my beasts are not reliable, my waters are not carried (Osmachka, T.).

No less productive is word formation with the use of composing words and bases. For example: by dark velvet shades of violet and cinnabar (Volk, Virtual'na antolohiya poeziyi N'yu-Yorks'koyi hrupy); as if quietly plotting on round-eyed blueness (Koverko, Virtual'na antolohiya poeziyi N'yu-Yorks'koyi hrupy); word combination, turning into a compound word and creating new colors, spatial adjectives.

Also, no less effective is the phonemic spelling of words, for example: extracting extracts from machines, j ust a moment more – and the cellophane storm / Will turn on the living body (Andievs'ka, Virtual'na antolohiya poeziyi N'yu-Yorks'koyi hrupy).

The creation of the neologic corpus also occurs through the transition of words to different parts of speech or the creation of

new words. For example, neutral nouns with the ending -ia. They can be used for the purpose of temporal and spatial parameterization, accentuated by idiostyle expression, for example: D. Pavlychko (abroad, tile, wings); L. Kostenko (blackness, black brow); I. Drach (hundred wings, shackles, clouds), M. Wingarowski (snow, flight, beads). For example: The last fluctuations/Washes and drains the heavy rain (Irvanets).

Neologic forms are also created by means of word formation with affixes that form the comparison degrees of adjectives and adverbs, and affixes of subjective evaluation of various semantics are also often used. For example: Oh, the snow has fallen on the Brovary bogs, the branches are bent down; I dreamed of a strange bazaar: under the sky in a clear field (Kostenko, Lina, b); I go out into the garden, it is black and thin, it has no dreams about even an apple (Kostenko, Lina, b); Every second some little boy opens you for himself (Drach, 2019).

Regarding the comparison degree, the neologism forms additional intense shades in the emotionality of the figurative structure of the poetry. For example: the weak deceitful, it has a devious power, in the forms of various dimensions flowing, for everything as deeper, as the slightest is the movement (Andievs'ka, Virtual'na antolohiya poeziyi N'yu-Yorks'koyi hrupy); that much less of that appearance (Boichuk, Virtual'na antolohiya poeziyi N'yu-Yorks'koyi hrupy).

The normativity of postmodern literature also implies experimentation with the word, actively used by young poets of the XX and XXI centuries. A characteristic stylistic feature is the constant and creative use of neo-lexes. Their large number is also connected with the maximum productivity of composing words, bases, and complex abbreviations. It allows saturating of new lexical units with new semantic and expressive shades. For example, in the Ukrainian language, long-known and new adjectives are often used in which both color and abstraction of feeling express subjective evaluation: *I will still go to the destination of the blue-wine morning* (Rubchak, Virtuaha antolohiya poeziyi N'yu-Yorks'koyi hrupy).

The successful combination of artistic style renewal processes, stability in the ratio of literary norm and neologic formations allows to create composites of color, spatial, sound and form-creative shades. Innovation can be seen in the search for color names, achromatism, complex visual effects. For example: chernostav, chernokrylya, chernovodya, belousto (Stus); white-flowered, black-winged (Wingarowski).

Complex words contain a combination of names of colors in one line, for example: raspberry-violet food (Revakovych, Virtual'na antolohiya poeziyi N'yu-Yorks'koyi hrupy); the snorting wings of an angel in red-blue-yellow stripes (Tarnavsky, Virtual'na antolohiya poeziyi N'yu-Yorks'koyi hrupy); nor a toadstool squinting on light-shadow edges (Rubchak, Virtualha antolohiya poeziyi 'Nu -Yorks'koyi hrupy).

Spectral color adjectives are also the basis of visual characteristics for postmodern art language.

These are aesthetically expressive and figurative characteristics of the author's poetry figuratively. They denote emotions, characters, abstractions, objects, personalities, and feelings precisely because they have a plastic semantic structure. Longknown and new adjectives are used, in which both color and feeling abstraction express the subjective evaluation: I will still go to the destination of a blue-wine morning (Rubchak, Virtual'na antolohiya poeziyi N'yu-Yorks'koyi hrupy). The neolects define the saturation level and the color intensity; they do not name a particular color: the night is flattened by a dirty spot (Kolomiets, Virtual'na antolohiya poeziyi N'yu-Yorks'koyi hrupy); the earth has taken on darker colors (Baboval, Virtual'na antolohiya poeziyi N'yu-Yorks'koyi hrupy), a dark barbarian with black eyes (Kilina, Virtual'na antolohiya poeziyi N'yu-Yorks'koyi hrupy); it is possible, being like that, to live, earn your bread and get married, and even to be happy with pale, and naive happiness (Tarnavsky, Virtual'na antolohiya poeziyi N'yu-Yorks'koyi hrupy); the day was gray and ashy (Baboval, Virtual'na antolohiya poeziyi N'yu-Yorks'koyi hrupy). There are also epithets that, with the semantics of indefinite color, indicate the general coloring of life realities, the character of the author's sensations, and complex fantasy images: you are a catcher of colored souls (Revakovych, Virtual'na antolohiya poeziyi N'yu-Yorks'koyi hrupy), you are a satrap of colorful devils; in a whirlpool of shimmering pearls of purple neons (Koverko, Virtual'na antolohiya poeziyi N'yu-Yorks'koyi hrupy); thundering with their pruney giggles (Andievs'ka, Virtual'na antolohiya poeziyi N'yu-Yorks'koyi hrupy).

The idiostylistic level can also be better represented by analyzing the works of V. Stus, where neo-lexes are often used as hyperbolized images. For example, ways to actualize the theme of suffering: The red pain from the whip in his eyes spread like wildfire; a hundred voices of white lips; groans surround the world; a hundred-year-old cry, you are a hand of a hundred foreheads' prayer.

The figurative component of the shown formations prevails over their informative content. The basis for the function of the neolectic is the hyperbolization of sensations, the contents embedded in the images' core.

The innovations in the development of Ukrainian contemporary poetry artistic style presented for consideration presuppose close research attention to the transformation of norms for changes in the vocabulary component of the language.

#### 6 Discussion

The studies of stylistic norms' evolution in the art and stylistic discourse of the XX century are presented in several papers (Murphy et al., 2020). Researchers have determined (Stavitskaya, 2010) that the clarification of semantic, derivational, and functional-pragmatic parameters of innovative and occasional components of artistic style norms complement the idea of the main trends and regularities of national poetic vocabulary updating in a broad historical context. Moreover, the ideological precepts of the post-modern era provide an opportunity to start an overall experiment with images and quotations from past works of literature of different tensions, ideological content, and historical periods.

In studies on word-formation innovations as an integral part of post-modern stylistics and art method (Twose, 2008), the productivity of aesthetically oriented word-formation, genre, and stylistic diversity of Ukrainian artistic language of the XX century have been established. The author has noted the innovative nature of post-modern ideas embodied in the verbal forms. It is a valuable and successful experience for authors to actualize the expressive potential of the word. The full-fledged artistic image is achieved through the realization of evaluation through the image (pragma-evaluation function) and nomination (nominative function).

M. Stavitskaya (2010) considers the idiostyle aspect of the artistic norm, represented by the idiostyle artistic norm, which finds a direct presentation through the systemic expression of creative expression means, methods of concrete and sensual description of reality. Each author's position and the world's picture presented in the work are relevant and original. Textual units are projected on normative categories and enrich the language with new resources. We have found that changes in phonological, lexical, and grammatical norms are essential for the post-modern period's creativity. Their systematic description will allow us to create a picture of the development and intensification of new components' creation of artistic style by projecting on the requirements of genre, direction, aesthetics, etc.

#### 7 Conclusion

The conducted research indicates that the lexical norm of the artistic style in the second half of the XX century should be defined as thematic expansion, publicity, the introduction of a set of industry terms, and the enrichment of the author's vocabulary – all these are changes at the lexical and semantic level. Moreover, this is related to the modern trend of entering the high-tech era, where science, technology, and intellectual practices are a sign of the times and are actualized in the language as a social topic. The striking representatives of this national artistic style are writers of the 80s (O. Zabuzhko, Yu. Andrukhovych, I. Malkovych, I. Rymaruk) and 90s (Yu. Andrusyak, Irvanets) generation, as well as representatives of the XXI century (S. Zhadan, V. Neborak, Yu. Lyubka).

We will represent the concept of a stylistic artistic norm as a concept of historical stylistics' theory, where we can categorize the idea of the norm. Altogether, studying the neologic norm in the XX century poetic language has revealed the productive nature of authorial neo-lects of the postmodern artistic method. Their contextual pragmatics is determined by the semantic and trophic needs of the poetic text.

A broad and complete study of artistic style history should be carried out, considering the dynamics of stylistic artistic norms as one of the key parameters of linguistic dimensions. Determination of idiostylistic, temporal, and spatial characteristics of stylistic norms presents typological and historical trends in the formation of state languages' styles. It allows us to show the systematic connections of literary norms and, in general, the overall picture of state artistic style. The dynamics of the development of stylistic artistic norm is related to the ability of poetic language to respond to the development of linguistic and artistic consciousness, speech activity, and creative thinking of both the author and his audience.

In the future, we should consider on diachronic and synchronic levels the most significant changes, artistic trends, and phenomena in the development of poetic language, the reactions of the language system to the demands of society, and the authors' individual needs.

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**Primary Paper Section:** A

**Secondary Paper Section:** AI

# SPECIFICS OF MODERN INTERNATIONAL PUBLIC LAW ON THE EXAMPLE OF THE EU COUNTRIES

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Abstract: The strengthening of the global instability processes, the emergence of threats, risks, and challenges of socio-political and economic-legal character cause the intensification of the reduction of the security level at the global, regional, and national levels. The specified tendencies are strengthened by conflicts and numerous military confrontations occurring in different countries. They testify to the necessity of efforts intensification with the aim of regulation of normative-legal provision of peace and security, promotion of sustainable development of the international community, which can be achieved through regulation of relations between states and other subjects of international law, as well as strengthening of the implementation of international legal obligations. This study aims to substantiate the theoretical and applied principles of studying the peculiarities of modern international public law on the example of EU countries. The study uses general scientific and unique methods of economic analysis, in particular; — analysis and synthesis; — analogy and comparison; — generalization and systematization; — grouping and cluster analysis based on the k-means way; — graphic and tabular methods. Regarding the results of the study on specifics of modern international public law in EU countries, it has been established that among the European Union countries, there are three groups characterized by joint and distinctive features: highly developed countries that provide high rates of implementation and enforcement of international public law, as shown by the lowest indexes of state instability (Austria (24–27), Belgium (27–31), Denmark (17–21), Ireland (20–22), Luxembourg (19–23), Netherlands (23–26), Germany (23–27), Portugal (24–27), Finland (15–18), Sweden (18–22) and Slovenia (26–32); countries with a sufficiently high level of sustainable development providing high rates of implementation and enforcement of international and international public law incomplete and the state instability index

Keywords: Rules of law, international public law, legal obligations, legal principles, interstate agreements.

# 1 Introduction

The establishment of interaction between sovereign states, nongovernmental bodies, and transnational corporations at the present stage of socio-economic development is one of the priority tasks of the world community. Controversial provisions to ensure human rights and settle the basic principles of warfare are the focus of the subjects of international public law since the solution of problematic issues beyond the individual capacity of governments is a strategic task of each country. One of the regulators of international relations is international public law as a legal system of regulation of socio-political principles and legal norms observed by the state in establishing its concerns and ties with international organizations. Undoubtedly, the evolution of international public law has reached a stage where the decline of the country's stability causes challenges and threats to state sovereignty and territorial integrity. Increasingly, there is a situation in which some states are losing exclusive control over the decision-making process on a global scale and creating dangers for other states. Given the outlined trends, the problem of researching the specifics of modern international public law

and its impact on the processes of regulation of international legal relations in the context of ensuring the European Union countries' development becomes particularly acute.

#### 2 Literature review

The current stage of the new world order formation gives due attention to the uncertainty processes, the support of a fair system, and the globalization of international legal relations. Furthermore, the desire to ensure the efficiency and legitimacy of international institutions increases the need to implement their coherent interaction. According to Bogdandy et al., it can be achieved by using soft and informal management tools of innovative mechanisms and informal institutions and networks. Under such conditions, the problem of sustainable development of international public law intensifies, which, according to Perfileva (2021), largely depends on the specifics of civilizational development and changes in the global environment due to globalization and mega-regionalization. At the same time, Boas (2012) notes that a positive effect can only be achieved through a precise adherence to the principles of the international legal system, in particular:

- sovereign equality of states;
- non-use or threat of force;
- preservation of territorial integrity;
- inviolability of state borders;
- peaceful resolution of international conflicts and disputes;
- non-interference in internal affairs of states;
- respect for human rights;
- self-determination of peoples and nations;
- cooperation and compliance with international obligations.

Shaw (2019) interprets international public law as a set of legal norms and standards, methods, and mechanisms applied by sovereign states and legally recognized international actors. The scholar focuses on the definition of international public law subjects, whose list of competencies includes war, peace and diplomacy, human rights, economic and trade issues, and international organizations. In this context, Stepanenko (2016) notes that a powerful subject of international public law is the European Union, and transparency of interstate borders of member states and ensuring peace and security is one of the contours of modern international public law. Therefore, Odermatt (2021) argues that the law of the European Union has a significant influence on the formation of the international public law principles, but, as Alshdaifat (2017) proves, countries of other regional associations and continents also make a significant contribution.

Instead, Holloway (2022) considers international public law as a particular legal body whose competence includes the interaction of sovereign states, non-governmental organizations, and transnational companies, and Pinheiro (2020) argues that the formation of national law is based on international law.

A similar position is held by Eggett (2019), who connects the elements of the international legal system with the systemic coherence of general principles and norms of law. This hypothesis is scientifically substantiated by Syroid et al. (2019). They developed a theory of the relationship between international public law and national law, within which the interaction of international and national law takes place following the ideas of monism and dualism. The theory of monism argues that international and national law are elements of one system, and the dualistic approach assumes their independence and individuality.

Nirmal & Singh (2019) emphasize the variability of international public law, which is manifested in its ability to respond to the challenges and problems of today, and Shongwe (2020) argues the inevitability of its fragmentation as an objective condition for

modern development. In addition, the formation of the European Union and the adoption of its legal norms require the harmonization of European law with international law, which necessitates their interaction. In this context, Ziegler (2016) notes that elements of international public law are present and reflected in European Union law, and Chuprina (2019), on the example of Germany and France, proved that the system of modern international public law of the European Union is closely linked to national rights and focused on the realization of common interstate interests. However, the scientist states that the modern legal systems of the European Union are readily amenable to typology but do not coincide completely.

At the same time, studying the features of modern German international public law, it should be noted that the country is making significant efforts to achieve peace and security in the world. To accomplish that, it actively cooperates with international institutions and structures such as the EU, NATO, UN, OSCE, G7, and G20 and takes responsibility for the security and resolution of crises and conflicts in countries such as Syria, Libya, and Ukraine (Germany's Foreign and European Policy Principles (2019); Stolleis (2019). Instead, Lee (2021) argues that France ensures modern public law connects with the peculiarities of building a sovereign state, and Sinclair (2017) proves the unquestionable participation of international organizations in this process.

As noted by Cai C. (2013), the predominant role in forming international public law is large and highly developed countries.

Consequently, the level of development significantly affects the structural transformation of international relations.

#### 3 Research aims

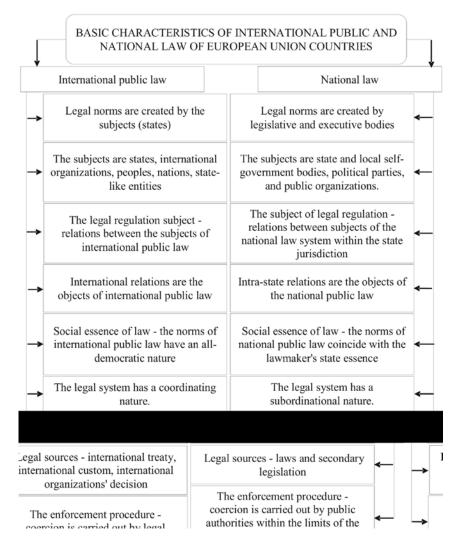
This study aims to ground the theoretical and practical principles of analyzing the specifics of modern international public law, using the example of the EU countries.

#### 4 Methods and materials

The study uses general and unique methods of economic analysis, in particular:

- analysis and synthesis, to determine the essence of the scientific category of "international public law";
- analogy and comparison to conduct analytical assessments of the state and trends to ensure the implementation of the principles, norms, and principles of international public law in the European Union;
- generalization and systematization for the formulation of hypotheses and the formation of conclusions and results of research;
- grouping and cluster analysis based on the use of the kmeans method to group the countries of the European Union according to the Fragile States Index;
- graphical and tabular methods for visualization of research results.

Figure 1: Basic characteristics of European Union international public and national laws.



European Union countries were chosen as the countries to conduct the study.

The information base of the study is based on the reports for 2018–2021: List of countries by Fragile States Index according to the Fragile States Index.

#### 5 Results

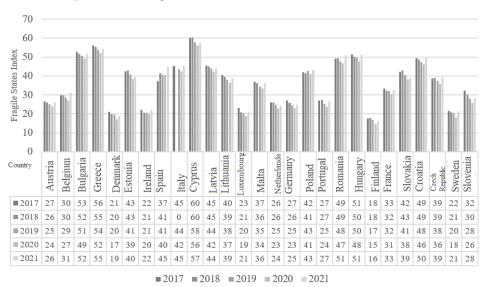
International public law is a particular legal system that combines a set of diverse elements, which during the European integration process have undergone significant structural changes within the European Union and determined the international legal relations in the global community. Modern international public law reflects the ideas of democracy, sovereignty, preservation of state territorial integrity, and progressive influence on national legal systems. Therefore, we consider it appropriate to systematize the main characteristics of

EU countries' international public law and their comparison with the national law specifics in Figure 1.

The ability of the European Union countries to control the territorial integrity and inviolability, socio-economic and socio-political situation at the international level is one of the priority state tasks, the effectiveness assessment of which is determined by the calculation of the State Instability Index (Fragile States Index), the positive value of which characteristically its growth indicates the state instability aggravation.

According to the Fragile States Index dynamic's research of the European Union in 2017–2021 (Figure 2), high values of this index are observed in such countries as Cyprus (56–60), Greece (52–6), and Bulgaria (49–53). It shows an insufficient level of legal provision in these countries and problems in the realization of international public law norms.

Figure 2: Fragile States Index dynamics in the European Union countries in 2017–2021.



Calculated by: Fragile States Index, 2021; List of countries by Fragile States Index, 2017–2021.

It should be noted that special attention is required to the value of the state instability index of Cyprus, which is one of the largest offshore zones in Europe, where the most significant number of offshore jurisdictions is registered. The regulatory framework is characterized by loyalty, particularly to the tax legislation, favorable fiscal and monetary, and financial. The European Union is characterized by a simplified business structure registration procedure, a high level of confidence in conducting transactions, and a high degree of banking and commercial secrecy protection.

Deepening the research of the European Union countries by the index of state instability is advisable in the context of the grouping of countries and determination of shared and distinctive features of the effectiveness of the implementation of international public law, which is advisable using the technologies of multifactor cluster analysis based on k-means method (Table 1).

Table 1: European Union countries grouped according to the Fragile States Index in 2019–2021

2	2019		)20	2021		
Country	Cluster number	Country	Cluster number	Country	Cluster number	
Austria		Austria		Austria		
Belgium		Belgium		Denmark		
Denmark		Denmark		Ireland		
Ireland		Ireland		Luxembourg		
Luxembourg		Luxembourg		Netherlands	1	
Netherlands	1	Netherlands	1	Germany	1	
Germany		Germany		Portugal		
Portugal		Portugal		Finland		
Finland		Finland		Sweden		
Sweden		Sweden		Slovenia		
Slovenia		Slovenia		Belgium		
Estonia		Estonia		Estonia		
Spain	2	Spain	2	Latvia	2	
Italy	]	Italy	] 2	Lithuania		
Latvia		Latvia		Malta		

Lithuania		Lithuania		Poland	
Malta		Malta		France	
Poland		Poland		Slovakia	
France		France		Czech Republic	
Slovakia		Slovakia		Bulgaria	
Czech Republic		Czech Republic		Greece	
Bulgaria		Bulgaria		Spain	
Greece		Greece		Italy	3
Cyprus	3	Cyprus	3	Cyprus	3
Romania	3	Romania	3	Romania	
Hungary		Hungary		Hungary	
Croatia		Croatia		Croatia	

Calculated by: Fragile States Index, 2021; List of countries by Fragile States Index, 2017–2021.

The results conclude that the EU countries were divided into three clusters according to the Fragile States Index from 2019 to 2021. In the first group in 2019–2020, such countries as Austria, Belgium, Denmark, Ireland, Luxembourg, the Netherlands, Germany, Portugal, Finland, Sweden, and Slovenia, are characterized as highly developed and capable of ensuring high standards of implementation of international public law norms, interact closely with other EU countries and provide legal assistance to those countries that record lower development rates, were stably included. Significant attention in these countries is paid to protecting territorial integrity and sovereignty, strengthening borders, ensuring internal security, and strengthening the legal norms of economic policy efficiency. At the end of 2021, Belgium moved from the first cluster to the second, weakening its position to ensure state stability.

The second cluster during 2019-2020 included Estonia, Spain, Italy, Latvia, Lithuania, Malta, Poland, France, Slovakia, and the Czech Republic. Note that Spain and Italy left this cluster in 2021, dropping into the third cluster, and Belgium joined this group. The countries of the second group are characterized as sufficiently developed in terms of socio-economic and sociopolitical indicators but position themselves as countries with an unstable legal and regulatory framework. Most of the countries in this group went through post-socialist transformation and reorientation to market conditions of functioning, which significantly affected the socio-political order, slowing down its development. It should be noted that Italy and Spain, being part of the European Union, are going the way of implementing and unification of norms of national legislation with the standards of European and simultaneously international public law, a feature of which is the establishment of supranational control over compliance with international conventions.

The third group during 2019–2020 includes Bulgaria, Greece, Cyprus, Romania, Hungary, and Croatia, in which the transformation processes are not completed, and ensuring state stability occurs under the influence of challenges, dangers, and threats to the sustainable development of the country. Accordingly, implementing the legal framework of international public law requires due attention. In addition, Cyprus is considered one of the most potent offshore zones, is characterized by loyal fiscal legislation, and is involved in the legalization (laundering) of shadow capital, which greatly exacerbates the problems of ensuring compliance with international public law.

Consequently, the conducted studies allow characterizing the effectiveness level of public administration, assessing the state's political stability, the effectiveness of public authorities in ensuring compliance with law and order, the quality of legislation, and the law supremacy.

#### 6 Discussion

The research results of the specific features of modern international public law in the example of the European Union allow us to identify three groups of countries characterized by standard features of the enforcement and implementation of international public law.

Group 1. In highly developed countries, where a high level of implementation of international public law is ensured, there is unconditional compliance with the basic principles of protection of territorial integrity, sovereignty, strengthening of borders, guarantees of internal security, and norms of economic policy efficiency are provided (Austria, Belgium, Ireland, Luxembourg, Netherlands, Germany, Portugal, Finland, Sweden, and Slovenia).

Group 2. The countries with a relatively high level of sustainable development provide high indices of implementation and realization of norms of international public law. However, in such countries, unstable normative-legal support, because most of the countries of the mentioned group pass the way of implementation and unification of national legislation with the norms of European and international public law, establish an organizational mechanism of supranational control over observance of standards of international conventions and closely cooperate with the countries.

Group 3. Countries with a medium level of sustainable development, characterized as transitional countries, which have not completed the process of structural adjustment, need the support of highly developed countries, are subject to a significant destabilizing influence of destabilizing factors, challenges and dangers, and the mechanism of ensuring high performance of implementation and realization of norms of international public law requires revision and improvement (Bulgaria, Greece, Cyprus, Romania, Hungary, and Croatia).

In this context, we should note that certain EU countries are in close cooperation in the framework of the approved commonwealth and actively cooperate in the transatlantic partnership. In particular, support for democracy, freedom, and the rule of law are recognized as priority interests and goals for countries such as Germany and the United States, which have established effective socio-economic and political ties, thus realizing a high level of compliance with international public law.

# 7 Conclusions

The conducted research on the specifics of modern international public law by the example of the European Union countries allows us to assert that international public law is a system of normative legal rules created to regulate relations between subjects of international public law. International public law has been shown to interact closely with the EU national public law, ensuring the autonomy on the one hand and the interdependence of international and national legal orders on the other, and, equally importantly, does not combine them into global or transnational law. International public law has been found to provide an institutional framework. It protects the common interests of countries in the face of significant destabilizing changes in contemporary international relations, which, in turn, has a substantial impact on the development of international public law. Analysis of trends and features of modern international public law in the EU countries gives reasons to conclude that there are three main groups characterized by standard features of implementation and realization of international public law:

- 1) highly developed countries;
- 2) sufficiently high level of development;
- 3) countries with a medium level of development.

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Primary Paper Section: A

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# TRADITIONAL PEDAGOGICAL APPROACHES IN THE CONTEXT OF HIGHER EDUCATION DIGITALIZATION

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Abstract: Digitalization has become a necessary component of the educational process in higher education under pandemic and quarantine constraints. This study aims to establish the effectiveness of the digitalization of the educational process while preserving traditional pedagogical approaches and determining the assessment that participants in the educational process give to the introduction of high technology in the conventional approaches to learning. The primary method of the study was the pedagogical experiment. The research results show that teachers are pretty positively perceived digitalization. The disadvantages and positions of digitalization should be comprehensively accepted and worked out. Digitalization, together with traditional approaches, improves the skills relevant to the new society.

Keywords: Professional Pedagogical Activity, Digitalization of Education, Value Orientations, Educational Process Transformation.

#### 1 Introduction

The progress of university education digitalization in European countries was greatly accelerated by the beginning of the COVID-19 pandemic in early 2020. Such an intensive and massive transition to distance forms of education needed an active digitalization of the educational process, which was in parallel with traditional pedagogical techniques and is comprehensive. Conducted surveys show positive results (Kuzmina, 2020), where digitalization of education improves relevant skills for the modern labor market and open new horizons of knowledge and skills in the new society. The scientific problem of social and cultural pedagogical impacts on educational processes of high technology remains relevant and open in the research space.

In addition, several studies have looked at the impact of high technology on reducing the costs associated with education. It is a debatable topic, where researchers have noted the need for high financial costs and hiring additional professionals (Alfarwan, 2019), but many studies have promulgated results regarding consistent, stretchy cost reductions related to education. It is also a relevant research problem where the focus is on balancing the positives and negatives of implementing digitalization in the educational process.

New means of shaping education in modern conditions, where digital technology is a necessary requirement of the time, constitute the success of distance education and determine the possibilities of communication in all spheres of society. The educational process at the university is no exception. This learning tool supports well the traditional pedagogical approaches. It is interactive and requires electronic tools and specific qualifications (Faryadi, 2017). The pandemic situation for today's "digital generation" youth requires facilitating changes in learning, the way learning tasks are accepted, processed, and accomplished.

The implementation of the digitalization process involves the involvement of different levels of education, the provision of facilities, and educational and methodological developments.

We are talking about a comprehensive approach necessary for university education. Moreover, the introduction of high technology is associated with the learning capabilities of social networks, cloud services, and network sites (SNSs) (Kostikova et al., 2019). In such a context, the question of how significantly high technology is woven into the social life of young people and traditional university education is acute.

Today, digital technologies have great potential to function in the educational space, defined by concrete and convenient ways of taking, storing, and using educational materials and research results. The involvement of digitalization in the educational process can be of great value in distance education from a pedagogical point of view, as it increases the interest of education applicants in the learning process itself and will increase the motivation of learning through the interaction between all participants in the educational process. Digitalization is a factor of intensification of learning, this interaction in learning in the well-known youth. We should also consider creating conditions aimed at the continuous improvement of technical equipment and the improvement of the traditional education system.

#### 2 Literature Review

The autonomy of applicants is one of the outstanding characteristics of education. Learning that minimizes the intervention of external control, or occurs without the assistance of a teacher at all, manifests the ability to take responsibility for learning and the potential ability to approach the learning situation creatively and at a high technological level (Synorub, Medynska, 2019; Mykytiuk et al., 2020).

Using social media, blogs, and websites in the educational process will help students be active, which is also the goal of traditional approaches (Rababah, 2020).

For the most part, traditional teaching was a closed system where the outcome was measured through tests, quizzes, and research results (Vial, 2019). The emergence of Web 2.0 in the early 2000s brings up a new model that has also been actively researched in pedagogy (Farkas, 2012). Primarily defined by attitudes towards categories such as "authority" and "experience," the digitalization of education leads to a redefinition of such categories. The teacher is no longer the only source of knowledge or authority. There is a whole corpus of learning experiences instead of one. Farkas (2012) calls digital technologies participatory technologies and argues that learning opens new horizons for applicants of education, and they are not limited to the content of lectures and textbooks.

Several studies investigate the use of digital technology by students in the classroom and extracurricular activities (Nenthien, Loima, 2016), project, and creative activities (Howlett, Waemusa, 2019). In addition, researchers investigate the changes in pedagogical formation, where instead of the authoritarian teaching forms appear democracy and a dialogue between all participants in the process (Dzvinchuk et al., 2020).

The pedagogical changes brought about by digital innovation require a shift from unidimensional planes in learning to multi-layered cooperative learning. Several studios have presented better student outcomes when co-learners are exposed to hybrid and digital learning environments (Henderson et al., 2017). Profound and informative education in today's environment involves the creation of hybrid learning environments consisting of models of socio-digital participation on mobile, virtual, online, and mobile space updates (Lonka, 2015). In the last few years, new offerings and players have been entering the education market, but at the same time, traditional universities can take advantage of digitalization to develop new learning and didactic materials (OECD, 2019).

There is also a viewpoint arguing that the main aim of digitalization of university education is to teach young people autonomous lifelong learning regardless of career changes and priorities (Howlett, Waemusa, 2019). Researchers have identified commonalities and differences in democratic and traditional educational approaches and cultural diversity in educational institutions in different countries, resulting in different digitalization outcomes in different cultural contexts (Kuzmina et al., 2020).

Separately, pedagogy presents research on the practical feasibility of digitalization in education, the expansion of the communication circle in the acquisition of knowledge (Köktürk, 2012), from such positions considered the processes of professional development through the use of new educational technologies (Damian et al., 2017), the features of combining tradition and others in the teaching of technical and natural sciences students (Nenthien, Loima, 2016), the development of integrated models of teaching in university education (Dizon, 2018).

This study aims to establish the effectiveness of an educational process digitalization while preserving traditional pedagogical approaches and determine the assessment that participants in the educational process give to the introduction of high technology in the traditional approaches to teaching. The following tasks need to be accomplished in order to solve the research aspirations:

- to establish respondents' evaluation of different forms of university education;
- to determine the frequency of respondents' use of digital educational platforms (Google Meet system, Google Classroom, thematic Facebook groups) in the educational process;
- mobile devices are used in the educational process to establish a set of computer equipment.

#### 3 Materials and Methods

The research project used a comprehensive approach to analyze the theoretical material. Also, we used methods of research analysis and synthesis.

We used observation and questioning methods during the experiment, and the experiment's method became the main one in work. It allows us to test in practice the theoretically developed hypothesis, makes it possible to use high-tech means of communication in the conditions of university education, and an extensive range of communications; reveals the peculiarities of the use of digital technology. Furthermore, the integrated approach in the research methodology allows for collecting the necessary materials, conducting control activities, and measuring the experiment results (pre-experimental and post-experimental evaluation).

The experiment was conducted during the 2020-2021 academic year at the Kharkiv National Pedagogical University, named after H. Skovoroda (Ukraine). First-year undergraduate students of the Faculty of Physics and Mathematics were involved in the experiment. They were united into 3 groups with a total number of 63 people.

The whole experiment was conducted in three stages. The first stage involved the introduction of an experimental questionnaire, preparation of teaching materials, and technical and advisory base for the implementation of the experiment.

The second stage used experimental integrated teaching in the context of digitalization of physics and mathematics disciplines. During the experiment, respondents were added to distance courses in Google Meet and Google Classroom, tests and assignments were conducted on these platforms, and students were added to thematic Facebook groups. As a result, all the mentioned resources have been preloaded with necessary and

specially designed teaching and reference materials, tasks, and control tests.

The third stage included post-experimental questioning, working with the results, and summing up. We measured changes in the frequency of use of various forms of learning and the mastery of new digital learning tools, the ability to use tools in Google Meet, Google Classroom, themed Facebook groups, and mobile applications of an educational nature. In conclusion, we analyzed the respondents' answers in the pre-experimental and post-experimental stages. There were three-answer questions, and the results are expressed as a percentage.

The proposed questionnaires and tests were voluntarily filled out and administered by the respondents. Everyone agreed with their participation in the pedagogical experiment. The research team adhered to ethical principles during the entire study, maintaining participant confidentiality and cooperative and virtuous principles. The study was observational and contained no noninvasive interventions. No interventions affected the honesty and truthfulness of the participants' responses and actions, and the experiment was based on the principles of respecting the respondents' interests.

An experimental framework of the study was designed on a set of specially developed by the research team training materials, which were uploaded to educational platforms and social networks, mobile applications, etc.

#### 4 Results

In order to test the hypothesis presented in the study, a pedagogical experiment was conducted in the conditions of traditional university education. In addition, the study of the educational process with the inclusion of interactive forms of learning with new digital technologies was carried out.

Stage 1: Organizational and Institutional. First of all, a base of teaching-methodical materials was formed, consulting and training of all participants in the educational process was carried out, and a group of technical consultants was selected. At this practical training stage, a preliminary survey of the participating students was carried out. We asked them three questions (see Table 1):

- 1. What form of education do you think would suit you in today's environment? Full-time. Distance. Mixed.
- Which form of education causes you the most difficulty? Full-time. Distance. Mixed.
- Which form of education requires active use of digitalization? Full-time. Distance. Mixed.

Table 1: Survey on respondents' evaluation of different education forms (author's elaboration)

Education form	Question 1	Question 2	Question 3
Full-time	43	22	0
Distance	10	30	51
Mixed	10	11	12

At the initial stage of the experiment, the most accessible form of education was determined by 43 respondents - moreover, the distance and mixed form of education suited 20 people. On the other hand, the distance form of education was considered the most difficult (30 people have difficulties with this form). Active implementation of digitalization is necessary for distance education, according to the majority of respondents - 50 people. However, unanimously in the experimental groups at the beginning of the experiment was recognized the need for active use of high-tech communication tools in modern education.

Stage 2: At the stage of the educational process itself, the respondents were asked to evaluate the set of technological

tools and means used in their learning process by them (see Table 2).

Respondents determined that a comprehensive approach to the digitalization of education involves the mandatory use of Google Meet, Google Classroom, and other learning systems in the learning activities. Therefore, all participants of the experiment (63 people) used the Google Meet system and tests in the Google Classroom system - 62 respondents. In addition, 59 respondents used Facebook groups, 30 students resorted to the capabilities of mobile applications, and 12 diversified the learning process with other digital tools.

Table 2: Set of high-tech and educational tools used by the

respondents (before the experiment)

Number of respondents	Digital technologies tools
63	Google Meet system
62	Google Classroom tests
59	Facebook educational groups
30	Mobile add-ons
12	Other platforms

Stage 3: At the final stage, after determining the learning outcomes, skills, and knowledge levels, the experimental groups were asked to evaluate the intensity of their involvement in using high-tech tools in traditional university education. The question was: Which device do you use most often in your studies? (see Table 3).

Table 3: Use of computer and mobile devices in learning (before the experiment)

DEVICE	Number of students
Laptop computer / Notebook /	36
Netbook	30
Desktop computer	18
Mobile phone with internet access /	58
Smart	36
Phone / Android	38
Tablet / iPad	10

As we can see from the survey, respondents actively use high-tech tools as additional accessories to learning. Therefore, the total number of users of high-tech communication is the majority. 58 people from the group always use cell phones. The least popular was the iPad. It is used only by 10 respondents. It should be taken into account that with the instability of the Internet in certain areas, the use of recorded learning materials is necessary, so laptops and computers remain relevant and convenient (36 and 18 people).

In the final stage, after the control and qualification work, the respondents received a questionnaire in which they could evaluate the form of education and its convenience in an active digitalization (see Table 4).

Table 4: Respondents' assessment of different education forms (author's elaboration)

Education form	Question 1	Question 2	Question 3
Full-time	30	22	5
Distance	20	24	46
Mixed	13	17	12

According to the survey results, most respondents recognized the need for active use of digitalization in modern university education. Regarding distance and blended learning, the need for digitalization was considered by 7% more respondents overall. Also, the importance of improving their competencies was recognized by 12% more respondents overall. 5 identified that face-to-face education also requires the active application of digitalization.

Students in the group showed an awareness of the importance of digitalization in modern education. It expands the

possibilities of university education in conjunction with traditional pedagogical methods.

#### 5 Discussion

Accordingly, the design of curricula, educational and methodological complexes, taking into account the digitalization of education, involves specific difficulties in implementation and implementation. The study (Minedusk, 2014) determined that as a result of the surveys conducted among students and teachers, the largest were the lack of knowledge and skills in the information environment (53%), about 69% named the presence of problems in the development and work with control and assessment materials, 78% were not ready to design educational and methodological support of the educational process, taking into account the need for studentcentered approach. The experiment results showed that 7% more respondents recognized the need for digitalization from the beginning of the experiment. Also, the need to improve their digital competencies is recognized by 12% more respondents in the final study.

Some similar experiments have demonstrated a correlation between the availability of technical skills in integrated learning at HEI and the extent to which participants in the educational process become more creative and establish collaborative relationships with teachers and other group members (Boghian, 2019). The level of student confidence in the digitalization of education in traditional education has increased. We believe that this is due to the general availability of digital technology, the activation of forms of distance education, the emergence of digitized learning materials, and game-based learning applications. The research team agrees with such research results, as students recognized the effectiveness of using high technology in the world. Digitalization increases interest and motivation in learning through techniques adapted to the peculiarities of distance education. Students and teachers may be interested in increasing the share of high technology in the learning process.

In several studies, it has been found that students and teachers have varied experiences with digital technologies, but digitalization has a significant impact on their perception of learning. They better perceive learning platforms and electronic media for educational purposes. The higher the level of digital literacy of teachers and students, the more diverse the information field that can be used in learning (Farkas, 2012; Boyd, 2014), and more excellent opportunities in the context of increased digitalization of education have people with inclusions, vulnerable populations (AmCham, 2021). According to our results, students were more optimistic about digitalization processes, especially in the context of distance and mixed forms of education.

A study was conducted on the characteristics of teaching and learning in the context of intensive digitalization of education, where the capabilities and tools of Web 2.0 are an integral part of education and is used along with traditional pedagogical techniques. Changes were found in students' access to technology and the level of skills in digital literacy - it has significantly improved in a distance education environment. Furthermore, these technologies in the study are available to education applicants of different gender, ages, social background, etc. (Čuhlová, 2019; Cavus, Ibrahim, 2017). The results of our study show that the vast majority of students understand the need for digitalization in their current university education. All respondents perform tests and use digital tools for learning. However, the problematic issue remains the lack of digital education and the insufficient quality of the Internet.

In the future, we should expand the boundaries of the experiment and involve a wider group of students, not only first-year students, especially considering that teachers can work with different courses and in different majors. Some indepth studies, interviews, and focus group work were conducted to understand the content of students' learning

experiences through qualitative sociological research methods. A set of wishes and recommendations should be formed, and research of this nature can form methodological recommendations in the best combination of traditional pedagogical methods and innovations of the digital world.

#### 6 Conclusion

The research results showed that the applicants approve of digitalization and modern technology tools in university education for education. Applicants are ready to get acquainted and use high technology in learning constantly. The experience of students' comprehensive education has shown the positive results of using the capabilities of Moodle platform, Google Meet system, and the capabilities of Google Classroom, social networks' educational thematic groups, mobile apps, etc.

Digitalization within traditional university education can be a driving force of educational innovation. There is an educational space where the benefits of digitization and social media, learning platforms, and software can extend beyond contact learning. Several conditions, technological features, and assistive technologies can make these forms of learning accessible to a wide range of people. It has the potential to make modern European education accessible and democratic, as it will allow the learning material to be adapted to a wide range of educational aspirants.

As shown above, the respondents agreed with all aspects concerning the need to involve high-tech communicative tools in the HEI distance learning process. It increases the communicative capabilities of the participants in the distance education process. Furthermore, the experimental group agreed that electronic means of communication, social networks, online learning platforms, and applications help quality and practical learning in a quarantined and distance learning environment.

The knowledge gained allows education applicants to continually engage in self-education, expanding the range of learning tools used daily throughout life. In addition, a complex combination of traditional approaches and high technology capabilities helps young specialists build their professional development trajectory and work with learning material, online methods, and developing creative and logical thinking.

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Primary Paper Section: A

**Secondary Paper Section:** AM

#### PEDAGOGY OF PARTNERSHIP IN MODERN HIGHER EDUCATION

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Abstract: The establishment of democracy and the transition to new forms of educational activities have necessitated the development of partnership pedagogy. It implies equality in the right to respect, trust, mutual demandingness, and goodwill in the implementation of educational activities. Ensuring constructive cooperation and effective interaction between the participants in the educational process is a requirement of our time. It allows improving the quality of higher education to achieve a high level of academic activity efficiency through innovation. This study aims to substantiate the theoretical and applied research principles into the features of partnership pedagogy in modern higher education. All scientific and special methods of economic analysis are used in the study, in particular: analysis and synthesis; analogy and comparison; generalization and systematization; graphic and tabular methods. Concerning the study results about the features of partnership pedagogy in modern higher education, we established that it is the newest tool of interaction between the participants of the educational process based on equality, openness, and joint achievement of the goals set. The current state and tendencies of partnership pedagogy in higher education institutions in the USA, Great Britain, and Ukraine were analyzed, demonstrating its effectiveness and practicality. It has been proved that the pedagogy of partnership in modern higher education is based on the model of interaction between participants of educational activities, should meet the established criteria, and be characterized by clear parameters, in particular: 1. The ability to create an educational environment that meets the principles of humanity, respect, and perception. 2. The ability to establish effective communication within the partnership interaction. 3. The ability to scientific and pedagogical staff to create the basis for partnership. 4. The provision of command of partnership. 5. The application of self-management technologies. The ar

Keywords: Pedagogy of partnership, innovation, higher education applicants, educational process, higher education, parameters of partnership pedagogy.

# 1 Introduction

Intensification of scientific and technological progress development caused an increased innovation activity, in general, in all sectors of the economy, in medicine, education, science, and, in particular, in pedagogy, and educational institutions, which direct their development in the creative direction, achieve a higher level of competitiveness. Ensuring advanced professional development based on innovation necessitates the introduction of partnership pedagogy in modern higher education as an innovative research direction. It provides an organized system of relationships between participants in the educational process based on common interests, equality, respect, mutual rights, responsibilities, and active participation in achieving the goals set. Challenges and threats of today increase the need to improve the quality of educational activities in higher education and implementation of new methods and technologies of training, as the innovative ability of the higher education system is most fully realized with the tendencies in the development of the principles of partnership pedagogy, which actualizes the topic of research and becomes important.

#### 2 Literature review

Given that pedagogy is one of the methods of learning, the need for its development in the direction of innovation is significant, and the uneven socio-economic development of the country is even more profound. Therefore, the higher education system requires reform and implementation of new content and forms of learning based on partnership pedagogy. Hill et al. (2021) believe that compelling aspects of education have been sidelined from practical use for a long enough time. Nevertheless, the growing need to ensure the well-being of applicants, to support them and their emotions in learning, is increasingly relevant. Partnership pedagogy has the potential to realize the outlined in the following ways:

- 1. Supporting applicants in developing emotional resilience.
- 2. Providing opportunities to achieve positive well-being.
- 3. Forming an evidence-based model to ensure the potential effect of pedagogical partnerships.

In addition, scholars have considered two modes of pedagogical partnership adapted to the higher education environment: student-teacher and student-student.

This theory was deepened and scientifically substantiated by Healey et al. (2014), who noted the interaction of applicants and teachers as equal partners in the implementation of educational activities, and Smagina & Shunevych (2020) added the definition of parameters and indicators of the performance of the principles of partnership pedagogy.

At the same time, Treve (2021) argues that pedagogy development has been significantly affected by the emergence of significant international socio-pedagogical and socio-political challenges and the COVID-19 pandemic, which resulted in the actualization of the transition to "online pedagogy" and the use of interactive learning systems. The scientist posits the need to reduce the destructive impact on the educational process in higher education of such factors as the high level of mobility of applicants, the instability of technological communication, and the differentiation of access to education. This problem became more acute after the full-scale invasion of the Russian Federation into Ukraine, as a result of which a significant part of higher education applicants was forced to internally relocate to safe regions, many of whom have left the country and are in neighboring states. Considering these tendencies, the problem of organizing the educational process in higher education institutions and providing mutual support and assistance has become more acute. Therefore, a study of transnational partnerships in higher education, a concept that Bordogna (2018) develops, is warranted in such a case.

Chou, D. C. (2012) argues that the objective necessity of developing partnership pedagogy in higher education teaching practice requires building a proper model of partnership pedagogy, the dominant success of which should be quality and risk management, effective change management, and close interaction between teachers and applicants. In this context, educational innovation, which includes pedagogical, scientific-methodological, and technological innovation activities, which, in turn, belong to the elements of the national innovation system, becomes essential. The scientist's opinion is shared by Mykhailyshyn et al. (2018), who argue that the innovative development of modern higher education is the key to their success and a factor in increasing the competitiveness of higher education.

Bakay, S. (2021) notes the importance of the democratization of the relationship between the teacher and the applicant of higher education based on a favorable atmosphere in the educational process, implementation of active teaching methods, and development of applicants' initiative. The pedagogy of partnership is one of the unconditional factors of effective interaction of the participants in the educational process in modern higher education. In this context, Korinna (2019) proves that the possibilities of partnership pedagogy cannot be limited to the interaction of applicants and teachers. The scientist convinces of the critical role in this process of such actors as parents, social institutions, and academic institutions, which, taken together, allows for close cooperation for personal development of participants in the educational process in modern higher education in the format of formal and informal communication.

At the same time, Golota & Karnaukhova (2019) note that the effective organization of pedagogical partnership significantly depends on creating a comfortable psychological climate, implementing pedagogical dialogue, and stimulating partners to reflective activity. At the same time, scientists argue that in modern higher education institutions, partnership pedagogy, built on certain principles, acts as an interactive interaction of participants in the educational process, characterized by the openness of communication, organized cooperation, and mutual understanding of partners.

However, Fedirchyk & Didukh (2019) consider the pedagogy of partnership through the prism of reforming all levels of education and perceive it as an essential factor of effective interaction between the participants of the educational process. Its primary purpose is to support applicants, develop their intellectual, emotional, and social capabilities, and match the needs of modern educational theory with the requirements of practice. In this context, the observations of Bovill & Woolmer (2019) suggest that the participation of applicants in the organization of the educational process should be strengthened, in particular by involving them in the discussion and formation of curricula and focusing on proposals for the definition of innovation space and creative development opportunities.

Cook-Sather et al. (2019), while investigating the effectiveness of partnership pedagogy in the United States and the United Kingdom, concluded that the principles of the partnership pedagogy concept have led to the establishment of systemic and institutional support for higher education participants and a changed understanding of learning through its redefinition and promotion of continuous academic development.

Partnership pedagogy is considered an effective innovation method in modern higher education, but according to Woolmer (2018), it has some risks that manifest when a higher education institution is partnering with educational stakeholders. In addition, such risks may modify and intensify their impact. In doing so, Peters & Mathias (2018) note that maintaining the boundary between voluntariness and coercion, crossing which would preclude the implementation of partnership pedagogy principles, is vital in ensuring the functioning of partnership pedagogy.

Crawford et al. (2015) consider partnership pedagogy as one of the valuable characteristics of the interaction of applicants and teachers, building on equality, mutual assistance, and opportunities for self-actualization, and Serrano et al. (2017) convince that partnership pedagogy allows to achieve the expected goals and make the occurrence of destabilizing factors impossible. Furthermore, Buzhinskaya & Suprun (2019) rightly point out that the possibilities of partnership pedagogy allow the effective implementation of inclusive education principles and practices. It demonstrates increased humanity in higher education and a high degree of protection of the interests of higher education applicants.

Meanwhile, Pastovensky (2020) notes the provision of a systematic approach to implementing the idea of partnership pedagogy, built on a variety of partnership subjects' interactions and taking into account the level of development of the country's higher education system.

#### 3 Aims

This research aims to substantiate the theoretical and applied framework for studying the features of partnership pedagogy in modern higher education.

#### 4 Materials and methods

The study uses general scientific and unique methods of economic analysis, in particular: analysis and synthesis, to determine the essence of the concept "partnership pedagogy"; analogy and comparison to assess the current state and tendencies of partnership pedagogy implementation in modern higher education and research its effectiveness; generalization and systematization to formulate hypotheses and form conclusions and research results; graphic and tabular methods to visualize the research results.

We chose such countries as the USA, Great Britain, and Ukraine for carrying out the research.

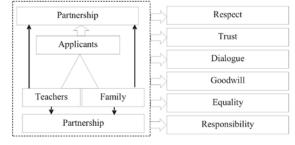
The information background of the study is based on the following reports: A Report on the Findings of the Higher Education Academy Funded Project Examining How Partnership-Based Pedagogies Impact on Student Learning at the University of Lincoln.

#### 5 Results

Partnership pedagogy as an independent and effective method of education and training, based on the principles of the creative approach of teachers and students to develop personality, provides equal rights to participants in the educational process and full responsibility for the results of training. The establishment of active interaction between the participants of the educational process is carried out through the individualpersonal development strategy due to the possibility of changing the structure of cooperation based on the introduction of new principles of communication between the participants of the educational process mutual respect and deep mutual understanding. The main idea of partnership pedagogy is undoubtedly achieved if a favorable psychological climate is created and dialogue for self-reflection and self-knowledge is implemented. Among the basic principles of partnership pedagogy in modern higher education are:

- 1. Respect for each applicant as an individual.
- A positive attitude towards all participants in the educational process.
- 3. Building relationships built on mutual trust.
- 4. An open dialogue based on the idea of interaction.
- Initiating the applicants' desire to be active in the learning process.
- 6. The exclusion of coercive measures towards applicants.
- 7. Intensification of innovation.
- 8. Ensuring social partnership.

Figure 1: The interaction model for the implementation of partnership pedagogy principles in modern higher education.



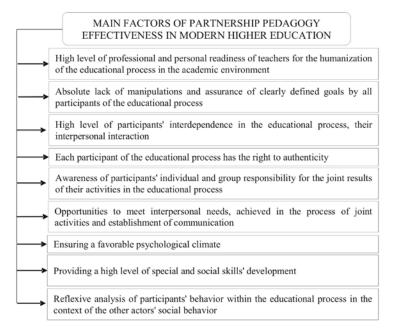
The implementation of these principles will successfully establish a vector of a humane and creative approach to the organization of the educational process in modern higher education. It has already been done in countries such as the

United States and Great Britain, which have formed their pedagogical practice and constitute the main reference points for progressive experience in countries of transitional type, including Ukraine. We should note that even in highly developed countries, the principles of partnership pedagogy are implemented differently, which depends on the duration of education, training profiles, class load, etc. In particular, in the UK, most specialties have shorter training periods than in the US, and the training profile is narrower. Figure 1 shows an

interaction model for implementing the principles of partnership pedagogy in modern higher education.

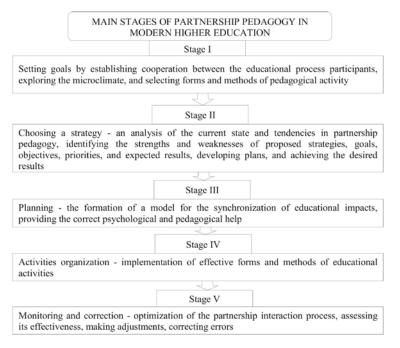
The establishment of effective interaction between participants in the educational process achieved through the proper conditions for forming partnerships between participants in the educational process, pedagogical interaction, which considers the main criteria, the position of which is systematized in Figure 2, remains equally important.

Figure 2: The main factors of partnership pedagogy effectiveness in modern higher education.



Let us admit that the process of pedagogical interaction is based on the creation of a well-established mechanism of interaction between the scientific and pedagogical staff of the institution of higher education and the involvement of students in various aspects of the life of the institution and is realized on a step-bystep basis (Figure 3), which allows achieving the desired effect due to the precise definition of objectives, the right choice of strategy, accurate planning and organization of activities, as well as constant monitoring and timely corrigendum of the detected inaccuracies and lapses.

Figure 3: The main stages of partnership pedagogy in modern higher education.



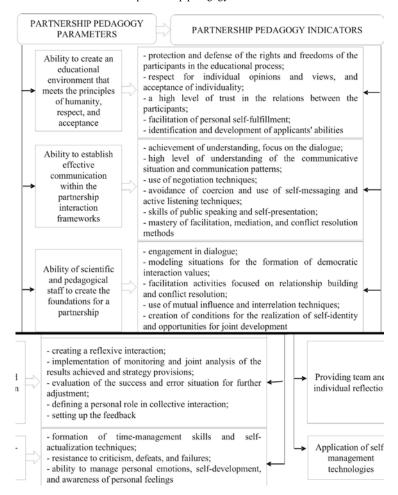
It is evident that globalization has caused profound structural and socio-cultural changes, and the transformation processes in

the higher education system need systematic, consistent, balanced, and effective reform in developing countries.

Partnership pedagogy, capable of ensuring effective communication, a horizontal model of interaction between participants, their mutual respect, cooperation, mutual understanding, and responsibility for the results obtained, is a tool for systemic value interaction of all educational process subjects in modern higher education. In-depth research in the

outlined direction suggests that the effectiveness of partnership pedagogy in modern higher education is characterized by specific parameters. Moreover, it implies the allocation of particular indicators, which we consider appropriate to detail in Figure 4.

Figure 4: The main parameters and the indicators list of partnership pedagogy.



As we can see, implementing the pedagogical partnership principles and their perception is a multi-vector process that requires mastering knowledge, developing practical skills, gaining experience, and forming value orientations. At the same time, Ukraine's desire to integrate into the world's higher education system requires an appropriate adaptation of national conditions to global development tendencies. Undoubtedly, the experience of such countries as the USA and Great Britain is valuable and constructive because these countries have demonstrated the diversification of the higher education system, significant achievements in the organization of the educational process and possession of high scientific potential, and institutional changes in higher education are influential.

# 6 Discussion

The research results of partnership pedagogy in modern higher education allow us to state that the intensification of partnership pedagogy development is caused by the need to optimize the educational process and involves ensuring respect for the individual, equality of rights and freedoms of all participants in the educational process, building a fruitful dialogue, trust, and mutual respect. We should note that the implementation of partnership pedagogy significantly depends on the level of development of the country and the capacity of national education systems. The results prove that highly developed countries, in particular the USA and Great Britain, have quite

effectively tested the basic principles and positioned effective results, which we cannot say about Ukraine, where there are still unresolved problems of substantiation of theoretical prerequisites and foundations of this pedagogy direction, namely:

- the levels of interaction between the subjects are not distinguished;
- problems of the educational process organization;
- incompleteness in forming the interactive activities with the stakeholders.

Besides, a high enough level of higher education system centralization in the transitional countries, such as Ukraine, creates certain limits for developing partnership pedagogics, which manifests itself in the decrease in higher education quality. In their turn, highly developed countries position decentralization of higher education and high level of educational institutions' functioning autonomy.

# 7 Conclusions

Thus, the conducted research on the pedagogy of partnership in modern higher education gives grounds to state that the features

of the pedagogy of partnership are manifested in its ability to define a democratic way of interaction between researchers and applicants for higher education based on the adequate perception of the difference in their life experience, knowledge, and creative success, and also provides unconditional equality in the realization of rights to respect, goodwill, trust, and mutual demands. The processes of globalization and current challenges, notably the COVID-19 pandemic and the war in Ukraine, have necessitated a revision of the higher education system, its modernization, and innovation. It is established that under the conditions of rapid changes, the content of education was significantly influenced, which prompted the formation of a new system of educational relations and updating the organizational mechanism of the educational process participants. That is why the pedagogy of partnership, as one of the pedagogy directions, is an effective means of achieving educational goals based on participants' active and voluntary interaction in the educational process.

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# **Primary Paper Section:** A

Secondary Paper Section: AM

# THE PLACE AND THE ROLE OF FILM TEXTS IN EDUCATIONAL DISCOURSE: LINGUO-DIDACTIC EFFICIENCY

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Abstract: The exploration of the effective use of the linguo-didactic component in educational discourse and the place and the role of film texts in this space is relevant, forasmuch as the active digitalization of the society requires teachers to develop new educational content. The vast majority of studies concern the theoretical aspects of the consideration of didactics in educational discourse. Accordingly, the need arises to conduct the investigations on practical innovations in the field of using film texts in the educational process, as well as the assessment of such issues by teachers and students. Consequently, this has determined the relevance of the academic paper. The purpose of the research lies in establishing the effectiveness of using film texts as a tool of linguo-didactics in the educational process; the assessment of the expediency of introducing film texts with obligatory linguo-didactic significance to the learning process has been also determined by educators and students. The experimental method is the basic one in the course of the research. Questionnaire and interview methods have been also used; the theoretical material has required descriptive method, analysis and synthesis. The main hypothesis lies in the fact that using the film texts in educational activities for learning outcomes and educational purposes is an effective means of improving and modernizing the educational process, which is positively perceived by all participants in the educational process. The results of the research show that the introduction of audio-visual technologies into the educational process for educational purposes contributes to improving the motivation to learn and develop an active social and patriotic standpoint; educators and students make aware of the benefits of using film texts as didactic material is not only a means of learning, but also a factor contributing to improving the motivation of participants in the educational process, enhancing critical thinking skills, a sense of social justice, and

Keywords: audio-visual technologies; higher education; pedagogics; techniques of teaching; video resources.

#### 1 Introduction

Significant research attention to the film text as a tool for the linguo-didactic component of educational discourse appeared in the late 1980s - 90s (Jurkovič, Mertelj, 2015). The capacity of technical means, audio-visual technologies in teaching, the relationship between learning efficiency and the use of digital technologies in the educational process were studied. Over time, the life of the society is generally not conceivable without digital technologies and electronic media. Consequently, the work on the development of linguo-didactic educational materials using digital technologies is relevant, and the efficiency of implementing empirical investigations is analyzed prior to the introduction of audio-visual texts into the educational process. Extensive possession of electronic devices, their availability and convenience have changed the landscape of technological learning. The use of audiovisual technologies has been proven to be a good support, aligned with strategic educational outcomes, such as improving and sustaining students' achievements, supporting the need for intensive learning and involving more educational seekers (Ahmad, M. 2016).

A particular research direction for further development is the analysis of the correlation of mobile technologies with traditional and innovative ways of teaching and learning in a wide range of educational activities (Bilal, et al. 2019). In parallel with traditional education, the opportunities for daily

access to digitized educational resources are growing; the number of learning platforms in the Internet space has increased.

Several modern researchers point out that the film texts (documentaries, fiction picture films, educational animated films and series) should be useful for use not only at the level of learning foreign languages, but also for morale building activities, motivation for learning (Howlett, Waemusa, 2019). Audio-visual technology is a term that means a set of methods, operations and techniques requiring the mandatory application of film resources used for studies and educational purposes (Karpushyna, et al. 2019).

The emphasis of research attention has been placed on different types and forms of digital technologies, their positive and negative aspects influencing the features of organizing and conducting the university education. Facebook communities (Mykytiuk, at al. 2020), ways to use different gadgets, use of video games and testing are considered. The development of the theoretical fundamentals of linguo-didactics, its influence on the educational process has been going on (Hortigüela-Alcalá, at al. 2019). It is evident that an active interest in educational innovations of an audio-visual nature requires their constant verification and analysis at the level of implementation of pedagogical experiments.

Direct investigations of video content, its benefits and drawbacks, positions of use as an educational innovation were conducted in a number of practical studies. Explorations of students' performance level in the educational context and the impact of digital technology on this success were also carried out (Ruey, Kun, 2014).

In the present research, we will focus on the introduction of audio-visual technologies as part of the pedagogical learning strategy and which should be widely used in foreign language teaching, but not be random and accidental. Video content is a modern tool that should be used as a teaching method, forasmuch as films are accessible and effective learning resources.

Heretofore, insufficient attention has been paid to the attitude of teachers towards determining the role and place of the film text in educational discourse, linguistic and pedagogical effectiveness of their use

## 2 Aims

The purpose of the research lies in establishing the effectiveness of using the film texts as a tool of linguo-didactics in the educational process; the assessment of the expediency of introducing film texts with obligatory linguo-didactic significance to the learning process has been also determined by teachers and students. Based on the purpose outlined, it is planned to implement the research aims as follows:

- to establish how teachers and students evaluate the introduction of systematic film texts in the educational discourse in the educational process;
- to determine the assessment of efficiency of implementing the corpus of the video text as an effective linguo-didactic tool:
- to reveal the main positive aspects of the introduction of the corpus of film texts into the educational process.

#### 3 Literature Review

The review of the literature concerning the purpose outlined shows that the first positions are occupied by the thesis about the benefits and importance of the introduction of digital technologies, the possibilities of electronic media educational discourse: educational work and the use of mobile applications (Dizon, 2018; Voinea, 2012); electronic tools in the process of mastering foreign languages as a necessary component of modern education (Rababah, 2020).

The linguo-didactic component in modern pedagogy is closely connected with the involvement of innovative methods in the educational process and the features of the regular use of digital technologies (Köktürk, 2012; Karpushyna, 2019). The positive aspects and problematic issues in the application of audio-visual content to education were considered, forasmuch as not all methods were effective, some of them required the involvement of powerful resources (Cavus, Ibrahim, 2017; Dzvinchuk, et al. 2020). An important component of modern education is motivation to learn (Kostikova, et al. 2020), as well as prospects for increasing motivation to learn using the film texts as language didactic tools (Kaiser, 2011).

There are a number of goal-oriented pedagogical experiments focusing on the use of film texts and mobile content. This is a program designed for Dutch teachers (Smidts, et al. 2008). It contains materials for gaming and creative use (global positioning system), film texts, on the basis of which educational games and examples have been developed. Researchers have revealed that audio-visual technologies, mobile devices and GPS create additional dimensions for interactive learning. In the course of the experiment, students have received a lot of information of different nature, thus, forming connections between the virtual and physical worlds; students find it on their own, where the numbers of levels of perception of information are available simultaneously.

A number of studies (Kaiser, 2011) highlight the importance of applying the film texts to mastering foreign languages: the education seekers improve their critical thinking skills, thanks to the film text, increase their knowledge of the culture, art and traditions of the country the language of which is being studied, and generally develop the personal characteristics of students of foreign language courses (Hortigüela-Alcalá, at al. 2019).

Along with this, the issues of introducing the film text into educational discourse for the purpose of linguo-didactic effect, which would be regular and useful, remain unresolved. Special attention should also be paid to training teachers to use innovative methods involving the application of audio-visual technologies in the education system.

# 4 Methods

The study of the role and place of the film texts in educational discourse, in particular, their linguo-didactic effectiveness is based on an integrated approach.

The survey data were collected during the 2021–2022 academic year (the 1st semester: from September to January) from students and teachers who were involved in the pedagogical experiment; all the participants studied and worked at Khmelnytsky National University (Ukraine).

All teachers (4 people), the participants of the experiment, are certified specialists in the field of linguistics; they possess a doctorate in philosophy. The respondents had from 7 to 14 years of scientific and pedagogical experience, as well as sufficient teaching experience. All teachers have expressed interest in participating in the experiment, in self-improvement of pedagogical skills, forasmuch as all of them are regular participants in internship programs, and have diplomas in nonformal education.

All students participating in the experiment are first-year students (62 people) of the first (bachelor's) level of education. They studied at the Faculty of Humanities and Education, as well as they were taught the academic discipline "Philosophy of Service". All participants in the experiment voluntarily agreed to participate in the research project. Anonymity was granted to all respondents.

The pedagogical experiment consisted of 3 stages, during which the research data were obtained.

At the beginning (stage 1), a corpus of film texts was selected and systematized on the topics of the training course. Preliminary interviews were conducted with teachers and students participating in the experiment. The research team had been working on drawing up a curricular program for the discipline, which provided for the active use of the film texts.

At the 2nd stage, it was planned to conduct an active educational process of working with the film texts in the framework of the discipline "Philosophy of Service". At this stage, all students were united into groups (G1 - 20 people, G2 - 21 people, G3 - 21 people). Further, preliminary testing of the participants for the level of awareness was carried out, which determined their readiness and positive attitude towards the use of the film texts in the educational process. The teachers and the research team had been working on changes to a curricular program, which involved working with the film library as a source of didactic materials for the course.

The final stage (the 3rd stage) included a final interview of teachers and a survey of students concerning using the film texts for linguo-didactic purposes.

From among the shortcomings of the described approach, it is impossible to conduct a deep qualitative study, after which it would be possible to interpret the changes taking place during the experiment. By the way, it should be mentioned about a short period of time during which the experiment lasted.

#### 5 Results

In the course of conducting the research, the focus is on the role and place of the film text as a linguo-didactic tool in the educational discourse.

At the preparatory stage (stage 1) of the pedagogical project, there was an awareness of the positive aspects of using the film texts in the educational process at the level of linguo-didactic presentation of materials. The film text as a tool of linguo-didactics was used in the organization and conducting the educational process. Links to the film text were used in training manuals for practitioners; these are tools to support the successful learning of a future specialist.

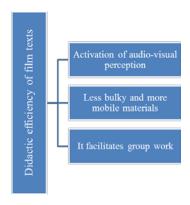
Primarily, students had the opportunity to actively interact with the teacher and colleagues, studying in a group. It is much easier to organize the work of students with a common film text; in addition, such material requires electronic media, which are much more convenient than heavy paper media. The film text can be available regardless of the student's chosen time and place of study – such mobility is a very important point in the choice of mixed forms of learning.

The film text can be an additional motivational element to studying; sometimes the monotony and complexity of learning give rise to depression, unwillingness to learn, while the film material can be useful, interesting, and educational at the same time.

At the beginning of the experiment, planning was introduced, as well as the organization of the educational process with constant coordination and control over the attitude of respondents to the proposed film content and the monitoring of learning outcomes. The entire research plan was divided into stages and assumed the significant use of the film texts and interactive teaching aids.

At this stage, the research team and teachers selected educational material with the necessary interpretations and explanations for students on complex grammatical topics (the use of verb forms, prepositions, articles, suppletive forms, etc.). The video was used not only as entertaining, but also as an illustrative, educational material for topics on English grammar.

Figure 1: The main positive aspects of introducing a corpus of the film texts into the educational process



At the preliminary stage, all students were united into groups (G1, G2 Kharkiv; G3, G4 – Zaporizhzhia), and there were 18 people in each group. Further, the preliminary testing of the participants' awareness level with the grammar of the English language was carried out.

At the 2nd stage of the experiment, the active use of video content was introduced into the educational practice, which was also explained by comments, repetitions of difficult places and clarifications. This stage also included preliminary testing, where

the attitude of respondents to the use of film texts for linguodidactic purposes was revealed. The question "How do you assess the usefulness of using the film texts in training?" provided three response options. The results are presented as a percentage.

Table 1: The 1st stage. Students' assessment of the benefits of film texts as a linguo-didactic component in the educational process (author's development)

Group	p Approvingly Disapprovingly		Don't know	
G1	65 %	24 %	11 %	
G2	66 %	24 %	10 %	
G3	72 %	18 %	10 %	

According to the test results, in general, students approvingly perceive the film texts as a tool for linguo-didactics. In groups 2 and 3, the number of positive reviews is higher. Along with this, there are a significant number of students who could not decide their attitude towards the question.

At the final stage of the project, the results of interviewing teachers, the participants of the experiment, were shown. The teachers were asked the question "How do you feel about the use of the film text as a linguo-didactic tool in education?" The answers at the beginning and the end of the experiment were taken into account and compared.

Table 2: The results of interviewing teachers on the need to introduce the film text into the educational process (author's development)

Teacher	Question	The answer at the preliminary stage	The answer at the final stage
Teacher 1	How do you feel about the use	Positively. I use popular science series	This is a good practice. I believe that
	of the film text as a linguo-	2–3 times in the framework of the school	the educational goal is easier to achieve
	didactic tool in education?	year.	with the help of audio-visual arts.
Teacher 2	How do you feel about the use	Positively. This is a nice way to diversify the	Efficiently. Such experience should be
	of the film text as a linguo-	educational process.	continued, the amount of target video
	didactic tool in education?		content on linguo-didactic topics should
			be increased.
Teacher 3	How do you feel about the use	This is a useful practice. My students watch	This is good; however, I don't think
	of the film text as a linguo-	feature films twice a year. After that, I ask	watching movies contributes to the
	didactic tool in education?	them to write a short review.	morale building activities in education.
Teacher 4	How do you feel about the use	Positively. I use film materials and series	I have enjoyed working in such a way.
	of the film text as a linguo-	2 times a year, at the beginning and at the end	Unfortunately, we do not have enough
	didactic tool in education?	of the semester in order to give the	time for film texts.
		opportunity to relax	

As we can observe, teachers - respondents 3 and 4 were quite sceptical concerning the film text as a linguo-didactic component, actualized in the educational discourse. One teacher is ready to continue to actively use the film text for morale building activities and educational work. In general, all the respondents positively assess the practice of including audiovisual art in the morale building activities and educational work of university education. As it can be seen from the answers, at the beginning of the project, the understanding of the film texts as a linguo-didactic component was unclear and referred more to forms of recreation and encouragement. At the end of the project, the vision of the purpose of using the film texts with educational and pedagogical topics becomes clear and precise. Consequently, there is an understanding of the need to introduce innovations in the educational process, expanding students' opportunities.

At the 3rd (final) stage, a final survey was conducted, which made it possible to determine how students' assessment of the use of the film texts with an element of linguo-didactics has changed.

Table 3: The 2nd stage. Students' assessment of the benefits of the film texts as a linguo-didactic component in the educational process (author's development)

Group	Approvingly	Disapprovingly	Don't know
G1	85 %	12 %	3 %
G2	80 %	16 %	4 %
G3	95 %	4 %	1 %

At the initial stage, students had their own assessment of the need to use film materials in the educational process for educational purposes. The highest number of assessments – "approvingly", the least – express "uncertainty". At the final stage, the students showed an increase in the positive assessment of the film text as a linguo-didactic component by 15%. Testing of respondents at the final stage has revealed that all study groups demonstrate an increase in the level of approval of the innovative practice of using audio-visual content in education, recognition of its linguo-didactic impact.

At the final stage, a survey was also conducted among students with the aim of assessing the practice of introducing video content to the study of English grammar. A number of positive aspects of using the film text were mentioned; the respondents had to note the statements that they had assessed positively.

Table 4: Questionnaire on assessing the level of linguo-didactic influence of the film text in the educational process. (author's development)

Statements	G1	G2	G3
One can get additional technical knowledge; have more opportunities in applying high technologies	37 %	38 %	40 %
Watching the film texts and working on it in a group is a means of increasing active communication, teamwork skills	43 %	37 %	39 %
Movies and TV series are the best reward and entertainment after mastering a difficult topic	82 %	70 %	62 %
New knowledge has a positive impact on the ability to conduct a conversation, navigate the world culture.	65 %	40 %	51 %
With the introduction of video, the materials and ideological content of the topic under study are assimilated faster	46 %	38 %	34 %
It is worth introducing film texts into the educational process on a regular basis	60 %	57 %	63 %

As the survey has revealed, a total of 71 % of the students participating in the experiment believe that films and series are the best reward and entertainment after the end of a difficult topic. The majority of respondents (59 % in total) want to continue the experience of introducing the film texts into the educational process on a permanent basis.

#### 6 Discussion

The issue of the place and the role of the film texts in educational discourse is related to the linguo-didactic effectiveness of such practice. The audio-visual influences of the media text were considered as a factor of linguo-didactic effectiveness in the discourse of education, expanding the horizons of the democratic nature of education (Shim, Lee, 2018; Candlin, Mercer, 2021). Shim & Lee (2018) have argued that film production has a strong motivating effect, forming career aspirations, opening up an understanding of prospects for development in the profession. In the present research, the introduction of the film text into the educational process as a tool of linguo-didactics has been generally positively perceived by the respondents (a total of 59 %). Along with this, more than 70 % of students consider the film text as a means of easy and enjoyable learning, which improves the perception of the material, and it is a reward for intensive work.

Some researchers have also considered the issues of developing critical and analytical thinking skills; the student becomes more and more demanding on the quality of educational content, methodological diversity (Canning-Wilson, 2000).

The focus was often placed on studying the influence of the linguo-didactic component on the basic principles of university education, namely, the influence of using mobile and other gadgets in the educational process, in fact, providing the opportunity to listen and perceive various materials at the right time and in a convenient way (Hashemi, et al. 2011). It should also be mentioned that in the course of our research, in addition to increasing the positive attitude of students towards the film texts in the educational process (increased by 15 %), an important component of the experiment was a carefully prepared and clearly formed curricular program and selected film texts with a linguo-didactic load.

Activities with film content also include the development of new methods and forms of teaching, ways to improve and modernize curricula and the content of training courses at the level of higher education (Čuhlová, 2019; Thompson, Lee, 2018). Researchers have developed a set of didactic materials based on the use of audio-visual content (Sánchez-Auñón, Férez-Mora, 2021). By the way, an increase in students' motivation to learn foreign languages has been established. In the presented research, interviewing teachers revealed that teachers have noticed a positive attitude of students towards the film texts, the motivational component of such technology. Furthermore, more than 59% of respondents consider the introduction of the practice of using the film text in the educational space to be the beneficial one.

Directions for future research should focus on new ways of introducing audio-visual technologies into the educational process, as well as practices should be developed in order to

increase the pedagogical skills and digital literacy of teachers working in university education sphere.

#### 7 Conclusion

The conducted research shows that the introduction of the film text in the learning process has a number of benefits. The use of the film text in the educational process is a useful tool in the introduction of language didactic component in the university education. The film text can be an essential factor in engaging students in active learning and social activities where more traditional methods have failed or become ineffective. With the use of audio-visual content, the learning world becomes mobile, more flexible and exciting. The film text as a part of electronic technologies is promising; it can be used in formal and informal learning environments, allowing students to independently manage part of the learning space. Motivation as an important part of the learning process can be enhanced through the use of the film texts; it is precisely such means that play a clear role in improving the quality of education.

The film text in educational discourse and linguo-didactic effectiveness of audio-visual content are defined as important, necessary and innovative conditions for modern university education. The respondents were generally positive towards the educational role of the film text; they consider it influencing performance success: positive expectations from the use of the film text in education amounted to 59 %. At the same time, during the research, students' perception of the use of audio-visual technologies as a linguo-didactic educational component improved by almost 15 %.

In the course of interviewing teachers, it has been established that after participating in the experiment, some of them (50 %) consider it appropriate to introduce a systematic approach to the linguo-didactic component of the research with the involvement of the film text; in general, modern education requires the constant introduction of new high technologies into educational discourse

In prospect, it is important to continue conducting investigations of the influence of modern digital technologies and electronic media on educational discourse. After all, the innovative technologies in the university education not only improve the level of education and technological skills, but also increase the awareness of students about intercultural, artistic, scientific aspects of the world development.

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#### Primary Paper Section: A

### **Secondary Paper Section: AM**

#### THE DEVELOPMENT OF CHORAL ART DURING A WAR

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Abstract: The article examines the main trends in the development of art during the war in the context of Ukrainian contemporary musical culture. Choir troupes, as a form of revealing the participants' creative potential, are a means of uniting people, allowing joining the cultural heritage to become an essential part of rehabilitation in extreme conditions. It is the reason for the relevance of the theme of the study. This article aims to establish the main areas of choral art impact during the war and to identify changes in the methodology and content of choral art under extreme conditions. The article describes how we can mount new directions of choral art development and thematic constants in war conditions.

Keywords: Choral Art, Military Activities, Choral Genres, Choral Styles, Conducting and Choral School.

#### 1 Introduction

Recent events have been a tremendous and frightening challenge to the entire Ukrainian choral ensemble system. It has set many challenges for governmental and non-governmental creative teams, the educational system, and music institutions, requiring global, cardinal, and substantial shifts in choral art, especially in the coordinate system of the music industry.

The development of choral art for the creative industry is a fundamental theme, and the war was a pivotal factor in implementing transformations. Civilizational processes such as pandemonium and war have been a catalyst for reforming the managerial and communication foundations in the European and Ukrainian musical arts (Cleland et al., 2020, Juško-Štekele, 2022). Nowadays, this is a vast field for research work. We should analyze the extent and degree of changes in the content and artistic and creative approaches to the choral art. The basis of cultural influences, concert and festival activities (Shcherbonos, 2014), changes and the quality of the repertoire performed, and cultural aspects that influence audiences (Boghian, 2019; Čuhlová, 2019) are being reconsidered. Such shifts in the music industry were caused first by quarantine restrictions due to the pandemic and then by the ongoing active hostilities in Ukraine.

Choral art has long contributed to the discovery of human creativity. It is also a way for people from different social groups, levels of affluence, age, gender, etc., to come together. Furthermore, the choral singing art opens the possibility of getting acquainted with the folk-song heritage of the world and promotes public performances, festivals, and concert activities.

In order to establish the specifics and main trends in choral art during wartime, it is necessary to consider the features and main directions of choral art development in the XXI century in the context of Ukrainian and European musical culture. All this involves the consideration of the main directions of development and the activities of outstanding teams or figures who experienced a successful experience under martial law conditions. The research is scientifically directed to establish the main changes in paradigms and two socio-political trends affecting the development of Ukrainian choral art.

Several studies have named the features and conditions for the successful functioning of choral groups in all types of settlements in Ukraine in Soviet and post-Soviet times (Puchko, 2007). This type of research involves considering those factors designed to preserve the tradition and transform the organizational foundations necessary for the growth of skill and professionalism of choral ensembles. Therefore, consideration of

the realities of contemporary life and choral development is an essential part of the research paradigm.

The music industry's broad, creative, and artistic character should be viewed from the perspective of defining algorithms for creating favorable conditions for the development and functioning of the choral arts.

#### 2 Literature Review

The formation and development of a highly professional choir involve much work on the part of the conductor, performers, orchestrators, composers, and all management and administration representatives. Historians of musicology, theorists, and practitioners of choral art have determined (Riabukha, 2017; Tsiupa, 2016) that the formation of a high level of choral art is a long, complex process that requires much effort and requires personal qualities of conductors and leaders organizational skills, creative potential and initiative.

Some art studies have noted that a large constellation of prominent conductors who have also worked with choral art has been developing, strengthening, and expanding in Ukraine for a long time (Tkachenko, 2016; Martynyuk, 2020). These figures are the organizers and participants of influential schools (M. Kolessa, M. Lysenko, P. Demutsky), and further development of skills belongs to contemporaries - I. Bermes, I. Hamkala, S. Datsyuk, L. Ivanishina, A. Avdievsky, E. Bondar, L. Baida, E. Savchuk.

Studies of the history and development of choral art in Ukraine have identified the existence of many conducting and choral schools (Martynyuk, 2020). In the context of consideration of musical and educational processes in Ukraine, as well as historical and pedagogical aspects of the study of the phenomenon of choral art, Lviv, Odesa, Kyiv, and Kharkiv conducting and choral schools of the XX - early XXI century are singled out consideration and comparison of the development and functioning of choral traditions of Ukraine, awareness of their experience.

It was noted that the Lviv School of Conducting and Choir is characterized primarily by the constant expansion of the genre spectrum, multifunctionality of the artist-teacher, and the tendency to increase the performance of interpretive models of Ukrainian and world choral music, innovative activities in pedagogical approaches and teaching principles. Furthermore, from the end of the XX to the beginning of the XXI century, Lviv Conducting and Choral School has a solid scientific base and is working to deepen and expand the range of scientific problems that define this conducting and choral school.

Most of the works emphasize the trend toward developing Ukrainian choral art and pedagogy, as well as the positive dynamics of the development of choral art in Western Ukraine.

The heritage and traditions of the Odesa Conducting and Choral School of the XX-XXI centuries were also considered (Martynyuk, 2020). The versatility and multifunctionality of the conductor's work, high level of musical education, tendency to master different types of choral performance (academic choral singing; singing in folk traditions, chamber choral singing, male choral singing) and openness of artists to experiments and all levels of cooperation were named.

Ukrainian choral art is also represented by the Kyiv Conducting and Choral School of the XX-beginning of the XXI century. In some studies (Kovalyk, 2010; Bondar, 2005), its bright character and power are noted. The school representatives' creative work is characterized by the implementation of deep musical and theoretical knowledge in the educational system. Several researchers testify to the trend toward universalism in creative

activity and educational priorities. The Kyiv school was always marked by performing and pedagogical activity.

The performing and pedagogical system of the Kharkiv Conducting and Choral School was investigated in art history works (Martynyuk, 2020). Among the dominant features were high performance, pedagogical excellence, and active scientific and managerial activities. In addition, there is a constant updating of teaching methods in education. As a result, the performing style of conductors and ensembles is becoming more complex. The Kharkiv Composing School actively cooperates with representatives of choral singing.

Research in a separate area reveals the scientific and practical foundations of choral art's style and genre palette (Dzivaltivskyi, 2020). The scientist notes that the importance of the category of genre and style in choral art is an objective and concrete reality rooted in practice, where choral music is a multilayered and complex form of evolution, as well as adaptation to the modern requirements of creative attitudes and society.

The range of research in music education is defined by considering the problems associated with implementing distance education, which has become popular in recent times. This form activates and motivates creative individuals to learn and perform under crisis and stressful conditions (Cleland et al., 2020). We are talking about the transition and adaptation to distant forms of communication and changes of perception by all participants in the creative process. The main one was identified as being open to change, motivation, social support, and adapting to new forms of leadership and administration (Ko et al., 2013; Wynne-Jones, 2021). Such practices helped some choral ensembles adapt to the extreme war conditions, evacuation, and difficulties in carrying out their activities.

This study aims to establish the main influences of choral art in war conditions and to determine changes in the methodology and content under extreme conditions. The article describes how new directions of choral art development and thematic constants can be mounted under war conditions. It involves several specific tasks:

- to establish the main lines of action and development of the choral arts during the war;
- identify the new needs and difficulties encountered in the realization of choral activities during the war;
- to identify trends of change in choral art from the viewpoints of choral ensembles' members;
- to establish the personal opinions of choral members on changes in choral activities from February 2022 to May 2022.

#### 3 Methods and materials

The methodology is based on a comprehensive research approach. It is used in this paper to describe, elaborate, and perform research tasks. Scientific and theoretical studies of choral art, its genre, stylistic and regional specificity involve using descriptive methods, analysis, and synthesis. Moreover, the research nature implies a sound theoretical foundation and consideration of past research experience.

The online survey method was used from February 27, 2022, to May 27, 2022, and lasted three months. The survey was conducted using Google Drive forms among choral groups from different regions of Ukraine, representing other conducting schools, genres, stylistic trends, forms of ownership, and traditions.

The study used data from work with the Ivano-Frankivsk National Academic Hutsul Song and Dance Ensemble "Hutsulia" (C1), representing the Lviv Conducting and Choral School. It is a professional state-owned ensemble with a glorious and long history and traditions.

The Academic Choir named after Viacheslav Palkin (Kharkiv Conducting and Choral School), was also involved - C2. Since 1990, the Kharkiv Chamber Choir was called the Academic Choir named after Viacheslav Palkin, became a professional ensemble, and joined the Kharkiv Regional Philharmonic Society as part of the artistic team. The large and powerful Kyiv Conducting and Choral School is represented by the Archdiocesan Chamber Choir "Oranta" (Lutsk) - C3. The Student Choir of the Odesa National Music Academy named after A. Nezhdanova (C4), is a bright representative of the Odesa Conducting and Choral School. We chose 120 choir members, 10 teachers, and conductors working and studying in Ukrainian culture and education institutions to participate in the survey.

Surveying is the focus of the proposed study. It is a way to monitor the attitudes of all participants in choral activities to show attitudes toward changes related to martial law in extreme situations. Both this and the experiment allow us to define changes in choral art as a socio-cultural phenomenon. The extent to which these changes are systemic, affecting creativity, training and concert activities is reasoned. Questioning is applied to assess changes that have occurred in the personal and professional activities of music industry workers working under conditions of war. The professional skills importance and the vision of their mission while realizing the ideological and artistic precepts of choral art during the war are determined. Regarding the topic of communication, distance work, attitudes toward changes in methods of communication, management, and cooperation, and how much need participants in the educational process of application of interactive learning tools in a distance learning environment. The research aim also determined the use of surveys, questionnaires, and statistical and mathematical methods (qualitative and quantitative).

The survey process was conducted over a three-month period in three stages. First, we formulated questions and survey techniques according to the viewpoints of performers, orchestrators, conductors, and teachers, which were established through regular surveys.

The first stage (March 2022) involved a survey determining the difficulties and problems associated with choral performance during wartime. The second stage (April 2022) included a survey whose analysis provided an opportunity to identify trends in choral art from the perspective of choral members. Finally, the third stage (May 2022) established the personal opinions of choral members about changes in choral activities between February 2022 and May 2022.

We completed questionnaires with the consent of respondents who voluntarily agreed to participate in this study - the research team adhered to ethical principles throughout the experiment. Information collected through the questionnaires did not affect participants' dignity or anonymity. The study didn't contain non-invasive interventions; our team applied no actions that affected respondents' honesty and frankness, and the research team did not violate the interviewees' interests.

Among the disadvantages and difficulties observed during the experiment are: the heavy emotional state of the respondents, the time required (3 months), and communication challenges. Also, it is impossible to determine the reasons for these assessments (selected), as the research team did not have the opportunity to conduct a broad qualitative investigation.

# 4 Results

The Ukrainian choral art keeps developing even in extreme conditions and hardships caused by the war. The level of choral performance and orchestral mastery continues to grow, the musical language and compositional creativity in the choral genre become more complex, and the schools of conductors at higher educational institutions continue their creative search. All these tendencies call for even greater efforts in the professional training of future artists in the choral art.

The war significantly changed the direction of choral art development in Ukraine. However, on the whole, it is possible to identify several trends in the activities of Ukrainian choral groups, which began to be actively introduced under martial law (see Figure 1).

Figure 1: The main directions of the choral art development during the war



Choral art during the war should be aimed at supporting the morale of the Ukrainian army and creating positive therapeutic influences on civilians caught up in war situations. Everyone involved in choral activities should create propaganda works, strengthen the people's spirit, and support the population supporting their army. Choral art is meant to appeal to be prepared to lose and skulk, which is an integral part of the war. For example, the Halychyna Chamber Choir "Yevshan" (https://galician-choir.com), existing in Ukraine since 1990, took part in the all-Ukrainian action of support "Prayer for Ukraine" its repertoire is actively supplemented by works of Ukrainian composers, stylized works on folklore themes (M. Datsko, M. Lysenko).

The anti-war movement is also becoming a part of Ukrainian choral art. First of all, this should be a government policy and part of the activities of pacifist public organizations. It is working to change the repertoire, the audience, and the script to agitate for peace, to condemn violence and destruction. Choral groups in the South and East of Ukraine, such as the Academic Choir named after Viacheslav Palkin and the Student Choir of the Odesa National Music Academy named after A. Nezhdanova, faced this need. These are changes in the works of Russian Soviet composers, the active introduction into the repertoire of the heritage of contemporary Ukrainian artists.

Choral art can also aim to demoralize the enemy, first of all, a loud and demonstrative rejection of works that are the cultural and national heritage of the enemy. For example, Ukraine refused to perform works by Russian composers, partly by Soviet composers, and a complete rejection of the history and art of the enemy's culture. For example, in Ivano-Frankivsk and Ternopil oblasts, city authorities prohibited street performers from singing in Russian (War in Ukraine, 2022).

During the war, choral groups and representatives of the choral arts should continue to be active in concert and public activities for charitable purposes. The money earned through performances is sent to support the army, meet humanitarian needs, and support war-affected citizens. In addition, the arts can be a rewarding and supportive experience for audiences. Such are concerts in a war zone for civilians hiding from death and destruction.

A different theme that has influenced the development of choral art in war is the charitable work of art people. This possible participation in the reconstruction after the war, an active concert schedule, the funds' collection for the wounded and the injured, the restoration of the national economy, and assistance to the refugees and the victims. For example, the Oranta Choir and the Yevshan Choir actively perform charity concerts and raise funds to support the military ("Despite the War," 2022).

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Table 1: New demands and emerging difficulties in implementing choral activities during the war (author's elaboration)

№	Difficulties	Group	Significant	Not significant	None
1.	to acquire and	C1	23%	57%	20%
	develop	C2	40%	57%	3%
	practical	C3	30%	40%	30%
	skills	C4	25%	60%	15%
2.	cooperate and	C1	23%	57%	23%
	communicate	C2	40%	60%	10%
	(lack of premises,	C3	15%	75%	10%
	opportunities to gather)	C 4	32%	60%	8%
3.	radically	C1	30%	60%	10%
	altered	C2	20%	77%	3%
	repertoire,	C3	10%	84%	6%
	large volumes of novelties	C4	10%	70%	20%
4.	psychological	C1	45%	45%	10%
	problems of	C2	50%	47%	3%
	colleagues	C3	50%	40%	10%
	and audiences	C4	28%	78%	0
5.	a lot of own	C1	10%	75%	15%
	resources	C2	42%	45%	3%
	have been	C3	18%	52%	30%
	spent	C4	25%	70%	5%
6.	unable to	C1	65%	30%	5%
	work	C2	60%	37%	3%
	creatively, personal	C3	50%	33%	17%
	problems, stress	C4	32%	46%	12%
7.	financial difficulties,	C1	10%	60%	30%
	no necessary premises,	C2	70%	30%	0%
	conditions,	C3	73%	12%	25%
	equipment	C4	26%	34%	40%

The choirs' members identified the main concerns, which they consider to be quite significant. Among the biggest are

psychological and personal problems (on average, 96% of respondents noted their presence). Respondents also named the more severe ones the problem of material difficulties and proper conditions. Constant bombings (C2), sirens, alarms, delays in wages, and their reduction were cited as an argument. These are understandable factors, too. Less problematic was distant communication, the difficulty of not having direct contact because the quarantine system of prohibitions led to the fact that everyone was used to such a system. However, such communication was problematic (76% of respondents). In the final survey phase (May 2022), respondents were also asked to evaluate the role and place of the choral arts during the war. Again, we offered a series of closed-ended questions. The results are presented as percentages.

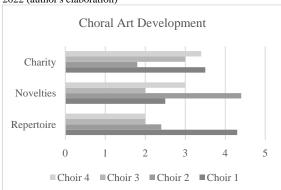
Table 2: Change tendencies in choral art from the perspective of choral members (author's elaboration)

	Question	Yes			No				
	Question	C1	C2	C3	C4	C1	C2	C3	C4
1	Does the war affect the choral art and repertoire?	86	94	80	90	14	6	20	10
2	Does the war affect the manner and style of performance?	15	32	12	27	85	68	88	73
3	Will the war have a lasting effect on the arts?	75	97	89	90	25	3	11	10
4	Is the choral art developing?	89	68	83	74	11	32	17	26

As the survey results show, all choral groups believe that Ukrainian choral art is developing (79% of respondents in total) and has undergone significant changes in the repertoire (87%). However, some respondents noticed fewer changes in stylistics and manner of performance (28% in total). In addition, some respondents do not see the early effects of the war (11%).

The study also analyzed the changes in the performance of choral groups that they underwent during the war. In addition, the research team monitored publications on these choral groups and surveyed members of the choral groups about their forms of activity. Finally, we evaluated it according to a 5-point scale (see Figure 2).

Figure 2: Choral activities change from February 2022 to May 2022 (author's elaboration)



As can be seen from the Figure 2, results during the war, active charitable activity is less in C2 because it was in the territory of active military operations and had limited opportunities, but during this period should be noted high innovative activity of the team, work with the repertoire and its changes. Thus, concert programs of modern Ukrainian composers were developed, and special attention was paid to composers of Slobozhanshchyna, compositions by E. Stankovych and V. Runchak. The Hutsulia

choir showed the most significant activity in the changes caused by the war: it is an active work with the repertoire, appeals to the results of modern Ukrainian composers, and was noted for great charity activities (participation in fundraising, charity performances). Consequently, depending on the degree of the extremity of the situation, the distance to the places of active hostilities, the activities of choral groups take place. Where there is an opportunity to conduct the energetic concert and charitable activities, there is work to improve skills, changes, and the formation of the repertoire.

#### 5 Discussion

The development of choral art in the Ukrainian space is defined by deep traditions, a high level of performing skills, rich and diverse repertoire, which in the current extreme situation has received a new impetus to the development and strengthening of national foundations.

Andriichuk (2020) studied amateur choral collectives of Ukraine, taking place against the background of the development of Ukrainian musical culture in the Soviet and post-Soviet periods. The researcher noted that significant historical shifts contribute to the emergence of new directions of "waves". So, in the Ukrainian choral art during the thaw, the first wave appeared, where the music in the clubs and palaces of culture contributed to the development of amateur choral art, the second wave arose in the days of the announcement of the independence of Ukraine, where the development of choral art occurs in line with the intensive development of national culture and art (Andriichuk, 2020). Participation in various festivals and competitions stimulates its development. Our research can be considered to describe the beginning of the "third wave" of shift and choral art development in Ukraine. We noted significant changes in the repertoire, the intensity of charitable concert activities increased, and the majority of respondents identified (90%) the presence of long-term changes.

A series of theoretical studies on the definition of specificity, styles, and genres (Bermesu, 2022; Martynyuk, 2019) of choral art pointed to its complexity and tendency to change, and extrapolations of genres indicated that the basis of choral singing is a set of timbre and composition positions: harmonies, textures, techniques that define the choral parts and groups, the musical composition, etc. (Batovsjka, 2019). The development of the artistic paradigm is determined by the aspiration of Ukrainian choral art to develop. In our study, we presented that choral ensemble believe that Ukrainian choral art is constantly evolving (in total, 79% of respondents). Ukrainian choral troupes experience changes in the repertoire (87%), genre and style priorities of artists, and evolution in the manner of performance (28%). All of this demonstrates the ongoing development of choral art in Ukraine.

An article on the role of art in war (Brancati, 2018) described 5 main areas in which art and war can be represented. These are agitational works, cherishing and disseminating their own culture, pacifist and charitable activities, and functions of material and moral support by artists of their people. The research results of our study showed the scientific potential of this direction. Respondents during the survey identified the above principles of development, which are being developed and actively supported by members of the choral collectives throughout Ukraine.

In our opinion, further research in the development and study of choral genres and styles will significantly expand the scientific and practical base of choral art, as well as contribute to the deepening of methodological principles of choral studies.

#### 6 Conclusions

The development of choral art during the war can be effective and associated with the sharp socio-political changes in Ukraine. The evolution of this music branch is determined by the constant work on improving performance skills, deepening the knowledge

system on the conducting and choral art, highlighting the historical evolution of choral art, and the innovation of views on this development.

The technology of choral craftsmanship and music education need systemic solutions to facilitate the interaction of all participants in the creative process with the involvement of opportunities and innovations in art education, which in wartime appear as a challenge to the artist.

The development of choral art in times of war involves the focus on supporting the fighting spirit of the Ukrainian army; creating a positive atmosphere for listeners who find themselves in a situation of war; work on writing propaganda and patriotic works that strengthen the popular spirit; active participation in the anti-war movement protests against violence and civilian deaths; demoralizing the enemy, the active denial of his cultural manifestos; energetic concert and educational activities for charity, supporting the population and their military forces.

In the future, we should work on the development of the content components of the new training and conducting disciplines aimed at changes in the system of artistic education and culture in the state; comprehensively update the performance style of conductors and choral groups, to work in the context of the constant complication of the language of contemporary music. In our opinion, it is also necessary to actively develop the scientific-theoretical base of the choral art development to cover the achievements of scientific thought in publications.

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# LANGUAGE PORTFOLIO FOR PROFESSIONAL PURPOSES: INTERDISCIPLINARY EFFECT ON PROFESSIONAL COMPETENCE FOR PROSPECTIVE SPECIALIST IN UKRAINIAN AND CHINESE UNIVERSITIES

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Abstract: The given paper discusses the effectiveness of "Language Portfolio for Professional Purposes" technology in setting up interdisciplinary links while learning English for professional purposes, and in producing a positive effect on developing professional competence in the professional field of study. The research goal is to analyze and prove the efficiency of the mentioned technology in the course of professional competence development for prospective specialists studying at the Faculties of Foreign Languages; Institute of Philology (Linguistics and Translation Department); Primary Education Theory and Practice Department; Educational and Scientific Institute of Trade, Service Technologies and Tourism in Luhansk Taras Shevchenko National University, Borys Grinchenko Kyiv University, SHEI "Donbas State Pedagogical University" in Ukraine and Northwest Normal University (Lanzhou, China). The proposed technology promotes Ukraine's and Chine's integration into the global information space, making prospective professionals mobile and adaptive to the dynamic requirements of the labour market, which allows achieving professional self-realization taking into account educational goals and individual characteristics. To test the effectiveness of the proposed technology and the level of professional competence development, the method of pedagogical experiment has been used in the experimental and control groups of prospective specialists studying at the listed departments, faculties, institutes and universities in Ukraine and China.

Keywords: Interdisciplinary effect, language portfolio for professional purposes, prospective specialists, professional competence, Ukrainian Universities.

# 1 Introduction

The world tendency to total globalization forces Ukrainian Universities to follow international courses, which intensively requires rethinking the ways to form the professional competence of prospective specialists in various fields in the process of their professional training. According to such internationalist trends, the Ministry of Education and Science of Ukraine, under the support of the British Council in Ukraine, has justified the priority and relevance of establishing interdisciplinary links with an emphasis on improving English language teaching within the project for Bachelor students "English for the universities". The results of the project prove that at the Bachelor's level there have been provided the following brand new changes in the context of their professional training: following the scale of Pan-European Recommendations on Language Education, new standards have been developed and incorporated into every aspect of foreign language teaching; teaching curricula have been improved (thematic materials, assessment, etc.) to stimulate professionally oriented and competence-oriented activities; the total hours for teaching English for professional purposes have been increased; English teachers have been trained to work at the university with students of various specialties; interdisciplinary links with specialized departments to select authentic material for the classes have been established, etc.

Following the above-mentioned recommendations, Luhansk Taras Schevchenko National University; Borys Grinchenko Kyiv University; SHEI "Donbas State Pedagogical University" (Ukraine) and Northwest Normal University (Lanzhou, China) have taken up fruitful interdisciplinary activity to train prospective specialists at the Master's level, which has led to a completely new relationship between English for professional purposes teachers and teachers of professional disciplines. In the process of collaboration and following the influential globalization triggers and global educational trends, taking into account specific national traditions and experience of working with students; incorporating project recommendations provided for Bachelor students, the authors' vision of technological support for prospective specialists is suggested. The technology adapted and presented in the research provides an opportunity to establish interdisciplinary links while learning English for professional purposes and developing professional competence in the field of study. The proposed technology (language portfolio for professional purposes), additionally promotes Ukrainian and Chinese integration into the global information space, making prospective professionals mobile and adaptive to the dynamic requirements of the labour market, which allows achieving professional self-realization taking into account the educational goals and individual characteristics.

Consequently, in the context of this paper, we shall illustrate the results of the research conducted at the university within two completely different specific departments. It should be emphasized that although the results of the study show efficient dynamics in these specialties, the ideas underlying the study can be adapted by any specialty that is focused on training prospective specialists.

Ukrainian and Chinese accession to the Bologna Process has obliged the education system to adopt the European experience have already led to significant steps to improve approaches to professional competence development in general, and to foreign language teaching in particular. With the support of the state and international organizations, university teachers direct prospective professionals toward active involvement in the global educational environment, expand the academic mobility of the participants of the educational process, initiate the exchange of scientific information through internationalization strategies, and introduce modern techniques of foreign language teaching. Nevertheless, the problem of training prospective specialists in various fields of knowledge remains urgent, since the aim of such training is to provide the modern labour market with such professionals who can self-realize and meet the demands of the labour market, i. e. they should have a highly developed level of their professional competence.

Analysis of scientific works on the professional competence development in prospective professionals within competence-based approach has proved that the system of professional training of prospective specialists in various fields of knowledge encourages to combine traditional forms and methods of teaching with personality-oriented technologies, as well as with practically oriented, humanistic content with a focus on the goal, and apply efficient and creative-technological forms and methods. This approach is considered especially vital for prospective specialists, who have a strong motivation to learn, are aware of their individual characteristics and educational goals, have life and professional experience that contributes to professional development and self-realization. They constantly broaden their professional horizons regarding professional competence; promote professional awareness and generate professional and creative initiatives. They are stimulated to personal and professional mobility and activation the mechanisms of self-development, self-education and selfrealization. They also identify themselves as prospective specialists with developed professional competence; assess various professional phenomena to solve certain professional tasks (Hamidova & Ganiyeva, 2020; Epstein et al., 2004; Chivers, 2007).

These characteristics of prospective specialists studying in different specialties made us reconsider the process of professional training so that it echoes the idea that Ukrainian high school has the opportunity to show "international orientation as a response to globalization" (Stromquist, 2007; de Witt, 2002).

According to the Ministry of Education and Science of Ukraine in cooperation with the British Council in Ukraine, the national strategy for Ukraine's internationalization above all involves the study of English for professional purposes. According to the idea, prospective specialists will be able to interact professionally in a fruitful globalized collaboration with their colleagues abroad at various levels (Bolitho & West, 2017).

Thus, we have come up with the idea to create a simulated learning environment, which uses the potential of relevant social institutions to coordinate their facilities to make an adapted content focused on the development of professional competence of prospective specialists in the course of their professional training using English for professional purposes (Bruno & Dell'Aversana, 2018; Miftachul et al., 2018; Mohr, 2017). Consequently, prospective specialists will be able to increase their level of professional competence while working with: government agencies that promote the professional development of prospective specialists; international institutions that are involved in improving the professional competence of prospective professionals in various fields; Internet sites for distance self-education, focused on prospective specialists training in various branches; international programs and grant opportunities; libraries of different levels; regional and international cultural organizations, etc.

Due to the limited period of professional training (1.5 years), we focused on such technology, which allows us to technologically develop professional competence in the course of professional training of prospective specialists. Considering the powerful interdisciplinary capabilities (Jacob, 2015; Bronstein, 2003) we have come up with the idea that interdisciplinary links should be set up within the individual activities of students, giving them the right to self-expression and self-realization. Thus, as a hypothesis, we assume that established interdisciplinary links will increase the level of professional competence of prospective professionals from various specialties.

# 2 Literature review

Searching for an effective technology for this idea, which shall provide an opportunity to plan individual work of prospective specialists on the background of individualization, variability, self-education, self-improvement, and self-realization in the context of professional competence development in prospective professionals, we have turned to the portfolio method (Farrell, 2021; Weldeana et al., 2017) which we have slightly adapted taking into account our specifics and goals.

Professional portfolio, as a tool to develop professional competence, has long been considered a highly effective way to improve the process of professional training (Sidhu, 2015). The professional portfolio is "a combination of processes and product. Portfolio development involves the complex processes of self and collaborative evaluation, which include a bit cyclical processes of goal setting, reflecting upon growth, and recognizing achievement, followed by further goal setting to advance professional development. This process also involves decision-making and analysis as well as the development of presentation skills to improve communicative skills in the course of professional development. On the one hand, the professional portfolio should "verify the professional development. A teacher, while applying this method, should collect all the materials related to teaching (from different sources) creatively and inclusively" (Rodriguez-Farrar, 2006, p. 8). On the other hand, it should also organize the professional's evidence, i.e. "the organization of evidence allows combining numerous documents under one topic" (Rodriguez-Farrar, 2006, p. 10). Anyway, a professional portfolio allows gathering everything that has been achieved and reflecting on self-professional development.

In terms of learning English for professional purposes, "Language portfolios" are mostly applied as they allow influencing the level of language and speech skills development. Otherwise "Professional portfolios" are applied. They concern only professional interests and professional self-development of individual specialists in their fields. We put forward the idea to combine some of the already acknowledged scientific ideas about "Language portfolios" and "Professional portfolios" into the so-called "Language portfolio for professional purposes" which we represent in the given research in the authors' innovative way. Regarding prospective specialists as mature, motivated, and self-sufficient individuals, we aim to establish such interdisciplinary links which would allow us to use English for professional purposes and thus to gather and represent some individual author's achievements considering any prospective specialists studying in any field.

#### 3 Methods

To achieve our goal, we simulated an educational environment where prospective professionals had the opportunity to participate and get professional experience from various professionally-oriented activities using the English language and create their Language portfolio p for professional purposes that should combine the following three purposes: to be professionally oriented, to promote the study of English for professional purposes, and to take into account the educational goals and individual characteristics of prospective professionals from various fields. Consequently, the task of suggesting a Language portfolio for professional purposes takes into account individual directions for professional competence development. It is also aimed at competence-oriented activities of the prospective specialist in the process of individual work in the whole course of professional training. It helps to master English for professional purposes and notice the prospects of its use for various professional purposes. Working with the portfolio triggers self-expression as well as professional and creative progress in prospective professionals. A language portfolio for professional purposes is a set of achievements that have been accumulated in the process of professional competence development in prospective professionals in the course of their training. In our opinion, the Language portfolio for professional purposes has become a synthesis of cooperative, group, and individual work and mentoring.

The research methods we have used to achieve the goal of the study relate to theoretical and practical methods of pedagogical research and cover analysis and synthesis, comparison, generalization, induction and deduction, abstraction, and concretization, which help to theoretically elaborate scientific facts on the problem of the given research. To test the effectiveness of the proposed technology, we used the method of the pedagogical experiment conducted in Ukrainian universities, which provides professional training for prospective specialists majoring in different specialities.

We believe that the stimuli to find individual ways to professional self-development and self-education while working with the Language portfolio for professional purposes encourage prospective professionals to use English for professional purposes in a more motivated and conscious way. At the same time, the increased level of English proficiency in the professional field on the background of interdisciplinary links will allow taking into account the educational goals and individual characteristics in the process of professional training of prospective professionals in various fields.

# 3.1 Participants

The study is based on the results obtained from work with 124 prospective specialists studying at the Faculties of Foreign Languages; Institute of Philology (Linguistics and Translation Department); Educational and Scientific Institute of Trade,

Service Technologies and Tourism; Primary Education Theory and Practice Department in Ukrainian and Chinese universities ("Luhansk Taras Shevchenko National University"; Borys Grinchenko Kyiv University; SHEI "Donbas State Pedagogical University" and Northwest Normal University). It is a generalized experience of such innovation in the Ukrainian scientific area. The approach to the organization of individual work with prospective specialists presented in the given study allows using English for professional purposes for self-development and self-realization in a professional environment via interdisciplinary links.

The experiment is conducted in the experimental and control groups of prospective specialists under supervision of 27 university teachers to test their level of professional competence development.

#### 3.2 Instruments

The effectiveness of the pedagogical experiment has been checked on the background of certain criteria verified before and after the experimental training. Thus, the following criteria are singled out: motivational criterion (diagnoses the degree of awareness of the need for self-development using interdisciplinary links as well as the need for self-development during future professional activity, involves personal internal motivation for professional activity and self-realization; value orientations, the need of the prospective specialist to achieve success); professional activity criterion - diagnoses the level of development of professional knowledge of the prospective specialists in the field of specialization and its application (using English) in solving professional problems; reflective and creative criterion - checks the ability to professional reflection and self-analysis of the results of their professional development; ability to professional creative activity while solving professional tasks).

On the background of the defined criteria, we have defined the following levels that allow to assess the level of professional competence development: elementary (demonstrates a low level of professional competence development; professional activity is repetitive and monotonous; prospective specialists solve professional tasks reluctantly and at a low professional level, low of communication), reproductive (prospective professionals have standard knowledge, skills and abilities, stereotypically solve professional tasks, need to be controlled and encouraged, show neutral attitude to professional selfdevelopment, low level of social activity), reconstructive (prospective specialists can freely and in various ways demonstrate their professional competence on the background of creative approach; they have an analytical and systematic way of thinking; apply previous experience with extra non-standard professional solutions to solve professional tasks; have a sufficient level of social activity); creative (prospective specialists are highly efficient in their professional activities; professionally mobile in the process of solving professional tasks; able to generate creative ideas and make non-standard creative decisions; strongly motivated for self-realization and self-development in every area of professional activity).

# 3.3 Procedures

To conduct the given research, we have selected 124 prospective specialists majoring in different specialties, and 27 university teachers (including 15 teachers who provided mentoring and consulting support in specialized disciplines in the given project; 8 teachers of English for professional purposes and 4 teachers who lead the given project) as the subjects of this study. We have divided students into four control (62 students) and four experimental groups (62 students).

Before the experimental study, the groups showed approximately the same level of professional competence. At the end of the experimental study we tested control and experimental groups applying well-known tests and techniques used to test the competence of specialists in different fields, such as test for motivation to succeed, the method of diagnostics of authentic structure of the individual's value orientation; the diagnostic method to discern reflexivity; adapted methods to assess the need to achieve success; the test "Creativity and creative potential of the prospective specialist" (adapted from the materials on the educational project "Vseosvita", Ukraine); various tests to self-assess professional knowledge of prospective specialists. To statistically assess the effectiveness of the experimental study in the experimental and control groups, we have used Pearson's criterion ( $\chi 2$ ).

We have assessed the level of professional competence development at the end of the pedagogical experiment in control and experimental groups after three semesters of their professional training. A traditional, mostly focused on the "knowledge" component, approach to the organization of individual work of students has been applied to control groups. The students were suggested traditional forms of individual work: they prepared projects, made reports, performed various tasks, did creative exercises. The students from the experimental groups within their work with "Language portfolio for professional purposes" had the opportunity to measure and demonstrate individual progress in the development of their professional competence and gather factual data as the material for self-presentation to prospective employers.

The main aim of creating a portfolio is to analyze and represent the most significant results of professional and personal development of prospective specialists, to monitor the educational and professional progress of students. Working on the Language portfolio for professional purposes is a creative process that allows taking into account the results achieved by the prospective specialists in various activities during the entire period of their study at the university. Students can summarize their achievements not only after graduation, but also at the end of the semester or the end of the academic year, see the results of their work compared to their group mates, and, which is most important, with their previous results.

The key functions of the professional portfolio are the following: diagnostic (recording and account of changes, first of all, in the professional growth of a prospective specialists over some time); goal setting (supports educational goals); motivational (supports the student's aspiration to master a high level of linguistic-andmethodological competence); content-related (includes the full range of work performed by a prospective specialist); reflexive (when prospective specialists analyze their educational activities).

Prospective specialists collect information and the teacher of English for professional purposes along with the teachers of major subjects control them. Comprehensive methodological support for the students creating their portfolios can be given via consultation with a teacher of a major subject. The teachers of major subjects help to plan the following: deadlines for the students' individual works and the total number of headings for a professional portfolio.

The Language portfolio for professional purposes portfolio is a cumulative database (folder, or e-portfolio), in which the student gathers the selected material. Bulk blocks of material as a part of the portfolio are called sections, within the sections, some headings that help to organize the material and form the structure of the section (Orna, 2021).

When arranging order the final version of the portfolio, it is recommended to include the following sections: Cover letter of the portfolio owner with a description of the aim, purpose, and a brief structure of this document; Content of the portfolio; Information resources; Working material; Achievements; Selfanalysis and prospects of work (forecast or plan) for the future.

Headings that can be freely selected allow individualizing the content, structure, volume of the portfolio personally per each prospective specialist, taking into account their characteristics of educational goals. The structure of the portfolio is not strict; it

can be changed as the prospective specialists gain knowledge of how to arrange the portfolio.

The list of admissible reporting documents that can be presented in freely selected headings: diaries or reports; printed works (publications: articles / proceedings), abstracts, essays; participation in scientific conferences, seminars (signifying the of the event or report); membership scientific / professionally-oriented society to present topics, materials, research results conducted in the framework of public activity; involvement in: the work of research laboratories; the research work of the department; development of methodical and didactic materials; participation in competitions/contests signifying the level and result; audio- and video materials; schemes, figures, tables, diagrams; preparation and participation in activities, festivals, competitions, exhibitions with an indication of the results; development of scripts for social and leisure activities; creative works / projects made by the author, etc. (providing texts, photos, and videos from the events); certified documents confirming individual achievements (diplomas, grants, certificates confirming additional education; copies of certificates of participation in conferences; information on awards, diplomas, appreciation letters; copies of documents (certificates) confirming participation in various competitions, contests, public activities; documentary evidence of publications about prospective specialists in magazines, newspapers and other editions; other documents at author's discretion); feedback (feedback from teachers, managers of different levels, colleagues, reviews of student's development, letters of recommendation, self-analysis of educational and professional activities; reviews; characteristics).

A language portfolio for professional purposes is created throughout students' study at the university. It is completed when the prospective specialists' graduates. In the future, the portfolio can serve as a source for compiling a resume when searching for a job, or continuing education, etc. Such a portfolio allows the student to professionally assess professional competence development, to build a personal and creative path to success, which will be an important component of prospective specialist ranking in the labor market.

The work on the portfolio includes the following three stages: organizational-adaptive, professional transformation, constructive-creative.

The adaptive stage involves the work on the development of a multifaceted image of the prospective specialist in a certain field with developed professional competence. The mode of work is specified by interdisciplinary optional information-and-methodological seminars, individual consultations with the teachers of major subjects on professional self-realization, implementation of student's projects, plans, etc.; interactive interdisciplinary workshops on the organization of various scientific-practical, educational-scientific, educational, and cultural-educational activities that expand the horizons of prospective professionals for self-realization in their future professional activities.

During the stage of professional transformation, the work is aimed at the development of individual behavioral mechanisms based on existing professional experience, which determine the professional and personal attitude to the development of professional competence of prospective professionals. Work on the "Professional Portfolio" proceeds to the stage of personality-oriented professional activity in those activities that are most significant for the specifics of professional development of prospective specialists: conferences, pieces of trainings, thematic meetings, competitions, contests, postgraduate courses, webinars, participation in the work of major subjects departments, creative associations and clubs according to professional interests, etc.

Optimization of the process of professional competence development in prospective specialists in the process of their professional training at the third stage (creative) became possible due to the development of their style of professional behavior in the process of professional activity, which created conditions to demonstrate professional competence.

## 4 Results

The obtained quantitative and qualitative indicators show that at the beginning of the experiment the distribution for every criterion in the control and experimental groups was statistically the same, which gave reason to consider the experiment as started correctly to test our assumptions in the training process.

Table 1: Distribution of the levels of professional competence development before and after the experimental training

Level	Elementary		Reproductive		Reconstructive		Creative	
	CG (%)	EG (%)	CG (%)	EG (%)	CG (%)	EG (%)	CG (%)	EG (%)
Motivational criterion								
At the beginning	38 (61.1 %)	38 (61.2 %)	19 (30.5 %)	18 (29.0 %)	3 (4.8 %)	4 (6.5 %)	2 (3.6 %)	2 (3.3 %)
At the end	28 (452 %)	21 (33.8 %)	25 (40.3 %)	20 (32.2 %)	5 (8.0 %)	11 (17.8 %)	4 (6.5 %)	10 (16.2 %)
Professional activity criterion								
At the beginning	37 (59.5 %)	37 (59.5 %)	20 (32.1 %)	20 (32.1 %)	3 (4.8 %)	3 (4.8 %)	2 (3.6 %)	2 (3.6 %)
At the end	26 (41.9 %)	18 (29.0 %)	26 (41.9 %)	23 (37.0 %)	5 (8.1 %)	12 (19.4 %)	5 (8.1 %)	9 (14.6 %)
Reflective and creative criterion								
At the beginning	34 (54.8 %)	33 (53.2 %)	25 (40.3 %)	26 (41.9 %)	2 (3.6 %)	2 (3.6%)	1 (1.3 %)	1 (1.3 %)
At the end	22 (35.4 %)	20 (32.2 %)	31 (50.0 %)	23 (37.0 %)	5 (8.0 %)	10 (16.2%)	4 (6.6 %)	9 (14.4 %)

Analysis of data at the end of the experiment confirmed the effective impact of establishing effective interdisciplinary links in the course of working on Language portfolios for professional purposes on the process of professional competence development. Visually the distribution is presented in Table 1.

To compare the distributions of control and experimental groups according to the levels of the selected criteria development, we used the nonparametric Pearson's  $\chi^2$  criterion. One of the limitations of this criterion is the condition that the intracellular frequencies must exceed 5.

To perform calculations according to Pearson's  $\chi^2$  criterion, we have transformed the scale for measuring the levels of development, specifically, we have combined the positions of the elementary level and reproductive one; reconstructive and creative levels. The initial data for the calculations are

summarized in Table 2, and the results of the calculations are shown in Table 3.  $\,$ 

We have also calculated the effect size (V Cramer's statistics). The results of the calculations are presented in table 4 and figure 1.

# 5 Discussion and results

Analysis of the calculation results (Table 3) shows a statistically insignificant discrepancy at the level of 0.05 between the control and experimental groups at the beginning of the experiment by all criteria, including generalized (empirical value of Pearson's  $\chi^2_{\text{emp}}$  is respectively 0.100; 0.000; 0.000; 0.013, which does not exceed the critical value of 3.842 per one degree of freedom and level of significance of 0.05).

Table 2: Distributions of experimental and control groups according to the levels of professional development criteria at the beginning and

the end of the experiment.

Criteria	Levels	At the beginning		At the end	
Criteria	Leveis	CG	EG	CG	EG
Motivational	Elementary + Reproductive	57	56	53	41
Mouvanonai	Reconstructive + Creative	5	6	9	21
Reflective and creative	Elementary + Reproductive	57	57	52	41
Reflective and creative	Reconstructive + Creative	5	5	10	21
Professional activity	Elementary + Reproductive	59	59	53	43
Professional activity	Reconstructive + Creative	3	3	9	19
Generalized	Elementary + Reproductive	58	57	53	42
	Reconstructive + Creative	4	5	9	20

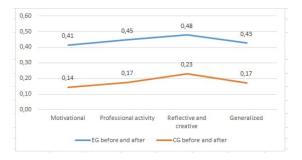
Table 3. Comparison of distributions in experimental and control groups by  $\chi^2$  criterion before and after the experiment.

Criteria	Empirical value of χ <sup>2</sup> criterion when comparing CG and EG before the experiment	Empirical value of $\chi^2$ criterion when comparing CG and EG after the experiment
Motivational	0.100	6.332
Professional activity	0.000	5.204
Reflective and creative	0.000	4.613
Generalized	0.013	5.361

Table 4: The effect size when comparing distribution in control and experimental groups by Pearson's criterion

Criteria	EG at the stages of veri	fication and development	CG at the stages of verification and development		
Criteria	Pearson's χ <sup>2</sup>	V Cramer's	Pearson's χ <sup>2</sup>	V Cramer's	
Motivational	10.653	0.41	1.288	0.14	
Professional activity	12.458	0.45	1.896	0.17	
Reflective and creative	14.146	0.48	3.321	0.23	
Generalized	11.273	0.43	1.83	0.17	

Figure 1: The effect size (V Cramer's) when comparing the distribution in the experimental and control groups by Pearson's  $\chi^2$  criterion.



On the contrary, when comparing the distribution of the control and experimental groups after the experiment, we have obtained significant differences in all criteria, including generalized, at the level of 0.05 (empirical value of Pearson's  $\chi^2_{emp}$  is respectively 6.332; 5.204; 4.613; 5.361, which exceeds the critical value of 3.842 per one degree of freedom and level of significance of

The analysis of Table 4 shows that by Pearson's  $\chi^2$  criterion the distribution in the control group at the stages of verification and development according to the levels of the selected criteria development do not differ significantly. Instead, there are significant divergences in the distributions in the experimental group before and after the experiment.

It should be noticed that the figures of Cramer's statistics (Table 4, Figure 1) in the experimental group significantly exceed the corresponding figures of statistics in the control group and indicate the effect size in the experimental group at the level, which is almost high (from 0.5 for Cramer's statistics). Thus, we can conclude that there are significant changes in the experimental group after the experiment, which indicates the efficiency of the proposed technique.

In the course of our research, the Language portfolio for professional purposes was created by prospective specialists majoring in different specialties in the following forms: a collection of research papers (creative essays, professional essays, pedagogical sketches, professionally-oriented glossaries, diagrams, tables, diagrams, etc.); reports on attending

professional theoretical projects (thematic competitions, lectures, etc.); certified documents confirming individual achievements (diplomas, grants, certificates of learning outcomes on additional education; copies of certificates of participation in conferences; information on awards, diplomas, appreciation letters; copies of documents (certificates) on participation in various competitions, contests, documentary confirmation of students' publications in scientific journals, etc.); feedback from teachers, managers of various levels, colleagues, reviews of prospective specialists' theses, letters of recommendation; author's developments; certificates of participation in competitions, conferences, training seminars, professional workshops, etc. The student's Language portfolio for professional purposes was presented at the last lesson in English for professional purposes with the involvement of the teachers of major subjects and junior students. It was arranged as a conference, where prospective professionals had the opportunity to present their work showing a year and a half of their professional development.

# 6 Conclusion

The given study proves that considering the specificity of the suggested technology, the work on Language portfolio for purposes should three professional involve organizational-adaptive, professional transformation, constructive-creative. As a result, at the first stage, work with students of different specialties became effective due to the optimization of the process of the development of a multifaceted image of the prospective specialist in a certain field with developed professional competence and considerable skills of using English for professional purposes. During the second (professional transformation) stage, the work was aimed at the development of individual behavioural mechanisms based on existing professional experience, which determine the professional and personal attitude to the development of professional competence of prospective professionals. During the constructive-creative stage, prospective specialists had the opportunity to develop their style of professional behaviour in the process of performing professional activities.

The development of professional competence in the course of individual work at the lessons of English for professional purposes for prospective specialists' majoring in various fields should involve interdisciplinary links encouraging selfimprovement that will help not only to develop professional competence but also to promote further professional selfrealization. As a result, the teacher should create the most favourable educational environment for professional selfdevelopment, using English and providing opportunities for its professional use while working on the Language portfolio for professional purposes. As it has been observed, the work on the Language portfolio for professional purposes develops in prospective specialists the skills to accumulate and analyze the results of their work, monitor their professional success, public activity, see the advance of their general and professional competencies while using English for professional purposes. It also gives an opportunity to collaborate with teachers of English for professional purposes as well as with the teachers of major subjects.

The given experience of using the method of Language portfolio for professional purposes in the course of the professional competence development in prospective specialists may be widely applied in training prospective specialists' in different fields and countries. In perspective, it is advisable to explore the possibilities of using Language Portfolio for Professional Purposes within the Bachelors' education or in the context of further professional development of specialists in higher educational institutions. The research allows drawing some theoretical assumptions of using Language portfolios for professional purposes in the course of the professional competence development in prospective specialists from different spheres. This could be of interest to the professionals involved in training prospective specialists in other countries.

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**Primary Paper Section:** A

Secondary Paper Section: AM, AI

# THE ANALYSIS OF PRINTING EQUIPMENT MANUFACTURING

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Abstract: Printed materials, including books, illustrated magazines, advertising materials, posters, and consumer product packaging, are an integral part of today's global economy, science, and culture. Modern printing equipment, supplies, and new technologies allow the creation of a wide assortment of printed products – from exclusive printed, electronic or combined editions, high-quality advertising posters, or brochures to creative packaging with a complex design. Originality, exclusivity, and prestige can be given to printed products using hybrid and ultraviolet technologies, elaborate engraving, metallic color treatment, coloring with traditional, matte, and shimmering varnishes, etc. The efficient functioning of printing equipment companies is a fundamental component of global economic development. Therefore, it deserves thorough research to optimize the development of printing equipment manufacturers. This article aims to analyze the features of manufacturing and the main trends in the printing machines production in the world. During the research, we used the bibliographic method to study the scientific literature on the use and manufacture of printing equipment, as well as general scientific methods (analysis, synthesis, deduction, induction, generalization) for helpful clarification of individual aspects of manufacturing equipment for the printing industry. According to the study results, we achieved the following tasks: – identified the most well-known manufacturers of printing equipment; – outlined production trends in the printing industry; – considered the location of publishing industry enterprises in the world countries; – assessed the distribution of printing equipment in different countries.

Keywords: Printing machines, publishing industry, printing equipment manufacturing, digital equipment, offset equipment, publishing and printing industry.

#### 1 Introduction

Today the publishing and printing sector in the world counts, by various estimates, more than 1000 book publishers and publishing houses, 3000 printed media, and more than 2000 printing companies (Balan, Berculescu, Răcheru & Piţigoi, 2021).

New technological processes have radically changed the nature of the printing industry. Over the past decade, printing equipment and technology have undergone significant qualitative changes. The everyday use of computing technology, the improvement of existing and the emergence of fundamentally new devices and materials, and as a consequence, the progress of technological manufacturing processes have greatly expanded the possibilities of producing high-quality goods and significantly increased labor productivity (Liu, Liu & Wang, 2021).

The manufacturing of printing machines is a sphere of knowledge-intensive production and one of the most powerful economic sectors. The experience of developed countries, as well as the practice of many regions that previously did not use printing equipment, and now this industry is one of the foundations of their economic development (China, India, Korea, Indonesia, etc.), prove this convincingly.

Undoubtedly, a large market and developed printing industry, as well as an experience in the development and manufacturing of printing equipment, the latest developments in this field, and the significant scientific and production potential of the country – all create conditions for the successful development of printing equipment and the economy as a whole. In current conditions, the country's development of knowledge-intensive printing technologies actively influences the result of many related industries and is, of course, a matter of national importance (Šproch, Schindlerová & Šajdlerová, 2020).

In recent years, leading printing companies in many world countries have devoted significant resources to developing fundamentally new pre-press equipment and introducing digital and laser technologies in the printing industry. Today, the main

challenge for most printing machines is the development of homogeneous and low-noise automation based on electronics and microprocessor technology (Pilat, 2022).

The theoretical part of this study offers an assessment of existing technologies and an evaluation of the current state of the art in printing, outlining the main aspects of the most famous printing equipment manufacturers.

The practical aspect includes:

- an overview of the publishing industry location worldwide;
- an assessment of the printing equipment production distribution by equipment type and demand for offset printing machines.

According to the study results, we determined the state and the main trends in the world's printing equipment development.

#### 2 Literature review

Today, the specialized scientific literature pays due attention to the study of the current situation in the publishing and printing industry, namely the territorial location of printing enterprises, and analyzes their sales volumes. Furthermore, it considers the regional aspects of the publishing houses' development; defines the role of publishing and printing houses in the development of the national economy development; outlines important trends in the development of the publishing and printing industry development; analyzes the scientists' views on the economic growth and development problems (Kutsynska & Kutsynskyi, 2018).

The study of the printing industry's problems is described in work by such scientists as C. Horvath, L. Koltai, K. Manurova, E. Balan, L. Berculescu, R. Rächeru, D. Piţigoi, and many others. However, due to the industry's importance and the change dynamics, it is vital to constantly monitor and evaluate the performance of individual printing companies and the industry as a whole (Horvath, Koltai & Manurova, 2020), (Balan, Berculescu, Rächeru & Piţigoi, 2021).

Recently, there has been a tendency for small printing companies to expand their product range and strive for versatility (Gomaa, Jabi, Soebarto & Xie, 2022).

Nowadays, the analysis makes it possible to state that most companies have substantial development reserves both for expanding the product portfolio and increasing their competence. Therefore, movement in these areas will allow companies to increase their competitiveness in the printing market.

According to X. Cao, S. Yu, H. Cui, and Z. Li, due to the society's globalization and expansion of production possibilities, price competition, and technology selection processes, the current state of the printing industry is characterized by: smaller print runs, shorter lead times, improved product quality, increased product complexity following individual customer orders. It can be achieved by increasing the level of production automatization and integrating different production areas into a single production process (Cao, Yu, Cui & Li, 2022).

As per D. Eidukynas, over the last few years, the most well-known printing equipment and systems manufacturers have increasingly opted to use standardized digital print production processes due to the established international cooperation within a single information production environment (Eidukynas, 2022).

This tendency is confirmed by R. Răcheru, A. Lucia, D. Piţigoi, and E. Balan, who pointed out that the development of science and technology makes it possible to constantly improve printing technologies per the market needs to create favorable conditions

for printing globalization and internationalization (Răcheru, Lucia, Pitigoi & Balan, 2021).

Improvements in printing processes depend on industries such as computer science, cybernetics, physics, chemistry, mechanical engineering, and others. The first step in the development of printing automatization was the interconnection of several workstations and output devices into a unified network. The preconditions for this were the complete digitization of the production process and the appearance of powerful computing equipment and special software. The use of networking technologies makes it possible to develop and implement the new production standard CIP3 (Cooperation for Integration of Prepress, Press, and Postpress), which is the result of the Frankfurt Institute and Heidelberg – the world's leading manufacturer of printing equipment and supplies (Fratello & Rael, 2020).

According to A. Gerosa, the current feature is the reduction of print runs while the number of printed products increases. For today's devices to be in demand and paid for, they must have minimal set-up time for changing print runs so that productivity does not decrease with low mileage (Gerosa, 2018).

This opinion is supported by A. Sidorov and I. Iljin, who emphasize that all printing market segments are experiencing trends toward shorter runs, higher requirements for speed of order fulfillment, and production quality. Therefore, printing companies need to turn to integrated production systems that integrate prepress, postprocessing, and control to meet these demands in the best possible way. Printing machine manufacturers are already offering such systems. Overall, we must state that choosing a manufacturing system is a risky fundamental decision where one has to choose between systems with an open or closed structure (Sidorov & Iljin, 2022).

For W. Urban and K. Łukaszewicz, software based on a computer format makes it possible to define the parameters of post-press operation by collecting all job data into a single array containing information about the printing devices, cutting, folding and other functions. Furthermore, each machine in computer-assisted production is equipped with a personal computer and can execute current jobs as JDF files that are automatically customized (Urban & Łukaszewicz 2021).

The market's saturation with the latest devices, equipment, tools, and processes for manufacturing a variety of printed products requires a thorough systematization to identify and display printing technologies in the modern publishing and printing complex worldwide. Moreover, identifying tendencies in the publishing and printing market seems relevant since, over the last years, only a few industry journals have summarized information on the installation of printing equipment and consumables supply without detailed analysis and comparison with the world trends.

The current printing market conditions are characterized by an increasing number of unprofitable printing companies, a steady decrease in the volume of printed products, and a change in the printing market structure due to increased competition from the system printing houses (Ardolino, Rapaccini, Saccani, Gaiardelli, Crespi & Ruggeri, 2018).

The literature review on the research topic showed that the situation in the global printing equipment market is not stable at the moment. Significant changes in the economic sphere associated with digital platforms increasingly affect not only the production and use of printed products but also the entire manufacturing infrastructure related to this area (equipment and supplies manufacturing, paper and cardboard printing, wholesale trade organization, and equipment maintenance).

#### 3 Aims

This study aims to determine the features of the current state and tendencies in the area of printing equipment manufacturing.

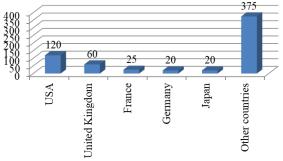
#### 4 Materials and methods

We used bibliographic-semantic and analytical methods for this study to investigate the question posed.

#### 5 Results and Discussion

According to V. Shpak, about 500,000 publishing houses are in the global printing business. About a quarter of all publishing houses listed in the International Handbook (Publishing house K. G. Saur (Germany) by the International ISBN Agency) are in the United States (120,000). The UK (about 60,000), France (over 25,000), Germany (about 20,000), Japan (over 20,000) etc., have strong publishing systems (Figure 1) (Shpak, 2017).

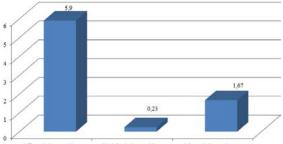
Figure 1: Worldwide location of publishing houses, thousands of publishers.



Source: built by the authors based on data from (Shpak, 2017).

Worldwide, about EUR 7,8 billion worth of printing equipment is produced yearly (not including spare parts, additional equipment, and maintenance costs). The main part of this money (more than EUR 5,9 billion) goes for offset printing machines. More than half of this amount, in turn, is spent on the purchase of sheet-fed offset presses. Currently, the digital printing equipment sales are about 3 % of the total of this kind of equipment (Figure 2).

Figure 2: Worldwide manufacturing of printing equipment by type of equipment, EUR billion.



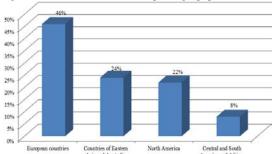
Source: built by the authors based on data from (Shpak, 2017).

The most significant demand for offset printing machines is in the European market (46%), followed by East Asian and Australian markets (24% in total) and North American markets (22%). Central and South America, Africa, and the Middle East come next in terms of sales. If we compare each country, the first place goes to the USA and the second to Japan (Figure 3).

The market for pre-press equipment (including input devices, workstations, software, and output devices) is worth about EUR 10 billion, and the market for after-sales services is worth about EUR 1,5 billion.

A significant tendency in industrial information system development today is the intellectualization of production management processes in all phases of the product lifecycle (Kapitan, 2017).

Figure 3: Global demand for offset printing equipment, %



Source: built by the authors based on data from (Shpak, 2017).

One of the main problems of the printing equipment manufacturing sector is the constant growth of labor intensity of production equipment, which inevitably entails the complication of design and preparation for manufacturing. Another problem is the need to constantly reduce the amount of information about the current state of production equipment to a level that needs a decision-maker according to the current ergonomic constraints. A third problem is the lack of time to make and agree on management decisions. Finally, another critical issue of production intellectualization, including printing, is the need for constant acquisition, preservation, and dissemination of experienced manufacturers' knowledge accumulated over many years of work, including positive and negative experiences in solving operational problems (Kapitan, 2017).

Thus, modern printing manufacturing is a complex, highly computerized technological process in which printing machines are equipped with electronic, mainly digital control systems.

A study by Ye. Hrabovskyi confirmed that the most common printing process is flat offset printing. Therefore, increasing the share of digital printing next to inkjet printing and decreasing the percentage of letterpress printing were also anticipated. The advantages of the digital method and various products' increasing proportion in the 1 to 500-copy range put it at the top of the list. However, the share of gravure printing, according to global forecasts, reaches up to 15 % and is typical for manufacturing soft packaging from flexible polymer films. However, it is not reflected in the results of the vast majority of studies in this area (Hrabovskyi, 2017).

The intensive development of printing technologies and technological printing systems over the past century has influenced the improvement of new technology design methods in this area and, on their basis, gave birth to several new high-performance companies operating today on the global economic stage. The technological design of publishing houses and printing companies has historically evolved from the systematization of practical experience to the creation of a scientific basis for developing new projects in this field. For this reason, many companies today need to re-equip, improve technology and the manufacturing organization, and therefore ahead of the competition, there are many questions about the definition of advanced equipment, training, quality, and effective work (Stavropoulos & Foteinopoulos, 2018).

The fact of combining high technology with mobility and process complexity has become undeniable in today's globalizing production, so the development of new technologies and the unprecedented rate of their introduction into the printing process, as well as the appearance and improvement of advanced supplies, have led to an increase in the structural complexity and artistic brilliance of printed products.

We can note that despite the decrease in circulation, the total volume, and an assortment of editions, the level of printed products design worldwide is steadily increasing today. In addition, there is a diversity of formats, increased uniqueness, and quality of printed products, and expanded artistic and technical decoration possibilities. Furthermore, the globalization

of production and the growth dynamics of the market encourage industrial enterprises to be continuously innovative, restructuring their production, and adapt to the changing market conditions, especially to the increased use of information in electronic form and the use of various interactive means (Zheng, Zhang, Baca & Ahmad, 2021).

Considering those mentioned earlier, the problems related to technology design are not long-term but require an urgent solution and urgent implementation. Therefore, scientific management of design processes has become indispensable in modern conditions (Hrabovskyi, 2017).

Analysis of the current level of production automatization and quality management of printed products shows that in recent years, thanks to the rapid development of networked information technology, computer and laser technology, software, and the like, printing has undergone revolutionary changes. As a result, the external and internal structure of manufacturing and the market for printed products have changed, and automation and digital production management systems are constantly being improved. In addition, regional and global information networks have emerged, allowing for more efficient interaction between remote organizations and manufacturing sites (Shpak, 2017).

All of this is undoubtedly reflected in the pace and direction of printing equipment manufacturers, reflecting the main tendencies of the printing industry's future related to the development of information technology. Nowadays, there is a mass automatization of not only production itself but also its management with the introduction of artificial intelligence, direct interaction of production with the customers for the goods produced, and adaptation of equipment to customer requirements in the field of printing equipment production. In printing, this tendency makes it possible to personalize not only digital printing technologies but also all printing processes, including the most complex computer-aided processing.

Such tendencies have become a key trend in printing and a guideline for the future for all printing devices, technologies, and software developers. Digital control is now widespread in the printing industry. Internet-based control systems include important structures for managing digital devices and generating and transmitting information, e.g., via the Internet. Such systems also ensure full "transparency" of manufacturing, i.e., they enable the customer to follow their order through all stages of the printing process.

#### **6 Conclusions**

The scientific and practical interest in analyzing world markets grows with the increasing tendencies of internationalization and globalization of the market economy and the development of economic relations. The world market of printed products is considered one of the best indicators of economic processes. Its dynamics, problems, and prospects are the key indicators of national economic development.

In today's environment, the innovative development of the state economy is determined by the factor of society's information support, which can and must be promoted by the publishing and printing sector. The publishing and industrial complex is one of the most knowledge-intensive industries. The strategic importance of the complex for the developed country's economy consists primarily in the fact that it concentrates on a highly skilled workforce of the both humanitarian, scientific, and technical profiles, and publishing as an intellectual product is one of the cornerstones of the country's cultural, educational and scientific-information potential. The development and creation of complex enterprises, regardless of their size and ownership form, are influenced by factors in the external and internal environment. From the perspective of forecasting trends in the development of the printing industry as a component of the global industrial complex, the study of the current level of printing equipment manufacturing as the most critical factor in the development of this sphere becomes relevant.

At the same time, we should emphasize that the downward production tendency is still beyond the critical level for the printing market development. Although a process of capacity reduction and the closure of publishing spectrum companies already exist. At the same time, according to analytics, the decline in the volume of printed products in the next few years will be slightly slower, primarily due to the high cost of purchasing additional electronic tools, as well as due to psychological barriers and publishers' incomplete adaptation to the electronic distribution of the media. Another typical feature of the further development of this industry will be the use of outsourcing services by printing houses, which will open up new opportunities for expanding their services with publishing services, such as color scanning, electronic image retouching, and electronic column layout, digital printing, etc.

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# **Primary Paper Section:** A

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# THE STATE OF FORMATION OF THE CULTURE OF SAFETY OF PROFESSIONAL ACTIVITY IN FUTURE OCCUPATIONAL SAFETY AND HEALTH ENGINEERS

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Abstract: This study examined the state of formation of the culture of safety of professional activity of future safety engineers. The sample consisted of 946 students majoring in 263 "Civil Safety" in the field of knowledge 26 "Civil Safety" with specialization "Occupational Safety", 127 teachers of higher education and 112 occupational safety engineers of industrial enterprises and organizations. Problems that hinder the effective formation of the culture of safety of professional activity have been identified. It is concluded that it is necessary to conduct a thorough and experimental study of the scientific problem of formation of the culture of safety of professional activity of future occupational safety and health engineers.

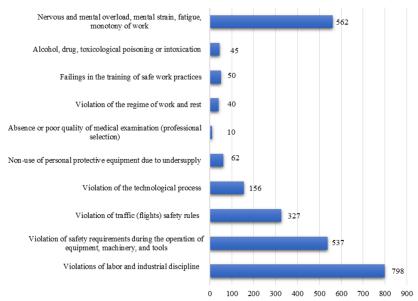
Keywords: Culture of safety of professional activity, vocational training, occupational safety and health engineer, occupational injuries.

#### 1 Introduction

Issues of creating safe working conditions and prevention of occupational injuries are important and relevant at the present stage of development of production. Accidents at work indicate an unsatisfactory state of labor protection at a particular

technological site. Based on statistical information presented on the website of the State Statistics Service of Ukraine (Injuries at work, 2018, 2019, 2020), we found that the number of victims of accidents, acute occupational diseases, accidents and fatal accidents, related to production in 2018 amounted to 4040 people, 4394 people in 2019, 6646 people in 2020. As we can see from the above data, occupational injuries in the period from 2018 to 2020 tend to increase. The structure of the causes of accidents related to production is dominated by organizational (2882 victims) and psychophysiological (607 victims) nature. Thus, the analysis of the causes of occupational injuries showed (Figure 1) that, in 2018, the number of victims caused by violations of labor and industrial discipline was 798 people; by violation of safety requirements during the operation of equipment, machinery, and tools - 537 people; by violation of traffic (flights) safety rules - 327 people; by violation of the technological process - 156 people; non-use of personal protective equipment due to undersupply - 62 people; by absence or poor quality of medical examination (professional selection) - 10 people; by violation of the regime of work and rest - 40 people; due to failings in the training of safe work practices - 50 people; alcohol, drug, toxicological poisoning or intoxication – 45 people; nervous and mental overload, mental strain, fatigue, monotony of work, which led to erroneous actions of the employee - 562 people.

Figure 1: The number of victims of accidents related to production formed on the basis of a detailed analysis of their causes



After the detailed analysis of the causes of accidents we can see the significant role of the human factor in creating the preconditions for traumatic situations. In this context, it is important to foresee and prevent occupational injuries taking measures, among which we highlight:

- high-quality professional training of occupational safety and health engineers, whose activities are aimed at creating and operating a occupational safety management system;
- formation of the safety culture among occupational safety and health engineers and development of the safety culture among staff and officials;
- organization of training on occupational safety.

Thus, the analysis of statistical data confirms the position that the key method of prevention of workplace accidents and occupational diseases is the formation of the safety culture at the stage of higher education training, as well as in the process of professional activities. In this regard, there is a need to modernize the training of occupational safety engineers, focused on the formation of a high level of the culture of safety of professional activities (CSPA). Thus, the problem of formation of CSPA in future engineers-teachers on occupational safety is relevant and needs more thorough research.

Searching for scientific literature and dissertation research works on this problem, we found that the definition of "the safety culture" is considered from the standpoint of social, philosophical, psychological, pedagogical, technical, and medical sciences. This concept is becoming increasingly relevant in areas related to the study of the human factor (engineering psychology, ergonomics of the workplace, psychology of occupational safety, management theory, and occupational safety management). The concept of "the safety culture" is very widely used in world science. In particular, scientists from different countries consider it important to form the culture of safety in workers whose mistakes may lead to threats, injuries due to human factors. The analysis of scientific works in the

international Scopus database showed that the formation of the safety culture is carried out in the following areas:

- in the construction industry (Dongping & Haojie, 2013);
- in health care (medical staff training) (Huang, Wu, & Lee, 2018; Ramos, & Calidgid, 2018);
- in transport safety (Timmermans, Alhajyaseen, Reinolsmann, Nakamura, & Suzuki, 2019; Nævestad, Phillips, Laiou, Bjørnskau, & Yannis, 2019);
- in nuclear power generation industry (Nascimento, Andrade, & Mesquita, 2017);
- in the food industry (Jespersen, & Wallace, 2017);
- in the sector of industry (Strauch, 2015).

In Ukraine, the issue of safe human existence is considered in two directions: the culture of life safety and the culture of safety. Thus, M. Zorina studied the problem of formation of the life safety culture of future specialists. She singled out and studied the essence of the interrelated mandatory components of the culture of life safety: motivational, cognitive, creative and technological (Zorina, 2011, p. 40). The article by O. Tretyakov and O. Dashkovskaya is of scientific interest. They emphasize that the mastery of the culture of safety, its principles is aimed to ensure the formation of a new, modern worldview on the attitude to the constant concern for the preservation of life and health of people in work and life (Tretyakov, & Dashkovskaya, 2012, p. 83). L. Kravchenko highlighted the issue of forming a culture of life safety of students of pedagogical universities (Kravchenko, 2016, p. 21).

The dissertation of T. Petukhova is also important for our study. It substantiates and determines the pedagogical conditions for preparing future teachers to form the culture of life safety in middle school students, as well as the structure, levels and criteria of readiness of future teachers to form the culture of life safety in middle school students (Petukhova, 2010). A significant contribution to the development of the theory and methods of vocational education on this topic was made by N. Kulalaeva, as evidenced by her monographs (Kulalaeva, & Mikhailyuk, 2011; Kulalaeva, Mikhailyuk, & Marmazinsky, 2013)

Scientists O. Kobylyansky and I. Kobylyanska believe that the process of formation of the safety culture in future specialists of higher education institutions within the framework of standard programs of normative disciplines "Safety of life", "Fundamentals of occupational safety", "Occupational safety in the field", "Civil protection" requires improvement, as these programs do not properly take into account the requirements of a systemic approach, as well as socio-political and economic conditions in the country (Kobylyansky, & Kobylyanskaya, 2013, p. 83). The same opinion is held by V. Demyanchuk, I. Ryzhenko and V. Chaban (2014). From O. Sharovatova's point of view, the main methods and means of influencing the formation of safety culture, in addition to improving knowledge in the field of safety of life and work, should be improving moral and ethical ideas of the individual, paying attention to psychological and patriotic education, which will limit the number of potential threats and risks in the context of social nature (Sharovatova, 2018, p. 93).

Scientific interest of our study is also falls on I. Grabovska's organizational model of formation of readiness of future professionals for professional activities that was developed on the basis of higher education institutions of the State Emergency Service (Grabovska, 2016, p. 161). Of great interest is the scientific article by O. Pulyak, which examines the safety culture of students of higher education institutions through the process of education (Pulyak, 2015, p. 140). Among other works that attract attention are the publications of scientists of the Lviv State University of Life Safety, in which various aspects of training of life safety specialists are presented (Koval, Kozyar, & Lytvyn, 2018; Povstin, & Kozyar, 2019; Evsyukov, 2017).

Further study of information sources showed that the term "safety culture" was first used in 1986 by the International

Atomic Energy Advisory Group (abbrev. INSAG) of the International Atomic Energy Agency (abbrev. IAEA), which has published a series of reports on safety culture: Summary Report on the Post-Accident Review Meeting on the Chernobyl Accident, No. 75-INSAG-1 (INSAG-I, 1986); Basic Safety Principles For Nuclear Power Plants, No. 75-INSAG-3 (INSAG-3, 1989); Safety Culture No. 75-INSAG-4 (INSAG-4, 1991); The Chernobyl Accident: Updating of INSAG-1, No. 75-INSAG-7 (INSAG-7, 1993); Basic Safety Principles For Nuclear Power Plants No. 75-INSAG-3 Rev. 1, No. 75-INSAG-12 (INSAG-12, 2015).

The analysis of international legal instruments shows that the concept of "safety culture" is widely used by the International Labor Organization (abbrev. ILO). Through its adoption of the Global Strategy on Occupational Safety and Health (Global Strategy, 2003), Promotional Framework for Occupational Safety and Health Convention No. 187 (ILO Convention, No. 187, 2006), the ILO Report Series (ILO Report, 2004, 2015), the ILO emphasizes the need to enhance and maintain a culture of prevention of occupational safety at the national level, emphasizes the feasibility and importance of identifying industrial risks and hazards in the workplace, preventive measures for occupational safety.

The results of the analysis of scientific sources, legal documents and consideration of various theoretical positions and conceptual ideas covered in domestic and foreign research indicate the need to study such an important issue as formation of the culture of safety of professional activity in future occupational safety and health engineers. Given this, the purpose of the article is to determine the state of formation of the culture of safety of professional activity in future occupational safety and health engineers.

## 2 Research methodology

The aim of the study is to study the state of formation of the culture of safety of professional activity in future occupational safety and health engineers. The logic of the study required the solution of the following tasks: establishing awareness of the essence of the concept of "the culture of safety of professional activity"; determination of the state of CSPA formation; identification of factors and problems that contribute to or negatively affect the effectiveness of the formation of CSPA in future occupational safety engineers; analysis of educational and professional training programs for future engineers in order to identify the content of their professional training with the CSPA component; conducting a survey of respondents on the importance of professionally important qualities; as well as identifying the needs for the formation of professional knowledge and skills necessary for the effective formation of CSPA.

## 2.1 Research hypothesis

The hypothesis of the study is that the developed methodology will determine the state of formation of the culture of safety of professional activity in future occupational safety engineers and identify problems that hinder the effective formation of the culture of safety of professional activity in future occupational safety and health engineers.

### 2.2 Research sample

To identify the state of formation of the CSPA, we involved in the survey majoring in 263 "Civil Safety" in the field of knowledge 26 "Civil Safety" with specialization "Occupational Safety", teachers of higher education institutions that provide training to future occupational safety engineers, and occupational safety engineers of leading enterprises and organizations of Ukraine. The study involved 1,185 respondents, including 127 teachers, 112 occupational safety engineers, and 946 students.

#### 2.3 Research methods and data collection instruments

In the process of research and experimental work to achieve the goal and solve the formulated problems, we used a set of methods which included the following types of methods: questionnaires, observations, testing, expert method, method of diagnostic work, method of diagnostic situations, statistical methods of interpretation. These methods were used in accordance with the program of the experiment by stages.

The complexity and versatility of the object and subject of research, the goals and objectives in view necessitated the use of different methods of research and experimental work: general, partial and specific. Together, they compiled tools for conducting theoretical research and obtaining experimental material. The variety of methods used in the research and experimental activities are valid and reliable, as they have been tested in scientific research works, and allow us to talk about the reliability of the results of the experiment. To diagnose the formation of CSPA in future occupational safety and health engineers, each individual component was evaluated, and substantiated with the selected set of methods.

Theoretical methods allowed us to conduct interdisciplinary analysis and synthesis of data of philosophical, sociological, culturological, general scientific, psychological and pedagogical literature, legal documents, educational and methodological documentation of higher education institutions. In particular, the analysis of the current state of the formation of CSPA in future safety engineers; methods of questionnaires, interviews, interlocutions, logical and structural analysis made it possible to identify the main problems of formation of CSPA in future safety engineers.

In order to study the state of the problem, its relevance, study trends and prospects at all stages of the work we used theoretical analysis and generalization of scientific and methodological literature on the problem of research. The conceptual analysis of dissertation research on similar issues over the past twenty years has been conducted.

In the process of research we used the method of content analysis (qualitative and quantitative study of documents), which was used to assess the strategy of reforming the system of higher professional education in general and the training of occupational safety engineers in particular. The application of the method permitted to determine the directions of state policy in the field under consideration, against the background of

changes in methodological directions and pedagogical paradigms, to form an idea of their essence. This work allowed us to rethink the leading methodological approaches in the field of higher professional education in the context of the social order of society; to give theoretical and logical substantiation of the main ideas of development of system of preparation of occupational safety engineers; to determine the strategic goals and content of professional training of safety engineers, to develop conditions that ensure its implementation. Consideration of these issues was important to address the main objectives of the study, aimed at justifying the need for a pedagogical system of formation of CSPA of future occupational safety and health engineers.

The analysis of curricula and programs of professional training of future occupational safety and health engineers helped to reveal the absence of the component of formation of CSPA in the content of disciplines of general and professional training. The ranking method helped to identify professionally important personal qualities of future occupational safety engineers to form the culture of safety. Analysis and generalization of foreign experience in the training of occupational safety and health engineers and in the formation of the safety culture made it possible to identify forms, methods, innovative techniques and technologies for their training.

In order to determine the state of formation of the culture of safety of professional activity, we developed questionnaires for teachers of higher education institutions and students majoring in 263 "Civil Safety" in the field of knowledge 26 "Civil Safety" with specialization "Occupational Safety" (Appendix, tables A-1, A-2, A-3).

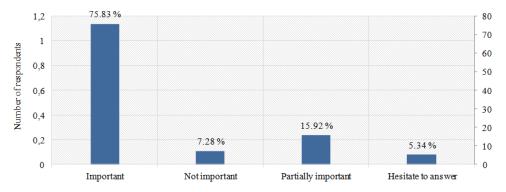
#### 3 Results and discussion

In the process of the research, we conducted the survey of students, teachers and occupational safety engineers on understanding the essence of the concept of "culture of safety of professional activity". The results of the survey showed (Table 1) that 48.9 % of teachers of higher education institutions, 47.5 % of safety engineers and 43.6 % of students understand the etymology of the concept of "culture of safety of professional activity". In general, 44.47 % of respondents have a general idea of the essence of the definition of "culture of safety of professional activity". At the same time, the problem of formation of CSPA in future safety engineers requires finding ways and mechanisms to solve it.

Table 1: The results of the survey of respondents on the understanding of the concept of "culture of safety of professional activity"

	Total		Results of the survey				
Categories of respondents		%	incorrect		correct		
	number		Number	%	Number	%	
Students	946	79,83	534	56.44	412	43.6	
Teachers of higher education institutions that train future occupational safety engineers	127	10,71	65	51.18	62	48.99	
Occupational safety and health engineers	112	9,45	59	52.67	53	47.5	
Total	1185	100	658	55.52	527	44.47	

Figure 2: The results of the survey of respondents on the importance for occupational safety engineers to possess the culture of safety of professional activity (compiled by the author)

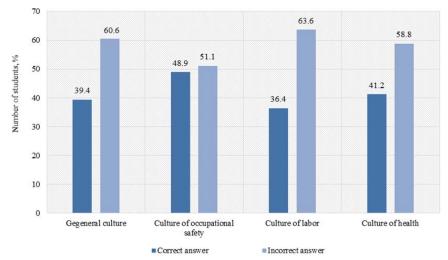


To the question of the questionnaire "Do you consider it necessary for occupational safety engineers to have the CSPA" the majority of respondents gave the positive answer (75.83 %); 7.28 % of respondents noted that CSPA is not particularly important for a safety engineer; 15.92 % of respondents indicated that CSPA is partially important; 5.34 % of respondents were hesitant to answer (Figure 2).

Based on the etymology of the concept of CSPA, we tested occupational safety engineers on the level of knowledge and mastery of the culture of safety of professional activity, labor culture, health culture, general culture. To this end, we developed a questionnaire for students (Appendix Table A-3), which provides a list of questions that made it possible to

determine the availability of relevant knowledge related to the culture of occupational safety, labor culture, health culture, and general culture. An in-depth study of the results of the questionnaire revealed that students needed to develop knowledge related to labor culture, health culture and general culture (Figure 3). Thus, questions related to general culture were answered correctly by 39.4 % of students, incorrect answers were given by 60.6 %; 48.9 % of students gave the correct answer to the questions related to the culture of occupational safety, 51.1 % gave the wrong answer; 36.4 % of students answered the questions related to the labor culture correctly, 63.6 % answered incorrectly; 41.2 % of students answered the questions related to the culture of health, 58.8 % gave the wrong answer.

Figure 3: The results of the survey of students on the knowledge of general culture, culture of occupational safety, culture of labor, culture of health



The results of the survey of students on knowledge of general culture, occupational safety culture, labor culture, health culture allow us to draw the following conclusions: the formation of CSPA in future occupational safety engineers in higher education institutions is spontaneous, not systematic; most students need to improve their knowledge on certain types of cultures that form the foundation of CSPA; in the content of professional training of future occupational safety engineers insufficient attention is paid to the formation of CSPA and its individual components.

In addition to the study of students' theoretical knowledge, the state of professional skills required for future occupational safety engineer to carry out professional activities on the principles and priorities of CSPA, including: organizing the work of the team and performers with due regard to occupational safety requirements; assessing and analyzing the condition of hazardous production facilities, technological processes and equipment for compliance with the level of safety; applying the requirements of occupational safety legislation, regulations and equipments' regulatory and technical documentation; assessing

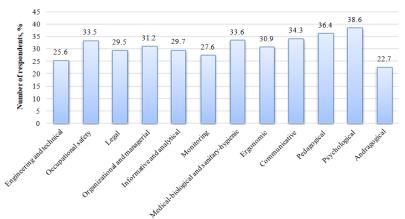
the level of one's own health culture and using health-preserving technologies to improve it; establishing interaction with employees, heads of structural subdivisions of enterprises, employers, representatives of trade unions, public administration bodies of occupational safety, state supervision and control and finding optimal solutions in conflict situations. In the process of questionnaire survey, we found (Figure 4) that 31.2 % of respondents need improvement of organizational and managerial skills, medical-biological and sanitary-hygienic skills - 33.6 %, ergonomic skills - 30.9 %, andragogical skills - 22.7 %. At the same time, 25.6 % of students expressed a desire to improve engineering and technical skills; 33.5 % - occupational safety skills; 29.5 % - legal skills; 29.7% - informative and analytical skills; 27.6 % - monitoring skills. Particular attention was paid to communicative skills (34.3 %), pedagogical skills (36.4 %), psychological skills (38.6%). Analysis of the results of the survey of students shows that during the formation of CSPA in future safety engineers there is a need to pay attention on improving medical and biological, ergonomic, communicative, pedagogical, psychological skills. In turn, this requires consideration when structuring the content of the formation of

CSPA in future occupational safety engineers of the relevant disciplines, which are part of the ergonomic, communicative, health-preserving content components.

In the process of monitoring the state of formation of CSPA of future occupational safety engineers in students, we found out the level of readiness of future specialists to perform their duties according to the principles and priorities of CSPA. The results of the survey showed that 45 % of respondents rated their capabilities at a sufficient level, 11 % – at a high level. It should be noted that 14 % of respondents said they were unsure of their abilities, 30 % of students believe that their preparedness to perform professional tasks on the principles and priorities of the CSPA is insufficient.

In order to find out the reasons for the low readiness of students to perform professional tasks on the basis of safety priorities, we conducted questionings and interviews. In the process of generalization and systematization of respondents' answers it was found that students have difficulties in organizing the occupational safety management system at the enterprise, as well as insufficient knowledge of document management in the field of occupational safety, and occupational safety control, low level of knowledge of labor law. There was a low orientation in the methods of prevention of occupational injuries, measures to organize the safe performance of work at high risk facilities. For some respondents, important limiting factors were: high responsibility for maintaining the health and lives of others, possible emotional overload in the event of an accident, psychological tension due to constant monitoring by the state occupational safety supervision authorities.

Figure 4: The needs of students in improving professional skills related to the implementation of professional activities on the principles and priorities of CSPA

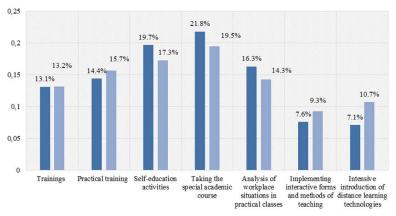


One aspect of the survey was to find out the opinion of higher education teachers and students on organizational forms that effectively influence the formation of CSPA in future occupational safety engineers (Figure 5). Thus, the survey of teachers shows the following results: trainings were noted by 13.1 % of respondents; practical training – 14.4 %; self-education activities – 19.7 %; taking the special academic discipline "Culture of Safety of Professional Activity" – 21.8 %; analysis of workplace situations in practical classes related to the academic discipline "Culture of Safety of Professional Activity" – 16.3 %; implementing interactive forms and methods of teaching – 7.6 %; intensive introduction of distance learning technologies, blended learning – 7.1 %. The results of the survey of students on this issue were distributed as follows: trainings were noted by 13.2 % of respondents; practical training –

15.7%; self-education activities – 17.3%; taking the special academic discipline "Culture of Safety of Professional Activity" – 19.5%; analysis of workplace situations in practical classes related to the academic discipline "Culture of Safety of Professional Activity" – 14.3%; implementing interactive forms and methods of teaching – 9.3%; intensive introduction of distance learning technologies, blended learning – 10.7%.

Thus, according to the results of the questionnaire, it should be noted that, according to students and teachers, the main forms that contribute to the effective formation of CSPA in future safety engineers are: taking the special academic course "Culture of Safety of Professional activity", self-education activities, practical training, and analysis of workplace situations.

Figure 5: The results of the survey of respondents assessing the effectiveness of forms of CSPA formation in future occupational safety engineers



■ Teachers ■ Students

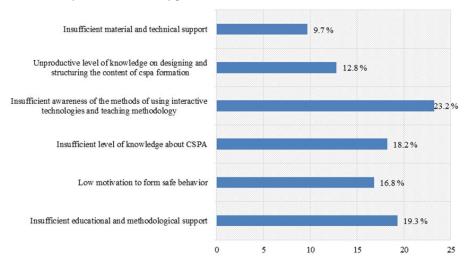
At the same time, students noted that the implementation of measures for the formation of CSPA in future safety engineers in higher education institutions is carried out constantly (23.2 %); sometimes (54.6 %); never (22.2 %). As the main activities the students highlight: holding Academic Olympiads, competitions for the Occupational Safety Day, holding scientific and practical conferences on occupational safety, studying certain issues of the culture of safety of professional activity in classes on professionally-oriented academic disciplines in the field of occupational safety. The analysis of the data shows non-systemic nature of the measures of implementing CSPA.

In the course of further research, we identified problems that prevent teachers of higher education institutions effectively form CSPA in future occupational safety engineers. The main reasons named by teachers (Figure 6) are: insufficient educational and methodological support (19.3 %); low motivation to form safe behavior (16.8 %); insufficient level of knowledge about CSPA (18.2 %); insufficient awareness of the methods of using interactive technologies and teaching methodology (23.2 %); unproductive level of knowledge on designing and structuring

the content of CSPA formation (12.8 %); insufficient material and technical support of the process of professional training of future safety engineers (9.7 %).

The results of the survey of the teaching staff of higher education institutions show that teachers need to improve their knowledge on the use of interactive learning technologies, as well as to implement effective methods of forming CSPA; there is an urgent need to update the content of professional training of future occupational safety engineers with the component CSPA; we also detected the disinclination of teachers for systematical implementing and applying information and communication technologies, distance learning technologies, as well as the using blogs, chats to promote CSPA issues. Thus, this leads to further research to determine the organizational and pedagogical conditions for the effective formation of CSPA, as well as the development of appropriate pedagogical system, and educational and methodological support for the formation of CSPA in future safety engineers, creating methodological occupational recommendations for teachers on CSPA formation.

Figure 6: The results of the survey of teachers to identify problems that hinder the effective formation of CSPA



One of the structural components of CSPA is subjective, which includes professionally important qualities and abilities of the individual, the presence of which affects the level of CSPA in future occupational safety engineers. With this in mind, the next step in our study was to identify the opinion of students, teachers, and occupational safety engineers on the importance of the professionally important qualities that a future occupational safety engineer with a high level of CSPA should possess. To this end, we conducted a questionnaire asking respondents to rank the professionally important qualities of a future occupational safety engineer, which in their opinion are significant. The following were identified as fundamental (Figure 7): responsibility (48.3 %); persistence (41.5 %); discipline (33.7 %); purposefulness (43.5 %); powers of observation (36.3 %); fidelity to one's principles (39.4%); emotional stability (14.8%); self-control (13.6 %); restraint (13.2 %) efficiency (17.3 %); mobility (21.8 %); communicative abilities (15.1 %).

The results of the survey show that respondents think that the main professionally important qualities of an occupational safety and health engineer are responsibility, persistence, purposefulness, fidelity to one's principles, powers observation and discipline.

At the same time, such qualities as emotional stability, self-control, restraint, communicative abilities did not receive due attention. This indicates that in the process of professional training of future occupational safety engineers, insufficient attention is paid to the analysis and formation of individual components of CSPA, as well as to the problem of personal development of these professionals. Thus, in the process of forming CSPA in future occupational safety

engineers we should provide for the formation of the above qualities through the content of disciplines "Psychology of Occupational Safety", "Business Communications", "Safety Pedagogy".

At the same time, one of the stages of our study was to find out the opinion of teachers of higher education and occupational safety engineers of industrial enterprises, institutions, organizations on the importance of professional skills of occupational safety engineer to carry out professional activities on the principles and priorities of CSPA. To this end, we proposed a questionnaire of professional skills of an occupational safety engineer, which could be used to rank the skills of an occupational safety engineer, which they determined themselves. Thus, from among the professional skills of a future occupational safety engineer, the respondents compiled the following rank: 1st place - occupational safety skills; 2nd place - legal; 3rd place - organizational and managerial; 4th place - monitoring; 5th place - engineering and technical; 6th place - ergonomic; 7th place informative and analytical; 8th place - medical-biological, sanitaryhygienic; 9th place - communicative; 10th place - psychological; 11th place - pedagogical; 12th place - andragogical. So, as we see, according to the respondents, for the future safety engineer it is important to form occupational skills like occupational safety, legal, organizational and managerial, monitoring. We agree with the opinion of teachers of higher education institutions and occupational safety engineers, but we also consider it necessary in the process of forming CSPA to focus on the development of such skills as communicative, pedagogical and psychological.

Self-education is important in the activity of an occupational safety engineer, because the skill is essential for systematizing and analyzing legislative and regulatory acts on occupational safety. In addition, the formation and development of CSPA is possible only through the process of self-education. Given these provisions, one of the stages of the study was to determine the importance of self-education in the students' educational process. Survey data showed that 72.4 % of respondents said that little attention is paid to self-education activities. Students named the following reasons that have negative impact on self-education in the course of CSPA formation (Figure 8): low motivation for self-education (21.4 %); lack of understanding and awareness of the need for self-education activities

(10.1 %); insufficient educational and methodological support of independent work (20.7 %); lack of skills to organize self-education (25.1 %); lack of proper control over self-education activities by teachers (16.5 %); inefficient timing of the working day (6.2 %).

The results of the survey indicate the need and actualization of logical planning and development of educational and methodological support for independent work of students in disciplines that ensure the formation of CSPA in future occupational safety engineers.

Figure 7: The results of the survey of respondents on the significance of professionally important qualities of future safety engineers

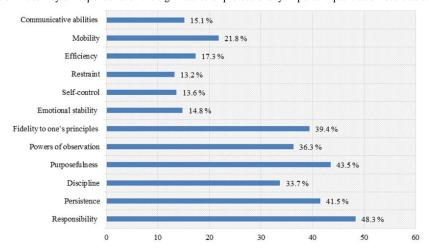
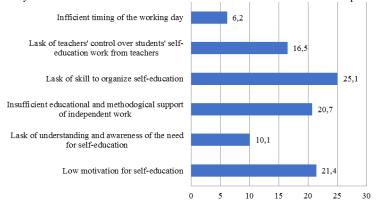


Figure 8: Reasons that negatively affect self-education in the course of the formation of CSPA in future occupational safety engineers



Taking into account the identified content components of CSPA (occupational safety, organizational and managerial, legal, ergonomic, health care, communicative), we analyzed Educational and Professional Programs (EPP) and curricula of specialty 263 "Civil Safety" in the field of knowledge 26 "Civil Safety" in specialization "Occupational Safety" of the first (Bachelor's) level for the availability of disciplines that ensure the formation of CSPA, in the following universities: Zaporozhye National University (2019), Lutsk National Technical University (EPP, 2019), Khmelnytsky National University (EPP, 2019), National University Water Management and Nature Management (EPP, 2017), National University of Civil Defense of Ukraine (EPP, 2019), Lviv State University of Life Safety (EPP, 2017), Ukrainian State University of Railway Transport (EPP, 2019). The results of the analysis of educational and professional programs and curricula allow us to state the insufficient number of subjects aimed on ensuring the appropriate level of formation of CSPA, and significant differences in the list of disciplines and the number of credits. Consider this aspect of the analysis in more detail.

According to the data, the occupational safety component in all these higher education institutions is widely represented. The main professionally-oriented disciplines in the field of occupational safety, which ensure the formation of occupational

safety knowledge, are "Industrial Sanitation", "System of Control of Hazardous and Harmful Production Factors", "Fire Safety", "Safety of Technological Processes and Equipment", "Electrical Safety", "Investigation, Accounting and Analysis of Accidents, Occupational Diseases and Accidents", "Examination Occupational Safety". Only at Khmelnytsky National University there are no disciplines related to the prevention of occupational injuries, investigation of accidents, occupational diseases. Note that these disciplines are key to the formation of CSPA. In addition, it should be emphasized that for the formation of informative and analytical knowledge, the ability to draft local acts of the enterprise an important discipline is "Documentation and Training in Occupational Safety", which is presented only at Zaporozhye National University. There are also disciplines that are part of the organizational and managerial content component of the curriculum of higher education institutions. Thus, Zaporizhzhya National University, Lutsk University, National Technical Khmelnytsky University, National University of Civil Defense of Ukraine, and Ukrainian State University of Railway Transport provide this component with the following disciplines: "Occupational Safety Management", "Organization of Supervision in the Field of Occupational Safety Protection"; in Lviv State University of Life Safety there is only one course - "Occupational Safety Management".

The formation of legal knowledge is carried out through the content of the following disciplines: "Legal and Socio-economic Foundations of Occupational Safety" at Zaporozhye National University; "Jurisprudence", "Organizational and Legal Aspects of Working with Staff" at Lutsk National Technical University; "Legal Bases of Civil Safety of Labor Policy and Occupational Safety" at Khmelnytsky National University; "Labor Law", "Legal basis of Civil Safety" at the National University of Water Management and Environmental Sciences; "Regulatory and Legal Framework in the Field of Civil Protection", "Legal Aspects of Occupational Safety" at the National University of Civil Protection of Ukraine; "Jurisprudence and Legal Principles of Civil Protection", "Regulatory Work in the Field of Civil Protection", "Legal Basis of Occupational Safety" at the Lviv State University of Life Safety; "Legal Basis of Occupational Safety Policy" at the Ukrainian State University of Railway Transport. We should make a special mention of the logical sequence and continuity of training in the process of designing curricula at Zaporizhia National University and Lutsk National Technical University. Thus, in the first year students receive general knowledge of law, and in the senior - professional legal knowledge in the field of occupational safety and civil protection.

Ergonomic content component, which includes "Ergonomics" and "Occupational Psychology and Safety" is presented in three institutions of higher education: Ukrainian State University of Railway Transport, Zaporozhye National University and Lutsk National Technical University. At the National University of Water Management and Nature Management this component is provided only by Labor Psychology, at the National University of Civil Defense of Ukraine this component is completely absent. At Khmelnytsky National University and Lviv State University of Life Safety, psychological aspects of occupational safety are considered as part of the integrated disciplines "Socioeconomic and psychological foundations of civil security" and "Fundamentals of psychology and pedagogy". Accordingly, ergonomic issues in these higher education institutions are not studied, which negatively affects the formation of CSPA. These differences and shortcomings indicate the need to develop appropriate content and educational and methodological support for the disciplines "Workplace Ergonomics", "Psychology of Occupational Safety".

In the process of analyzing educational and professional programs and curricula, we found that the communicative content component is insufficiently represented, and in some institutions it is completely absent. Thus, pedagogical knowledge and skills are formed through the content of disciplines "Teaching the Population to Act in Emergencies" (Lutsk National Technical University), "Fundamentals of Psychology and Pedagogy" (Lviv State University of Life Safety), "Fundamentals of Pedagogy" (Ukrainian State University of Railway Transport) . In other institutions of higher education (Zaporizhzhya National University, Khmelnytsky National University, National University of Water Management and Environmental Sciences, National University of Civil Defense of Ukraine) the study of disciplines included in the communicative component is not provided. The results of the analysis of educational and professional programs in this direction actualize our attention to the design of the content of disciplines that provide the formation of pedagogical and communicative knowledge, which are elements of the cognitive component of CSPA.

Further research has shown that this trend is observed in the analysis of curricula for the presence of disciplines that are part of the health component. Thus, at Lutsk National Technical University the health-preserving component is implemented through the course "Occupational Safety and Human Health", at the National University of Water Management and Nature Management — "Life Safety and Pre-Medical Care", at the National University of Civil Defense of Ukraine — "Preparation for Pre-Medical Assistance", at Lviv State University of Life Safety — "Medical Training". There are no disciplines related to health culture at Zaporizhia National University, Khmelnytsky

National University and Ukrainian State University of Railway Transport. Thus, it indicates a solution to the problem of structuring the content of the health component.

During the research we analyzed the educational and professional programs for the special academic discipline "Culture of Safety of Professional Activity", which showed that this discipline is provided only in the curriculum of the National University of Civil Defense of Ukraine. The results of this analysis confirm the importance of creating a special academic course "Culture of Safety of Professional Activity". Thus, the study of the state of formation of CSPA in future occupational safety engineers allowed us to conclude that the substantive components of CSPA we identified are represented partly in the above institutions of higher education. The results of the analysis of educational and professional programs for training of occupational safety engineers show that in each institution of higher education there are differences in the list of subjects and the number of hours; the substantive components of the CSPA are not sufficiently disclosed; there is a need for designing the content and developing the educational and methodological support of the special academic course, as well as disciplines that are part of the ergonomic, communicative, health-preserving components.

#### 4 Conclusion

This study substantiates the state of formation of the culture of safety of professional activity in future occupational safety and health engineers. The study of the state of the culture of safety of professional activity allows us to draw the following conclusions: the formation of the culture of safety of professional activity in future occupational safety engineers is mostly spontaneous, not focused, and not enough attention is paid to updating the content of vocational training of occupational safety engineers with the component culture of safety of professional activity. It was found that the process of forming the culture of safety of professional activities of future safety engineers is carried out with a focus on traditional teaching methods. The results of the analysis of educational and methodical documentation show that: training of future occupational safety engineers needs to be improved in the educational and methodical aspect; the content, methods and technologies of theoretical and practical training do not provide the appropriate level of culture of safety of professional activity, which in the future will negatively affect the quality of their professional activities.

Thus, the study of educational and methodological documentation (educational and professional programs, curricula), monitoring the training of future occupational safety and health engineers suggests that: the content of the formation of CSPA in future occupational safety engineers needs to be updated with component CSPA; the formation of CSPA in future safety engineers should be improved in the teaching and methodological aspect; methods and technologies used in the training of future occupational safety engineers do not sufficiently contribute to the effective formation of CSPA. The results of the analysis of the researched problem testify to the need to significantly improve the formation of the culture of safety of professional activity in future safety engineers, which should be based on improving the system of professional knowledge and skills, professionally important qualities, improving approaches to the introduction of modern pedagogical technologies and innovative methods of the educational process of higher education institutions.

Analysis of the results of theoretical and experimental research confirmed the need and relevance of a thorough study on the formation of the culture of safety of professional activity in future occupational safety and health engineers. We see the prospect of further research in the development of a pedagogical system of formation of the culture of safety of professional activity in future occupational safety engineers, aimed at increasing and improving the motivational and value sphere, professional knowledge, skills and professionally important

qualities to prevent occupational injuries, gaining experience in safe professional activities and communication on occupational safety issues.

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**Primary Paper Section:** A

Secondary Paper Section: AQ

# THE COMPETENCE MATRIX AS A TOOL TO ENSURE THE EFFECTIVENESS OF PERSONNEL DEVELOPMENT PROGRAMS IN SOCIAL ENTERPRISES

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Abstract: An active labor force in the labor market is the key to the vitality of the national economy, while at the same time, the most vulnerable and socially unprotected categories of the population may be insufficiently involved in socialization processes. As a result, such citizens, most of all, experience the negative impact of crisis phenomena and economic, social, and environmental shocks. The social enterprise is a business model that allows the involvement of socially unprotected categories of the population in labor activity and promotes the development of competencies necessary for socialization and demand in the labor market. This research aims to determine the critical competencies required to ensure the effectiveness of personnel development programs at social enterprises. The research methodology is based on a survey among representatives of socially disadvantaged groups, the analysis of a focus group of three social enterprises from Ukraine, and the use of DEMATEL method to determine and evaluate the relationships between the criteria and factors under study. The study results highlighted the most critical competencies: communicativeness, intellect, selforganization, responsibility, and adaptability. Furthermore, based on the focus group survey results, a competency model for employees (beneficiaries) of social enterprises was developed. The obtained results have a practical significance, as precisely the development of critical competencies should be paid attention to when assessing the employees of social enterprises using the business employment model.

Keywords: Social enterprise, human resource management, efficiency assessment, social economy, competence matrix.

#### 1 Introduction

The Ukrainian labor market pays much attention to socially protected categories of the population while caring for the most vulnerable citizens (those with a different starting set of qualities and opportunities, which reduces their competitive ability in various spheres of life, including the labor market) has been ignored. However, it is considered an indicator of the stability and civilization of the state. These categories include:

- people with disabilities, the chronically ill, the HIVinfected:
- the elderly, and other categories with limited opportunities for work and a habitual way of life;
- orphans, homeless people, former prisoners, independent women raising children on their own;
- internal migrants, participants in the hostilities, the poor ones, representatives of the Roma national minority, and other groups of citizens.

They are often subject to discrimination because they belong to one category or another. Such citizens are referred to as "vulnerable populations", which means individuals or social groups are more likely to suffer social harm from economic, environmental, artificial, and other factors of modern life (Bendasiuk, 2010). This part of society requires specific conditions at all stages of life, allowing not only to feel genuinely full society members, able to provide for their needs but also to make a contribution to the national profit, as opposed to the budgetary costs of paying social benefits. The principles of justice and equality underlying the ideology of equal opportunities of the Concept of Sustainable Development overlap with the concept of social inclusion, which, according to Saveliev (2012), conditioned the change in the socio-economic development of most Western European countries and laid the foundation for the development of the Concept of Sustainable Development.

### 2 Literature Review

The social inclusion of particular groups is one of the primary conditions for overcoming unemployment and poverty (Andrian, 2020). Pirvu & Iordache (2020) share this opinion, noting that the social inclusion of specific population groups is a crucial way to solve such social and economic problems as employment,

long-term unemployment, and poverty. Moreover, this approach is also very suitable in the context of the demographic crisis and the rapid aging of the economically active population of Ukraine because it is possible to increase the economically active population of Ukraine due to the intensive inclusion of socially vulnerable categories of the people in the sphere of employment.

The social enterprise is a model of economic activity, which involves socially unprotected categories of the population in labor activity and developing their competencies, allowing them to be competitive in the traditional labor market as well. Finally, social companies are a type of social business (Tykkylainen, Ritala, 2021). Such companies make an essential contribution to the economy in at least three ways: job creation and new opportunities, support for the most vulnerable people, and highquality public services (Social Enterprise UK, 2019). In other words, social enterprises exert influence on the national economy in three ways: by raising the possibility, increasing the desirable, and introducing the acceptable (World Economic Forum (2021). By serving social purposes, they are an essential tool that governments use to support social innovation and sustainability (European Commission, 2021). Social enterprises generate income by selling products and services to customers while creating social value by targeting underserved and often poor communities (Bunduchi et al., 2022). By aiming for both social goals and financial sustainability, social enterprises improve the economy and increase the number of resources raised (Jayawarna et al., 2020), as well as the range of stakeholders in their operations (Phillips et al., 2019).

The phenomenon of social enterprises, their typology, and their importance to the country's economy were also investigated by Edwards (2008), Alter (2007), Price (2008), and others. In addition, social enterprises as a type of business and social entrepreneurship as a phenomenon were studied by Zavadskikh, Tebenko (2020), Svinchuk (2017), and other researchers. However, the theory of entrepreneurship does not sufficiently reflect the specifics of human resource management in social enterprises, in particular on the formation of personnel development programs, given the fact that the economic results of the enterprise are not the primary goal of such enterprises, and staff turnover is often a positive metric. Thus, the managers are limited in selecting practical tools for working with personnel.

Research on socially insecure families and studies of the factors that cause the impoverishment of many households point to the so-called "vicious circle of poverty" – the relationship between the low educational level of most members of the group and their meager incomes. Thus, such families' low level of affluence does not allow them to invest in self-development, and the lack of development does not allow them to find employment and earn a salary. The problem is also exacerbated by a lack of social capital and social connections favorable to socialization (OECD, n. d.).

The employment model involves the creation of jobs and training and (re)socialization opportunities for the target audience, who are usually excluded from the traditional labor market. This model provides long-term results by strengthening the ability to cope independently of the target group, nurturing alternative role models of behavior, and improving their standard of living and quality of life.

Social enterprises operating according to the employment model are a platform for social adaptation and a springboard of labor socialization for members of marginalized or stereotyped communities with deviant lifestyles and who are at a great distance from the majority of society, have different starting conditions, and a high barrier to entry into the traditional labor market (Hong and Ju, 2019).

The phenomenon of these social enterprises is that the turnover rate is simultaneously seen as a metric of positive performance (Sytnyk & Yurchenko, 2021). In particular, if a person refuses to participate in the social enterprise activities due to a manifestation of weak will and a desire to return to previous living conditions – the turnover rate will harm the effectiveness evaluation of individual programs and the activities of the enterprise as a whole. Whereas dismissal (or it is more appropriate to characterize this phenomenon as "release") initiated by an enterprise or an individual as a sign of the latter's personal and professional growth and their ability for self-realization in the traditional labor market – is an indicator of achieving the social enterprise's mission.

The study of competencies began in the early 1970s, and today there are many discussions around competencies among academics, entrepreneurs, government, and the social sector. Boyatzis (2008) believes that competence is an essential characteristic of the individual that leads to or entails practical or better performance. Spencer & Spencer (1993) argue that competence is a primary personality characteristic causally related to a particular criterion of effectiveness and better performance at work or in a specific situation. Competencies lead to a performance in the causal effect that competence (intention) causes behavior (action), which in turn affects performance (outcome). At the same time, competence is the enduring trait and characteristic determining performance. A critical aspect of the concept of competence is the ability to distinguish those with better performance (Zwell, 2000). In business, competence is the skills, knowledge, and abilities characteristic of being visible to customers, better than their competitors, and difficult to imitate (Mooney, 2007). For an individual, competence is the mobilization of knowledge, actions, and emotions used to create value (Bendassolli et al., 2016) and the proven ability to responsibly and autonomously use their knowledge, skills, and abilities (personal, social, or methodological) in various situations, such as work, training, professional and personal development (Chiru et al., 2012).

Thus, the personnel performance evaluation process requires shifting the focus from the employee's ability to contribute to the development of the organization to the personal development of the employee, strengthening their potential, cultivating competencies of ability to cope independently, and as a consequence, self-actualization both within the given enterprise and outside of it. As a result, there is a need to analyze the indicators' dynamics, which will allow us to understand whether the employee is growing over himself. Also, it is needed to determine the growth areas of the employees, the difficulties they face, and their needs on their way to the traditional labor market.

The research aims to determine the critical competencies necessary to ensure the effectiveness of personnel development programs at social enterprises.

# 3 Materials and methods

The study surveyed 100 representatives of socially vulnerable groups in Ukraine: representatives of families with many children (20), former prisoners (20), representatives of Roma communities (20), former orphans (20), people with disabilities (20), who noted that among their close circle of communication there are no successfully employed people (61 %). We should note that in the majority, their only circle of communication is the family they live with (57 %). Furthermore, 74 % of those surveyed said that they felt that society did not want to have contact with them.

The research team conducted a focus group with managers of three social enterprises to determine the competencies that summarize the behavior of a person ability to cope independently. The first enterprise is "Winds of Change" (Odesa, Ukraine). The enterprise has been operating since 2020 and is one of the first social enterprises whose beneficiaries are Roma non-writing women. The enterprise is engaged in the

production of bedding and in the context of working with beneficiaries: they teach women to sew, provide a workplace, write and read, basic legal literacy, and provide psychological counseling

The second enterprise is "Nut House" (Lviv, Ukraine). The company has been operating since 2012 as a bakery, canteen, and catering. And in the context of working with beneficiaries, work with women who have fallen into difficult circumstances, provide psychological support, re-qualification, and foster ability to cope independently.

The third enterprise is "Samaritan" (Sumy, Ukraine). The enterprise has been operating since 2017 in the agricultural sector. The company has a small farm and is engaged in its maintenance and sale of farm products. The beneficiaries of the project are people with drug addiction in the past. Most of them are former prisoners. In the context of working with the beneficiaries, the enterprise:

- provides housing and employment;
- trains them in farm maintenance;
- prepares the beneficiaries for self-employment.

To form programs for developing specific competencies within the framework of social enterprises, there is a need to determine their relationship with each other. For this purpose, we will use the DEMATEL method (Fontela, Gabus, 1974), which allows us to build relationships between criteria and factors, and also allows us to assess the overall degree of influence of different elements or problems, to identify cause-and-effect groups and to establish causal relationships. In this study, DEMATEL will be used to identify complex relationships, construct an impact relationship map (IRM) of the criteria, and obtain the impact levels of each element over the others. The method is based on peer review. In our case, these scores were given by the founders of the three social enterprises by consensus. We assume that the scale is as follows: 0, 1, 2, 3, and 4, and means "no impact" with a score of "0" and "powerful impact" with a score of "4".

# 4 Results

Having summarized the suggestions of the social enterprises studied, we can state that the vast majority of respondents identified the following competencies as the most important:

- communicativeness;
- ingenuity;
- self-organization and responsibility;
- adaptability.

These are essential behavioral competencies and do not depend on the position or type of activity. Since we will evaluate these competencies, there is a need to identify behavioral indicators, which will minimize subjectivity in interpreting one or another competency. The proposed competency matrix for employees (beneficiaries) of social enterprises, formed based on the results of the focus group survey, is presented in Table 1.

Based on the consensus and expert assessment by the founders of the three social enterprises "Winds of Change" (Odesa, Ukraine), "Walnut House" (Lviv, Ukraine), and "Samaritan" (Sumy, Ukraine), a matrix of pairwise competencies comparison was obtained (Table 2).

Based on this result, matrix D and matrix T were calculated. Thus, we established a threshold value and constructed a causal diagram. The critical evaluative competencies were determined by the values (ri+ci). According to Tabl 2, intelligence and adaptability competencies were the most crucial group of competencies with the highest (ri+ci) score = 3.6667, followed by communication competencies with a (ri+ci) score of 2.0. In contrast, self-organization competency had a score of 0 (ri+ci), which means it does not affect other competencies (Table 3, Table 4).

Table 1: Proposed competency matrix for employees (beneficiaries) of social enterprises

Competency	Description	Positive behavioral indicators
Communicativeness and interaction	Demonstrates readiness for dialogue	<ul> <li>shares information openly, gives maximum relevant information;</li> <li>answers the question asked, speaks extensively and to the point, does not misuse jargon or terminology;</li> <li>shows politeness and consideration for others, demonstrates active listening, is moderately pertinent, and displays empathy;</li> <li>responds to calls and letters on time, calls back when agreed upon, responds promptly to inquiries, stays in touch and informs about existing changes in the situation;</li> <li>asks for recommendations and is attentive to them, shares impressions, gives feedback</li> </ul>
Intelligence	Quickly and correctly evaluates the current situation, adapts own behavior	- works through information quickly, establishes innovation in one's work;  - asks pertinent questions, draws correct conclusions from the information and data received;  - adapts own behavior and manner of communication to match another person;  - is able to quickly learn a large amount of new information;  - thinks comprehensively
Self-organization and responsibility	Can effectively and independently organize the work and take responsibility for the undertaken obligations	<ul> <li>is able to independently prioritize and balance, plans work independently, monitors compliance with deadlines;</li> <li>works effectively in multitasking mode;</li> <li>abides by rules;</li> <li>makes decisions independently within authority, demonstrates interest in personal and professional development, acts proactively</li> </ul>
Adaptability to change	Adapts to changes without stress	- remains calm under changing conditions and circumstances, easily tolerates unpredictability;  - adapts to new challenges;  - reflects positively, is open to new things;  - is open to new ways of working, new tools and techniques

Table 2: Matrix of pairwise comparison for groups

	Communicativeness	Intelligence	Self-organization	Adaptability
Communicativeness	0	0	0	0
Intelligence	3	0	0	4
Self-organization	0	0	0	0
Adaptability	3	4	0	0

Source: compiled by the authors

Table 3: Received meanings for the competence groups

	Communicativeness	Intelligence	Self- organization	Adaptability	$\mathbf{r}_{\mathrm{i}}$	ci	r <sub>i</sub> +c <sub>i</sub>	r <sub>i</sub> -c <sub>i</sub>
Communicativeness	0	0,0000	0	0,0000	0,0000	2,0000	2,0000	-2
Intelligence	1	0,4848	0	0.8485	2,333	1.333	3,6667	1
Self-organization	0	0,0000	0	0,0000	0,0000	0,0000	0,0000	0
Adaptability	1	0,8485	0	0,4848	2,333	1.333	3,6667	1

Source: compiled by the authors

Table 4: Direct and indirect influence of the criteria

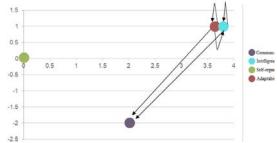
Table 4: Direct and indirect influence of the criteria	1	1
Criterion	$r_i+c_i$	r <sub>i</sub> -c <sub>i</sub>
Communicativeness	2	-2
Intelligence	3,6666667	1
Self-organization	0	0
Adaptability	3,6666667	1
Communicativeness		
Demonstrates tactfulness and consideration for others, demonstrates active listening, is appropriate	2,8423188	0,5867173
Asks for recommendations and is attentive to them, shares impressions, gives feedback	3,3174174	-0,5556273
Responds to calls and letters in a timely manner, returns phone calls if arranged, responds promptly to inquiries, informs of existing changes in situation	2,8779299	0,6446404
Demonstrates empathy	2,6995808	-1,3408039
Answers the question asked, speaks extensively and, in essence, gives maximum relevant information,	4,1033867	0,6650735
does not abuse jargon or terminology		
Intelligence		
Asks pertinent questions, draws correct conclusions from information and data received	3.1375162	0.2997541
Is able to quickly learn a large amount of new information	2.0604758	0.0161966
Processes information quickly, establishes innovations in his/her work	2.7030254	0.7931415
Adapts his/her behavior and manner of communication to the interlocutor	3.3397707	-1.1257582
Thinks multifacetedly	3.0868566	0.016666
Self-organization		
Complies with the rules	5.8510638	0.5744681
Works effectively in multitasking mode	7.7659574	-0.9574468
Is able to independently prioritize and balance, plans his/her work independently, monitors compliance with deadlines	10.402619	-0.1472995
Makes decisions independently within the limits of his/her authority, demonstrates interest in personal	9.7250409	0.5302782

and professional development, actively acts		
Adaptability		
Keeps calm in case of changing conditions and circumstances, easily tolerates unpredictability	4.9388889	0.0611111
Thinks broadly, open to new things	1	1
Forms ideas and approaches, evaluating the newest conditions	5.0555556	-0.0555556
Adapts to new challenges	6.0055556	-1.0055556

Source: compiled by the authors

Table 2 shows that the most critical competencies within the causal relationship are the competencies of intelligence and adaptability, followed by communicativeness. According to the study results conducted with the respondents, the competence of self-organization is not affected or any other competence. Causal relationships are depicted in Figure 1, which shows the correlation between competency groups.

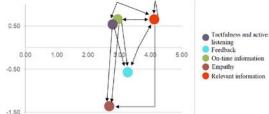
Figure 1: Cause-and-effect links for competency groups



The competence of intelligence affects itself and the competence of communicativeness; the competence of adaptability affects itself and the competence of communicativeness.

Intelligence and communicativeness also affect each other. The competence of communicativeness does not impact any competence, but it is affected by the competence of intelligence and adaptability. The self-organization competency is not affected by or has influenced any other competency.

Figure 2: Cause-and-effect links for communicative competence



Considering the communicative competence by elements (Figure 2), we can see the following most essential qualities:

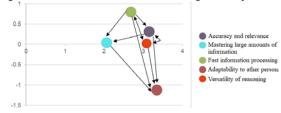
- ability to answer the question asked, to speak extensively and substantively, to give maximum relevant information, which influences the timely response to letters and calls;
- tactfulness and active listening;
- showing empathy and the ability to receive and provide feedback impacts all other competencies.

The second is the ability to answer calls and letters on time, which is influenced by the ability to receive and provide feedback and problem solving and delegation, as well as the ability to answer the question asked, speak voluminously and to the point, give as much pertinent information as possible. Being a tactful and active listener only affects the ability to answer a question, speak voluminously and substantively, and provide as much relevant information as possible, and affects the ability to receive and give feedback and be empathic. The ability to receive and give feedback only affects the display of empathy but is affected by the ability to answer the question asked, speak at length and substance, provide maximum relevant information, respond to letters and calls promptly, tactfulness, and active listening. Demonstrating empathy does not influence other

competencies, however, it is influenced by tactfulness and active listening, timely responses to letters and calls, and the ability to receive and give feedback.

Rapid information processing affects correctness and appropriateness in language, versatility in reasoning, mastery of large amounts of data, and adaptability in speaking to an interlocutor (Figure 3).

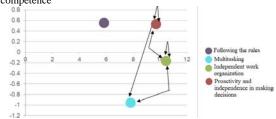
Figure 3: Cause-and-effect links for the intelligence competence



This competence affects all other competencies but is only affected by reasoning versatility. Correctness and appropriateness of language affect the ability to master a large amount of information, adaptability to the interlocutor, and versatility in reasoning. Mastering large amounts of data only affect versatility in a sense, but they are affected by correctness and appropriateness in language and quick information processing. Versatility in reasoning affects only adaptability to the interlocutor, but it is affected by correctness and suitability of statements and rapid processing of information.

Following to rules and self-organization affect themselves and multitasking (Figure 4).

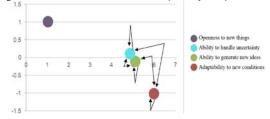
Figure 4: Cause-and-effect links for self-organization competence



Following the rules does not affect any other competency, but they are affected by self-organization and following the rules.

Openness to new things is not affected or influenced by any other factor (Figure 5).

Figure 5: Cause-and-effect links for adaptability competence



The ability to easily tolerate uncertainty affects the ability to shape ideas and the itself and the ability to shape ideas and adapt to new conditions. The ability to generate new ideas affects influence, adaptability to new situations, and the ability to tolerate uncertainty easily. Adaptability to new conditions influences itself and is influenced by the ability to generate new ideas and easily take uncertainty.

#### 5 Discussion

A social enterprise is an organization with a social mission and simultaneously adopts a commercial approach to self-financing its social measures, guided by all the rules of business (Bunduchi et al., 2022). In other words, all profits of such enterprises are refinanced to ensure the social mission. The task of the social enterprise is to solve problems for which there are no market or government solutions. Since the purpose of the social enterprise is to solve social issues, the answers may be different, as well as the ways to build business models to raise funds (Taeuscher et al., 2020). The management of these enterprises, on the one hand, involves the implementation of a profitable business model, and on the other - the implementation of a strategy of (re)socialization, adaptation, and further employee development with not only labor but also the joint social one. The profits of these enterprises are directed to implementing programs for (re)socialization and strengthening the ability to be independent. A share of the costs includes labor compensation – the salaries of the target audience of the enterprise resources (Jayawarna et al., 2020; Phillips et al., 2019).

Analyzing the interpretations of "competence" in most scientists' works (Boyatzis, 2008; Bendassolli et al., 2016; Chiru et al., 2012) has a standard set of elements. However, almost none of the definitions says that it is transformed into behavioral patterns, which become success factors for a different position. Therefore, we propose an extended interpretation of the concept of "competence" — the thinking, values, beliefs, skills, and knowledge that are transformed into behavioral patterns and lead to the desired results in work.

Boyatzis (2008) proves that three clusters of threshold abilities and three groups of competencies distinguish outstanding performance. Specifically, threshold competencies include experience, knowledge (declarative, procedural, functional, and metacognitive), and essential cognitive competencies such as memory and deductive reasoning. At the same time, competencies that distinguish outstanding performance include: cognitive, such as systems thinking and pattern recognition; emotional intelligence competencies, including self-awareness and self-management; and social intelligence, including social awareness and relationship management, such as empathy and teamwork.

Most people from disadvantaged backgrounds have been on the margins of life for generations and feel almost superfluous in society. Low educational level has a significant negative impact on inclusiveness, especially for vulnerable populations, which suggests that the state should focus on early development related to education, which would further positively reduce unemployment and poverty (Andrian, 2020). Being excluded from society's social, cultural, economic, and political life, they are practically marginalized and deprived of the natural development of such competencies as emotional intelligence, self-management, empathy, teamwork, and others. Therefore, we can assume that the competencies of outstanding productivity are unifying all social enterprises with a business model of employment, regardless of the type of industry of production or the service areas they provide. Developing such competencies will equip a person with opportunities to become part of any team and increase their chances for successful employment and labor development.

Competency models have become integral to any organization's human resource management. They are widely used to improve personal and organizational performance because they include a set of success factors necessary to achieve significant outcomes for a particular position in a specific organization. Depending on the type of job, a competency model typically consists of 7–9 competencies and identifies minimum (threshold) competencies and more important competencies that lead to

better performance (Cripe, 2012). Competency-based human resource management uses the competency model to develop strategies in human resource operations, including selection, career and competency development, performance management, and compensation.

Thus, the competency model in an organization allows us to agree on a common language and understanding of what is meant by high performance, therefore allowing us to promote certain employee behaviors. The competency model in dynamics can be embedded as a performance metric for each employee of a social enterprise. Also, the summative indicator in dynamics can be one of the performance indicators of development programs and part of the overall performance evaluation model for social enterprises operating under the employment business model because their main goal is to cultivate the ability to cope independently with their staff. Thus, the ability to manage independently should be described as a competencies model and assess the dynamics of their development.

#### **6 Conclusions**

The study identified the key competencies that need to be formed through the development programs of social enterprises in any industry. This approach eliminates chaos and helps identify indicators, which in turn will form the basis for the method of personnel performance evaluation. The results showed that in terms of prioritizing the importance of competence and the cause-and-effect relationship between the competencies of intelligence, the following qualities are essential:

- the ability to ask appropriate questions and draw correct conclusions from the information and data received;
- the ability to adapt their behavior and manner of communication to the interlocutor is most important within the competence of intelligence;
- the ability to remain calm when conditions and circumstances change and easily tolerate unpredictability:
- to form ideas and approaches, evaluate new needs;
- adapting to new challenges is essential in the competence of adaptability;
- within the communicative competence, the most critical is the ability to ask for recommendations and be attentive to them, share impressions, and give feedback;
- to answer the question, speak extensively and to the point, provide maximum relevant information, and not abuse jargon or terminology.

The most critical competencies among self-organization and responsibility are the ability to prioritize and balance independently, independently plan their work, control compliance with deadlines, make decisions within their authority, demonstrate an interest in personal and professional development, and be proactive. The development of critical competencies, the strengthening of which affects other competencies, should be paid attention to when assessing the personnel (beneficiaries) development in social enterprises operating on the employment business model.

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#### ECONOMIC BEHAVIOR OF CONSUMERS DURING INSTABILITY

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Abstract: The new millennium faced a COVID-19 pandemic and a war in Ukraine, which is much more than a crisis, as these incidents have unpredictably changed our entire way of life. As the analysis of economic sales data showed, this dramatic scenario had a substantial impact on the spending levels of specific categories of consumers. A study of consumers' economic behavior in times of instability has been conducted to understand these changes better. During a recession, consumers have a strong tendency to change their purchasing behavior because of the financial challenges of unstable conditions. They become more selective and focus only on what they consider necessary for survival. Thus, consumer preferences have changed, the approach to consumption has changed, and initial needs and, above all, security needs have come to the fore. Unstable conditions bring companies many visible problems but far fewer apparent solutions. Therefore, a modern business must consider configurations in consumer behavior in a dangerous environment to function effectively. This study aims to determine the economic behavior of consumers facing instability based on the dependence of psychological and economic factors through regression analysis and a survey. Research methods: comparative analysis; systematization; generalization; survey; regression analysis. Based on the survey, we found that the first reaction of consumers faced with instability is a sharp reduction in costs and the transition to the savings mode. The conducted regression analysis reflects the value of the determination coefficient, indicating that the model explains 60 % of consumers' economic behavior during instability and explains the change in costs for the items of the first and second necessities. The study found significant differences between "Changes of Spending on Essentials" and "Changes in Spending on Essentials", t (3832) = 11,99 p < 0,001. We found that spending on essentials increased by 90,66%, while the average increase for second necessities was 3

Keywords: Economic behavior, consumers, conditions of instability.

previous changes in consumer behavior during instability

# 1 Introduction

Modern society is quite dynamic and is characterized by a series of radical socio-economic changes. Their consequences are transforming social relations' matrix in various spheres of life. Accordingly, a new socio-economic environment is formed. It is characterized by changes in the needs, interests, and value orientations of different segments of the population, which are reflected in a certain way in their economic behavior (Kudrynska, Butylina 2018).

Economic crises have repeatedly been a point of instability and led to differentiated changes in the lives of entrepreneurs and consumers, where the last note different changes regarding their economic behavior in buying goods. Therefore, consumer behavior during instability is a significant area of research, especially in the last few years with the various upheavals and changes in the global economy (Stefura, 2010).

Amid historically difficult economic conditions, indicators of consumer financial vulnerability have increased in 2020, specifically unemployment (Financial Times, 2020), bad debt (The Times, 2020), and financial stress (Columbia University Irving Medical Center, 2020). These conditions have resulted in a significant increase in consumers' economic behavior when faced with instability (Deloitte, 2020).

Nevertheless, understanding the psychological factors governing consumers' product-selection behavior can be vital for two main reasons. First, this research can expand our understanding of the basis for consumers' behavior changes due to instability. Second, the findings could help develop new marketing strategies that consider psychological factors to meet real consumers' needs (Rajagopal, 2020).

On the one hand, companies could use this knowledge to increase sales within unstable environments (Diebner et al., 2020). Moreover, understanding consumers' needs could significantly improve market preparedness for future pandemics and emergencies (Song et al., 2020; Hesham et al., 2021). In addition, consumers could take advantage of the readiness of this new market to respond to their present needs.

When instability conditions emerge, factors such as anxiety and perceived lack of necessities could be reduced (Arafat et al., 2020), while consumers' well-being and positive feelings of well-being could be maintained (Gelderman et al., 2019). Two main aspects are new to this study. First, based on previous research finding that volatility conditions affect consumers' willingness to purchase necessities and other necessities differently (Larson, Shin, 2018; Durante, Laran, 2016), we adopted an approach and separate necessities and non-essentials. Second, given the unprecedented instability conditions, we adopted an integrative approach to investigate the role of psychological factors and conscious economic stability in consumer behavior (Di Crosta et al., 2021).

Therefore, it is relevant to deepen the scientific understanding of consumers' economic behavior when facing instability.

This study aims to determine the consumers' economic behavior during instability based on the dependence of psychological and economic factors through regression analysis and a survey.

The research tasks of this article are:

- To analyze the current state of Ukrainians' consumer moods.
- To distinguish between changes in expenditures on first and second necessity goods.
- To establish consumers' strategic intentions under unpredictable deterioration of the monetary situation in conditions of instability.
- To survey consumers to assess their economic behavior when faced with instability.
- To conduct regression analysis to reflect the consumers' economic behavior under conditions of instability based on the dependence of psychological and economic factors.
- To analyze the model of consumers' economic behavior under conditions of instability.

# 2 Literature review

The current economic environment is negative, and many consumers are cutting back on spending and will continue to do so until they feel some financial stability (Stefura, 2010). A consumer is a person who identifies a need or desire and makes a purchase, and then disposes of the purchased product in the consumption process (Grundey, 2009). There are no two identical consumers, as all are influenced by differentiated internal and external factors that shape their behavior.

Consumer behavior is an essential and ongoing decision-making process for seeking, acquiring, using, evaluating, and disposing of goods and services (Valaskova et al., 2015). Flatters and Willmott (2009) argue that consumers try to maximize utility, pleasure, or joy by purchasing consumer goods. Approaches to explaining consumer behavior fall into three groups (Valaskova et al., 2015): mental, based on the relationship between the mentality and consumer behavior; sociological approach,

focusing on consumer reactions in different situations or how various social circumstances influence behavior, social leaders; and economical approach, focusing on basic knowledge of microeconomics, in which consumers determine their demands (Mehta et al., 2020).

Recent studies have shown that consumer behavior has become a factor directly affecting business performance, although, for over 300 years, economists such as Nicholas Bernoulli, John von Neumann, and Oscar Morgenstern have studied the basics of consumer decision-making (Cornescu, Adam, 2015). A theory of utility was created to understand the consumers, in other words, their decisions, according to which the consumer is an "economic and rational individual" (Zinkhan, 1992) who shows only concern for himself. The theory of utility provided a theoretical framework for analyzing decision-making under uncertainty. According to this theory, people choose outcomes that increase their well-being.

Traditionalist economists analyzed human behavior rather rigidly (full rationality), from a purely economic perspective (standard economics), without considering psychological and sociological aspects. However, recent studies (Kahneman and Tversky, 1979) indicate that consumers are not entirely rational. First, the utility model was found to be seriously flawed. Later, Herbert Simon developed the concept of "pleasure" (Simon, 1977), according to which their cognitive and emotional capacities limit the individuals' rationality.

Perspective theory, a contribution of Daniel Kahneman and Amos Tversky, describes particular economic behavior that cannot be explained by previously developed theories that significantly endorse predictions of decision making. In approaching consumer behavior, behavioral economics elements are indispensable. However, we believe that the basic elements of standard theory should not be neglected. Thus, only a harmonization of concepts related to consumer behavior, as revealed by the two economic approaches, can help us define a sufficiently comprehensive view of consumers and their behavior in the face of instability (Cornescu, Adam, 2015).

Amalia et al. (2012) explained that consumers are not the same, and not all consumers perceive a situation with negative consequences, such as economic or any other crisis, in the same way. The latest trends in consumer behavior emerge in the face of instability. The most critical factors modeling consumer behavior during instability are attitudes toward risk and perceptions.

Existing studies point to changes in consumer behavior during crises with a significant difference in the utility model. For example, a study by Flatters and Willmott (2009) identified several new trends during crises, including a simplification of demand due to limited supply during the emergency, tending to continue after the crisis, when people buy simpler goods with high value. The researchers proved the impact of the recession on consumer sentiment and trends in their study to be critical. The most significant trends of the recession include the demand for simplicity, indicating that consumers seek uncomplicated, valuable products and services that simplify their lives and focus on acting in a company where consumers resent unlawful behavior and unethical company behavior (Mehta et al., 2020).

During a recession, but predominantly afterward, the purchasing behavior of all types of consumers undergoes dramatic changes (from the companies' perspective), which are determined by various important factors. Pop, Rosca (2009), and Perriman et al. (2010) find that the most obvious factor is uncertainty about the future. During a downturn, many unexpected changes cause consumers to feel insecure. They question the nature of future events and, therefore, become much more cautious in their approach to certain expenditures.

Perriman et al. (2010) divide factors influencing the consumers' economic behavior under instability into internal and external categories. Internal factors refer to consumers' psychological

and personal characteristics when making a purchase. External factors relate to the changes that consumers are forced to complete due to environmental influences. They are independent of them and are very hard to control.

Since the labor market is volatile, unemployment rates fluctuate (especially rising) during instability. As a result, companies make increasingly smaller profits, consumers feel danger regarding their employment, and they become careful in spending. Zurawicki and Braidot (2005) highlight two types of reactions among consumers: reactive and proactive. The reactive response includes consumption adaptation because consumers give up some unnecessary expenses or postpone them, reevaluate their needs, and change their priorities. Proactive response refers to temporary measures, such as liquidating assets, using savings, additional credits, or searching for a second job (Stefura, 2010).

Previous studies of consumer psychology and behavioral economics have shown that several psychological factors affect consumer behavior differently (Durante, Laran, 2016). Consumers' behavior changes can occur for various reasons, including personal, economic, psychological, contextual, and social factors. However, due to unstable conditions, such as a pandemic outbreak or natural disaster, some factors significantly impact consumer behavior more than others. Situations that potentially disrupt social life or threaten public health have produced intense consumer behavior changes. Panic buying is an emerging phenomenon in which fear and panic affect consumer behavior, causing people to buy more things than usual, as an example (Lins, Aquino, 2020). Specifically, panic buying has been defined as a group behavior that occurs when consumers buy a significant number of products in anticipation of, during, or after a disaster. A recent review of the psychological causes of panic buying highlighted that such changes in consumer behavior occur when purchasing decisions are impaired by negative emotions such as fear and anxiety (Yuen et al., 2020).

In the context of the COVID-19 pandemic, Lins and Aquino (2020) showed that panic buying was positively correlated with impulse buying. It has been defined as a complex purchasing behavior where decision-making speed precludes thoughtful and purposeful consideration of alternative information and choices (Yuen et al., 2020).

We could argue that during an uncertain threatening situation, such as a crisis or pandemic, a primitive part of the human brain prompts people to engage in behaviors that are (perceived) as necessary for survival (Chua et al., 2021). Moreover, these primitive instinctive behaviors can precede rational decision-making, impacting normal consumer behavior. Therefore, the essential primitive people's reactions are the main factor responsible for changing consumer behavior during a crisis (Gelderman et al., 2019).

In particular, fear and anxiety arise from feelings of uncertainty and instability, which are factors that drive these behavioral changes (Hendrix, Brinkman, 2013). These response processes may encourage people to shop for a sense of security, comfort, and instant escape, which may also serve as a compensatory mechanism for stress relief. In turn, the studies have shown that stress is a crucial factor influencing consumer behavior. Earlier studies have shown that consumers can withdraw and become passive in response to stress, and this reaction of inaction can lead to a decrease in purchases. However, some studies indicate that stress can lead to an active response, increasing impulsive spending behavior (Landau et al., 2011; Burroughs, Rindfleisch, 2002; Duhachek, 2005).

Therefore, the problem of consumers' economic behavior during instability is not fully reflected in scientific publications in the form of theoretical studies and practical explorations. Hence, the issue of research on consumers' economic behavior during instability remains relevant and open for further analysis.

#### 3 Methods and Materials

The realization of this study's aims implies the use of the following research methods:

- systematization of the leading consumers' strategic intentions in the unpredictable deterioration of financial conditions during instability;
- systematic and logical analysis, the method of information synthesis, and the generalization of the latest scientific literature concerning the model of consumers' economic behavior during instability;
- the method of comparison to differentiate changes in expenditures on primary and secondary necessities;
- generalization of statistical data published by national governments and reporting organizations to establish an assessment and current analysis of Ukrainians' consumer attitudes.

Regression analysis was used to reflect the consumers' economic behavior during instability, based on the dependence on the psychological and economic factors.

A descriptive statistic was conducted to determine the individual attributes and assess the consumers' economic behavior during instability, whose data were provided by a survey using MS Forms Pro. The survey was conducted to determine consumers' economic behavior when faced with instability. An online survey was conducted from April 22 until June 20, 2022. We enrolled a total of 4100 participants, to begin with. For this survey, we took a rigorous approach by excluding 100 participants over the age of 64 because they were vested in retirement benefits and were considered a specific population from an economic perspective that was not comparable to the rest of the sample. In addition, we excluded 181 participants who did not report spending money before unstable conditions to buy necessities and / or other items. Thus, we included 3819 participants (69,3 % women, 30,7 % men) in this study. All participants provided written informed consent before completing the survey. The study was conducted following the ethical standards of the Declaration of Helsinki. Participants did not receive monetary or any other compensation for their participation. We focused on two scales for this study: essential and second necessity goods, to investigate consumers' behavior regarding different products.

Table 1: Two scales for researching consumers' behavior on different products

Goods	Question
Essential	1. I felt the need to buy more goods
Goods	2. I believe that I impulsively bought basic
	necessities
	3. I felt the need to buy more basic necessities
	(e.g., food, health and wellness products,
	personal care products, household cleaning
	products) than before
	4. If you don't already have all the necessities,
	how much would you be willing to spend to
	purchase these products?
	5. I have felt the need to buy products I did not
	need before
Second	1. How useful do you think non-essential items
necessity	would be when buying them?
goods	2. Have you bought any products that are
	considered unnecessary?
	3. I felt the need to buy more non-essential
	items (such as entertainment products) than
	before

Source: Compiled by the authors.

#### 4 Results

According to Info Sapiens "Ukrainians' Consumer Confidence Index", conducted by Info Sapiens with financial support from Dragon Capital, in March 2022, the index of Ukrainians' consumer confidence increased and reached 92,4 points. The index growth is caused by the increase of all its components, except for the propensity to consume index, which decreased by 34,7 points (see Figure 1).

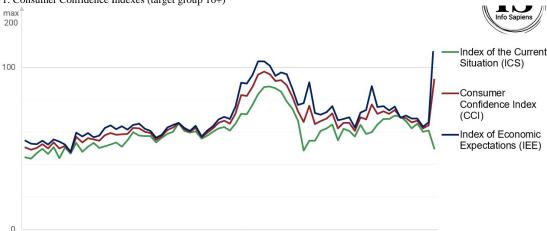


Figure 1: Consumer Confidence Indexes (target group 16+)

Source: Compiled by the authors by official data of IS (2022).

In March 2022, the Consumer Confidence Index (CCI) is 92,4, which is a 28,3 point increase compared to February 2022. The Index of Current Situation (ICS) decreased to 49,9, which is 11,2 points lower than in February 2022. The components of this index changed as follows:

- the Current Personal Financial Situation Index (x1) is 71,2, which is 12,4 points higher than in February 2022;
- the Consumer Propensity Index (x5) decreased by 34,7 points to 28,6.

In March, the Economic Expectations Index (EEI) rose to 120,8, which is 54,6 points higher than in February 2022. The components of this index changed as follows:

- the Expected Personal Wealth Change Index (x2) is 87,1, which is 20,2 points higher than in February 2022;
- the Country's Economic Development Expectations Index for the next year (x3) in March is 116,1, which is 61,2 points higher than in the previous month;
- the Country's Economic Development Expectations Index for the next 5 years (x4) increased by 82,5 points compared to the previous month and stands at 159,1 (see Table 2).

Table 2: Dynamics of the Consumer Confidence Index in Ukraine (target group 16+)

Month, year	Consumer Confidence Index (CCI)	Index of the Current Situation (ICS)	Index of Economic Expectations (IEE)	Index of Expectations of Changes in Unemployment (IECU)	Index of Inflationary Expectations (IIE)	Index Devaluation Expectations (IDE)
03'22	92,4	49,9	120,8	134,3	169,6	136,7
02'22	64,1	61,1	66,1	136,7	192,6	156,5
03'21	67,8	58,9	73,7	148,1	187,8	134,3

Source: Compiled by the authors by official data of IS (2022).

In March, the Unemployment Expectations Index decreased by 2,3 points and is 134,3. The Inflation Expectations Index fell by 23 points and is 169,6. On the other hand, Ukrainians' expectations concerning the exchange rate of hryvnia in the next three months have improved: the Devaluation Expectations Index has decreased by 19,8 points and is equal to 136,7.

In March, the Consumer Confidence Index is at its peak since 2014, approaching the values of autumn 2019, when it almost crossed the mark of 100, which would mean the transition to an upbeat assessment of the economic situation. That's a paradox, given the war, but it comes from the index's construction and Ukrainians' expectations. CCI is affected on 2/5 by the current situation assessment, which has fallen significantly during the war. It is now at the level of April 2020, when COVID 2019 began in Ukraine and 2015–2016. But 3/5

of the index is influenced by economic expectations for six to five years, and it is out of scale, reaching 120,8 points. This result indicates that 92 % of Ukrainians believe that Ukraine will be able to repel an attack by Russia. At the same time, Ukrainians are more optimistic about economic development in the long term than in the short term.

Considering "Changes in Total Spending", our results showed that in our sampling, total spending increased by an average of 60,49 % due to instability conditions. In addition, significant differences were found between "Changes of Spending on Essentials" and "Changes in Spending on Essentials", t  $(3832)=11,99\ p<0,001.$  Indeed, spending on essentials increased by 90,66 %, while the average increase for second necessities was only 36,09 %. The average values and standard deviations are presented in Table 3.

Table 3: Average value and standard deviation of the variables in the study

Value	Average value	Average increase
Changes in overall expenses	60.49	156.21
Changes in secondary necessities expenses	36.09	246.13
Changes in spending on necessities	90.66	199.85
Essential goods	44.77	19.94
Secondary goods	26.52	21.15

Source: Compiled by the authors.

Table 4 shows the results of regression modeling to reflect the consumers' economic behavior during the instability between psychological and economic factors:

# Economic behavior in instability = (-2,13) + 102,13 \* Psychological factors + 86,21 \* Economic factors

The model parameters are statistically significant, as indicated by t Stat values of 17,82 and 10,54 and P-value scores of 0,0000000000000001 and 0,000000000003.

Table 4: Regression modeling results

Regression Statistics								
Multiple R	0,78							
R Square	0,61							
Adjusted R Square	0,60							
Standard Error				15,30				
Observations				14				
			ANOV	A				
	df	SS		MS	1	F	Signifi	cance F
Regression	1	10215,05		10215,05	43.	,63	0,00000036	
Residual	28	6556,18		234,15				
Total	29	16771,23						
	Coeffi cients	Standard Error	t Stat	P-value	Lower 95%	Upper 95 %	Lower 95,0 %	Upper 95,0 %
Intercept	-2,13	0,32	-6,61	0,00000037	-2,79	-1,47	-2,79	-1,47
Psychological factors	102,13	5,73	17,82	0,00000000000 000081	90,40	113,87	90,40	113,87
Economic factors	86,21	8,18	10,54	0,00000000003	69,46	102,97	69,46	102,97

Source: Compiled by the authors.

The value of the determination coefficient indicates that the model explains 60 % of consumers' economic behavior during instability and explains changes in expenditures on primary and secondary necessities. It suggests that there are still a significant

number of other influencing factors on consumers' economic behavior during instability, which are not included in the regression model. Thus, changes in people's spending levels were related to their attitudes and feelings about specific products.

The conducted research revealed the following typical actions that characterize the consumers' propensity for one or another strategy of economic behavior under conditions of instability (see Table 5). The first reaction of consumers during instability is a sharp reduction in costs and the transition to the savings mode, which is confirmed by the data in the table and the fact that, for example, in conditions of instability, many consumers refuse to take expensive trips abroad in favor of domestic tourism.

Table 5: Consumers' strategic intentions in the face of unpredictable deterioration of financial situation during instability

Intentions	%
I will cut back sharply on spending, save money on everything	36,2
I will try to find other or better sources of income	32,4
I will take a bank loan or lend money from friends and relatives	24,5
I will rely on the care of other family members and try to get free financial help from my relatives	14,7
I will seek help from the state social security system	13,3
I will spend my own savings (cash, bank deposits, etc.)	10,1
I will sell part of my property (belongings, furniture, car, etc.)	6,4
I will try to get reimbursement from private insurance	5,1
I will seek uncompensated cash assistance from my employer	4,3
I will try to get money from selling, renting out real estate	3,9
Hard to answer	5,8

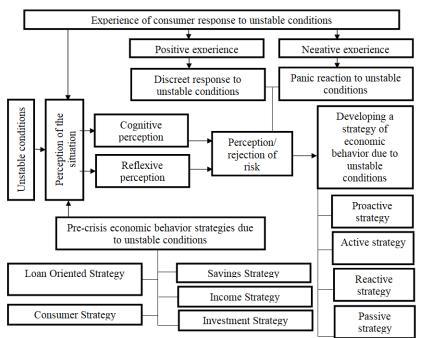
Source: Compiled by the authors.

Based on the above experimental data and theoretical approaches, it is possible to build a generalized model of consumers' economic behavior during instability, allowing the development of an interaction algorithm with different consumers' groups (see Figure 2).

The research findings on consumers' economic behavior in the face of instability led to the following conclusions. We were interested in separating essential and non-essential products because previous research has shown that such a distinction helps better understand consumers' behavior (Larson, Shin, 2018; Durante, Laran, 2016).

#### 5 Discussion

Figure 2: Generalized model of consumers' economic behavior during instability



Source: Compiled by the authors.

First, our results indicate a 61 % increase in spending levels during instability compared to average spending. In addition, spending levels increased differently for purchases of essential goods (91 %) and second necessities (36 %).

Second, we partially investigated consumers' behavior, which included indicators related to psychological and economic need to buy. Our results showed that changes in consumer behavior were positively associated with changes in spending levels in an unstable environment.

Finally, we focused on consumers' strategic intentions in the face of unpredictable financial deterioration under volatile conditions, which may explain psychological changes in consumer behavior. In this context, we confirmed our hypothesis about the role of the identified psychological factors in predicting consumers' behavior during instability.

In addition, our findings confirmed the importance of separating essential from non-essential goods, as we found that they had different psychological backgrounds. Finally, regarding the cost level study, our results are consistent with sales data reporting that consumers' priorities became more focused on essentials, including food, hygiene, and cleaning supplies during instability (Di Crosta et al., 2021).

Thus, the research confirmed a greater tendency to buy essential goods in times of instability. Consequently, consumers will face new challenges because the potential to change the consumers'

economic behavior during instability is quite high; an in-depth study will lead to increased attention to the influence of psychological factors on consumers' economic behavior during instability.

#### 6 Conclusion

The study of consumers' economic behavior, when faced with instability, led to the following conclusions. First, the results of this study showed that unstable conditions have a significant impact on consumer behavior. In our sample, this influence led to an increase in spending, which was accompanied by an increase in the psychological need to buy both essential and second necessity goods. In addition, our results showed that psychological factors predicted these changes in consumers' behavior

Consequently, consumer behavior under the influence of irrational emotions makes adjustments, making predictions less reliable. In particular, pessimistic expectations and panic of the population lead to actions that ultimately harm the financial stability of the banking system. Therefore, under uncertainty and risk, a comprehensive approach is needed to include behavioral factors in the consideration, and we should use methods with stochastic elements for their assessment and prediction.

The results obtained during the study allow us to identify areas for further exploration of the research of scientific methodological and practical foundations for the study of consumers' economic behavior amid instability. The functional significance of the study is to ensure that we can use the conclusions and recommendations developed by the author and proposed in the article to avoid high costs of essential and second necessity goods during instability and make rational purchases by consumers.

Future investigations may focus on analyzing the evolution of consumers' behavior. Since our study focused on people's perceptions of changes in spending, we did not know how reliable these estimates are, and objective assessments of changes in the amount of money spent in volatile conditions may diverge from subjective views. Consequently, this study represents one of the first attempts to examine changes in consumer behavior under volatile conditions from a behavioral economic perspective, providing a thorough analysis of the factors that entail changes in consumers' behavior. Moreover, this research fits into a growing body of studies that help increase consumers' economic and psychological preparedness in the face of future unstable conditions.

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**Primary Paper Section:** A

**Secondary Paper Section:** AH, AN

# CONSEQUENCES OF FAILURE TO COMPLY WITH CIVIL LEGAL OBLIGATIONS DURING THE WAR

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2, 1

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Abstract: The article highlights the features of the consequences of non-fulfillment of civil obligations during martial law, as well as the study of civil liability as one of the consequences of breach of obligation, structural elements of civil liability, its role in ensuring proper implementation of obligations and protection of civil rights and interests in the civil law of Ukraine in modern conditions. The legal consequences of non-performance and improper performance of obligations are considered. Civil liability, damages, the distinction between "insurmountable" and "extraordinary" in civil law are studied.

Keywords: Obligations, war, responsibility, transactions, contract, force majeure, legal consequences

#### 1 Introduction

The military aggression of the Russian Federation against Ukraine has affected almost all spheres of human life in Ukraine, including the possibility of fulfilling civil obligations. It is assumed that for these reasons, a large number of civil law agreements concluded in Ukraine will not be properly implemented. In this regard, there is a need to investigate the consequences of non-compliance with civil law obligations due to martial law in Ukraine. Civil law relations cover part of the legal relations that need to be regulated in accordance with the economic and political state of society. Civil legislation of Ukraine is devoted to the settlement of property and personal non-property relations among a significant number of participants in such legal relations, including individuals, legal entities, local communities, officials of local governments, the state and more. At the same time, today's civil law poses challenges that the country did not know before. The attack on the country of the terrorist state has caused significant changes in public life, which should be reflected in the current legislation.

The imposition of martial law means, first of all, the restriction of citizens' rights, which is a necessary necessity. It should be agreed that "the maintenance of martial law in a state and the declaration of a state of war are important military-political and legal acts of the top political leadership of a state against which there is an imminent threat or armed aggression, and are important for ensuring national security and defense and vital activity of the state". Kirichenko S. O., Lobko M. M., Semenenko V. M. (2019).

Almost every contract contains a section that defines the circumstances that are grounds for release from liability for failure to fulfill obligations under the contract. Due to the fact that obligations are a central category of civilization, scholars often turn to this group of legal relations, as they study both general theoretical approaches and specify their developments on certain types of obligations. This field of science is represented by the works of T. V. Bodnar, N. Yu. Golubeva, Zh. V. Zavalna, R. A. Maidanyk, V. V. Lutsv. D. I. Mever. I. Y. Puchkovska, K. P. Pobedonostseva, O. P. Pecheny, S. V. Sarbasha, M. M. Sibilova, G. F. Shershenevich, E. O. Kharitonov, R. B. Cone and others.

#### 2 The initial presuppositions

The civil legislation of Ukraine does not recognize the arbitrariness of the debtor in matters of execution or non-execution of the commitment. This is evidenced by a number of rules on the requirements for proper performance of obligations (Chapter 48 of the Civil Code of Ukraine), types of enforcement (Chapter 49 of the Civil Code of Ukraine), ways to protect civil rights and interests of the injured party and legal consequences of breach of obligation (Chapters 3 and 51 of the Civil Code of Ukraine).

The purpose of the article is to outline the general provisions on the consequences of non-fulfillment of obligations under the civil law of Ukraine during the war. Analyze the features of civil liability of the parties for failure to fulfill obligations.

#### 3 Methods

The methodology of the chosen problem is a systematic approach, as well as dialectical, formal-logical and structuralfunctional methods and other general scientific research methods, as well as special legal methods: comparative law and formal law. The methodological basis of the study is theory cognition, its general method of materialist dialectics. The following were used as general scientific research methods: formal-logical and systematic methods.

#### 4 Results and discussion

In accordance with the general provisions of the Civil Code of Ukraine, which determine the legal consequences of breach of obligation and liability for breach of obligation, breach of obligation is its non-performance or performance in violation of the content of the obligation (improper performance).

In accordance with the general rule on the legal consequences of non-performance or improper performance of obligations under the contract, the legislator established a general rule according to which in case of breach of obligations there are legal consequences established by contract or law, including:

- termination of obligations waiver of the obligation, if it is established by the contract or the law, or termination of the contract;
- 2) change in the terms of the obligation;
- 3) payment of a penalty;
- 4) compensation for damages and moral damage.

In particular, in accordance with Art. 614 of the Civil Code of Ukraine, the person who violated the obligation is liable for his guilt (intent or negligence), unless otherwise provided by contract or law.

In particular, under civil liability is understood to be provided by law or contract and provided by force of state coercion obligation of the parties to civil relations to suffer deprivation of property to restore or compensate for the violated right of the victim, expressed in imposing additional obligations or deprivation effective rights. Roziznana I. V. (2014)

Most researchers point out that civil liability is a sanction for an offense. As V. D. Prymak rightly pointed out, even when the term "sanction" is not directly mentioned in the proposed definitions in the legal literature, the definitions of the definition of civil rights. Primak V. (2003).

Under civil liability, it is necessary to understand only those sanctions that are associated with additional burdens for the offender, that is, for the offender. At the same time, the additional encumbrance is always of a property nature, aimed at the property sphere of the offender. It is with such an additional

burden that civil liability as a sanction differs from other civil sanctions. In addition, such a property nature of civil liability measures is a specific feature of civil liability.

Examining the nature of civil liability, researchers note that the grounds for its application are the existence of rights and obligations, violation of which entails the application of appropriate sanctions, wrongdoing, the presence of damage caused by wrongful conduct, the causal link between wrongful conduct and consequences, as well as the presence of guilt of the offender. Kharitonova E. O., Kharitonova O. I., Golubeva N. Yu. (2007).

Therefore, the conditions of civil liability are the presence of:

- illegal behavior of a person related to the violation of contractual obligations or the law in compliance with the terms of the contract;
- the negative consequences of such behavior (damage), both tangible and intangible;
- 3) the causal link between wrongful conduct and harm;
- 4) the fault of the person who caused the damage.

It should be noted that wrongdoing, harm, causation are objective and belong to such an element of the offense as the objective party, and guilt – the subjective basis of civil liability and belongs to the subjective side of the offense.

According to Art. 526 of the Civil Code of Ukraine, the obligation must be performed properly in accordance with the terms of the contract and the requirements of the Civil Code of Ukraine, other acts of civil law, and in the absence of such requirements and conditions - in accordance with business practices or other requirements. According to Art. 193 of the Civil Code of Ukraine business entities and other participants in economic relations must perform economic obligations properly in accordance with the law, other legal acts, the contract, and in the absence of specific requirements for the fulfillment of obligations - in accordance with the requirements In case of impossibility to fulfill the obligation due to a circumstance for which neither party is responsible, the obligation is terminated (Article 607 of the Civil Code of Ukraine). The inability to perform an obligation can be defined as the subjective or objective inability of the debtor to perform certain actions that constitute the content of the obligation. Inability to perform characterizes situations in which the debtor's performance of his duties arising from a contract or law has become impossible due to various reasons. Impossibility is an event that occurs at the time of fulfillment of the obligation and is contrary to the principle of inadmissibility of unilateral waiver of the obligation. The notion of inability to perform is collective, as this inability is associated with various facts that interfere with the normal dynamics of the obligation. Khalabudenko O. A. (2014).

## Legal consequences of breach of obligation

Forms of liability under civil law are set out in Art. 611 of the Civil Code, according to Part 1 of which in case of breach of obligation there are legal consequences established by contract or law, in particular:

- termination of the obligation due to unilateral waiver of the obligation, if established by contract or law, or termination of the contract:
- 2) change in the terms of the obligation;
- 3) payment of a penalty;
- 4) compensation for damages and moral damage.

Also in accordance with Part 2 of Art. 611 CC in case of breach of a negative obligation by the debtor, the creditor, regardless of payment of damages and (or) compensation for damages and non-pecuniary damage has the right to demand termination of the action from which the debtor undertook to refrain, if it does not contradict the obligation. Such a claim may be made by the creditor in the event of a real threat of breach of such an obligation.

We will consider in more detail some of these legal consequences of breach of obligation, as well as other legal consequences of breach of obligation, which are set out in the CC, in particular:

- the emergence of the right to unilateral waiver of obligations of the injured party. Thus, in case of breach of the obligation by one party, the other party has the right to partially or completely waive the obligation, if required by contract or law. Unilateral waiver of the obligation does not release the guilty party from liability for breach of the obligation. As a result of unilateral waiver of the obligation, the terms of the obligation are partially or completely changed or terminated accordingly;
- 2) the debtor's liability for the actions of others. The debtor is liable for breach of obligation to other persons who were entrusted with its performance (Article 528 of the Civil Code), if the contract or law does not establish the responsibility of the direct executor;
- 3) the right to demand a thing determined by individual characteristics from the debtor. If the debtor fails to transfer to the creditor the ownership or use of the thing determined by individual characteristics, the creditor has the right to claim the thing from the debtor and demand its transfer in accordance with the terms of the obligation. The creditor loses the right to claim from the debtor the thing determined by individual characteristics, if this thing has already been transferred to a third party in the ownership or use. If the item determined by individual characteristics has not yet been transferred, the priority right to receive it has the creditor whose obligation arose in favor of, and when it is impossible to determine the creditor who first filed a lawsuit:
- 4) execution at the expense of the debtor. In case the debtor fails to perform certain work for the creditor or fails to provide him with services, the creditor has the right to perform this work on his own or entrust its performance or service to a third party and demand damages from the debtor, unless otherwise provided by contract, civil law or obligation.
- 5) change in the terms of the obligation. Changing the terms of the obligation occurs, in particular, when terminating the obligation by transferring the assignment (Article 600 CC), when changing the subject of the obligation, ie instead of the specified in the obligation object (thing, service, work, etc.) to the creditor money, other property, etc. are transferred. Thus, there is improper performance of the obligation in violation of the terms of the subject of its performance, but with the consent of the parties the legal consequence of such violation is not liability, but change the terms of the obligation and its termination. which occur as a result of breach of obligation.

A distinction should be made between the impossibility of performance as a ground for termination of the obligation and force majeure as the basis for release from liability for non-performance of the contractual obligation. Force majeure is only a form of impossibility of performance of the contract and may in some cases entail termination of the contract by its termination. Therefore, it should be noted that the occurrence of force majeure does not always terminate the obligation, but only releases from liability for non-performance. Exemption of the debtor from liability in case of inability to perform is possible in the following cases: the circumstance is force majeure; there is no causal link between the debtor's actions and the circumstances; the circumstance that caused the impossibility of execution was beyond the control of the debtor.

According to Art. 1 of the Law of Ukraine of  $12.05.2015 \, Me \, 389$ -VIII "On the legal regime of martial law" martial law is a special legal regime imposed in Ukraine or in certain localities in case of armed aggression or threat of attack, threat to state independence of Ukraine, its territorial integrity and provides for granting the relevant state authorities, military command, military administrations and local self-government powers necessary to deter the threat, repel armed aggression and ensure national

security, eliminate the threat to Ukraine's independence, territorial integrity, and temporary, limited threat constitutional rights and freedoms of man and citizen and the rights and legitimate interests of legal entities, indicating the term of these restrictions

The legal basis for the imposition of martial law is the Constitution of Ukraine, Law 389 and the Decree of the President of Ukraine on the imposition of martial law in Ukraine or in certain localities, approved by the Verkhovna Rada of Ukraine.

Thus, the Law of Ukraine of March 15, 2022 № 2120-IX "On Amendments to the Tax Code of Ukraine and other legislative acts of Ukraine on the application of norms for the period of martial law" (hereinafter – Law № 2120-IX) supplemented, inter alia, section "Final and Transitional Provisions" of the Civil Code of Ukraine, paragraph 18.

Signs of force majeure (force majeure), in addition to the extraordinary circumstances, as well as the inevitability of the consequences, should also include the external nature of the activities of the obligor. Significant features, in turn, are characterized by additional criteria, which can be both mandatory (necessary) and optional (optional). So, let's look at the signs of force majeure (force majeure) in more detail. The generic feature that characterizes any circumstance of force majeure is the feature of its being "out of the control of the party". Kharitonova, noting that "the inability to control the situation, to influence it" is one of the factors for recognizing the circumstance as force majeure.

The sign of extraordinary is characterized by the presence of a mandatory criterion – objectivity, ie an atypical circumstance, unusual not because it is considered by the subject, but because of the objective understanding of the extraordinary in general, regardless of subjective attitude to this circumstance. So, force majeure is always objectively extraordinary. At the same time, the sign of emergency is characterized by the presence of an optional criterion – unpredictability. However, the optionality of this criterion means that it is not in all cases a necessary characteristic of the extreme circumstances of force majeure.

In particular, this clause currently stipulates that during the period of martial law, state of emergency in Ukraine and within thirty days after its termination or cancellation in case of default by the borrower of the monetary obligation under the agreement under which the borrower was granted a loan by the bank or another lender (lender), the borrower is released from liability under Article 625 of this Code, as well as from the obligation to pay in favor of the lender (lender) a penalty (fine, penalty) for such delay. Also, this paragraph establishes that the penalty (fine, penalty) and other payments, the payment of which is provided by the relevant agreements, accrued inclusive from February 24, 2022 for late performance (non-performance, partial performance) under such agreements, are subject to write-off by the lender (lender).

According to Article 617 of the Civil Code of Ukraine, a person who has violated an obligation shall be released from liability for breach of obligation if he proves that the breach occurred as a result of accident or force majeure.

In turn, according to Part 2 of Article 141 of the Law of Ukraine "On Chambers of Commerce and Industry of Ukraine" military action is considered force majeure, which objectively makes it impossible to fulfill obligations under the terms of the agreement.

Signs of force majeure are extraordinary and inevitability (Article 14-1 of the Law "On Chambers of Commerce and Industry in Ukraine"), as well as an objective causal link with the consequence in the form of default. For contractual obligations, force majeure is a precondition for release from liability for improper performance or breach of obligation, but does not in fact cancel the obligation. That is, force majeure is

not a universal debt forgiveness. Contractual obligations are not deleted, so the main obligation must be properly performed as soon as possible, if such performance is appropriate for the parties at the end of the force majeure.

The "insurmountable" and the "extraordinary" in civil law are not identical and have different consequences. In particular, force majeure is possible but not mandatory for declaring a state of emergency (this regime was in force in Ukraine during February 24, 2022). The direct military aggression of Russia and Belarus against Ukraine has not happened on such a scale before. But after the return of independence, we can talk about a similar situation in 2003 (the conflict in Tuzla). At least since the end of February 2014, the circumstances of aggression and occupation in Sevastopol, Crimea and ORDLO are very identical. Therefore, the events of the end of February 2022 in 9 oblasts and Kyiv can be considered expected. After all, no matter how rare it may seem to be war, threat of force by the state, sabotage or other use of weapons against the territory where the party to the treaty is located, many circumstances of such an event can be prepared and adapted.

An extraordinary but disgusting event is not force majeure. For example, 150 years ago it was difficult to imagine the real impact of man-made activities on natural phenomena, but in the early twentieth century it became known about weapons of mass destruction, and therefore, artificial mass poisoning and epidemics became possible. Since the middle of the last century, when nuclear weapons were invented, it has become possible to create artificial storms, earthquakes, cyclones, floods, which were previously considered natural disasters. Of course, with regard to less destructive social phenomena, which the law recognizes as force majeure circumstances (war by conventional methods, crimes against humanity, war crimes, threat of force, fire, etc.), it is quite objective to identify subjects of civil law who they cause and contribute to their occurrence.

The Supreme Court in Case 10910/9258/20 emphasizes: "Force majeure circumstances are not of a preliminary nature, and if they arise, the party must prove that these circumstances were force majeure in this particular case of performance".

As a general rule of peace, the Chamber of Commerce and Industry of Ukraine and its authorized regional chambers of commerce certify force majeure and issue certificates of such circumstances at the request of business entities individually. Now the CCI has issued a universal force majeure certificate, which applies to the entire territory of martial law (as of April 21, 2022, this is the entire territory of Ukraine). But is this a direct cause of non-compliance? This issue is subject to analysis in the context of the type of contract, as we can see in addition to the risks provided by law, the provisions of each contract and the circumstances of specific parties may differ. We assume that in relatively quiet areas the universal certificate of the CCI of Ukraine may be perceived by the injured party as a "life hack to avoid liability", so since the CCI certificate is not the only possible evidence for the parties, the case law will later clarify whether universality the CCI certificate is only de jure or de facto.

Let's look at some types of commitments.

For example, a contract of sale, the creditor is not liable for defects in the goods, if he provided guarantees for its quality and prove that such defects arose as a result of force majeure after the transfer of goods to the buyer. The current UN Convention on Contracts for the International Sale of Goods obliges a party that fails to fulfill its obligations to notify the other party of the obstacle and its impact within a reasonable time. If there is no notification and the pending party did not know and could not have known about such an obstacle, the executing party shall be liable for damages caused by failure to notify such force majeure.

The contract of rent, lease, force majeure does not avoid the fulfillment of obligations, including financial (for example, lease

payments), but allows you to defer obligations or release from liability of the entity for non-compliance during the existence of such circumstances (penalties, damages). If the property is damaged before the transfer to the lessee (rent payer), force majeure can be used only if the property can be replaced. In case of uniqueness of the subject of rent (lease) the contract is subject to change or termination due to impossibility of performance. If property destroyed or damaged as a result of hostilities after transfer is transferred for rent for a certain period, the rent payer is not released from the obligation to pay it before the end of this period under the terms of the contract. If such property is transferred for the payment of an annuity, the payer may demand the termination of the obligation to pay the annuity or change the terms of its payment.

Under the lease agreement, the lessee is exempt from payment for the entire period during which the property could not be used by him due to circumstances for which he is not responsible. However, there are other options: (suspend) the contract in accordance with the principle of freedom of contract, change the form, frequency of rent, reduce rent to justify a significant reduction in the use of property, terminate the contract by referring to force majeure in the contract or warning counterparty for 1 or 3 months for the lease of movable and immovable property, respectively.

In accordance with paragraph 6.2 of the Regulations of certification by the Chamber of Commerce and Industry of Ukraine and regional chambers of commerce and industry of force majeure (force majeure) force majeure (force majeure) are certified at the request of the person concerned under each contract.

Force majeure only exempts from liability for breach of obligations (ie from the imposition of fines / penalties), but does not exempt from the need to fulfill the relevant contractual obligations. Thus, in connection with the recognition by the Chamber of Commerce and Industry of Ukraine of the military aggression of the Russian Federation against Ukraine by force majeure (force majeure), the parties may terminate the obligations due to their inability to fulfill them without liability contractual obligations.

### **5 Conclusion**

In view of the above, it should be understood that during the martial law the consequences of non-fulfillment of civil law obligations have changed significantly only under loan agreements. In particular, debtors under such agreements are exempt from paying fines, penalties, three percent per annum, inflation losses and other liability.

As for other civil law agreements, the consequences of nonfulfillment of obligations are in fact the same as they were before the imposition of martial law. That is, if a party proves that it has breached its obligations due to insurmountable circumstances (for example, due to destruction of premises, inability to deliver goods to a certain territory, destruction of property, etc.), it will be released from liability. If the party is unable to prove such circumstances, it will be liable on a general basis.

In this regard, the parties to the agreement, who violated the civil law obligation and continue to plan to refer to the circumstances of force majeure, which arose in connection with military aggression, are advised to contact the Chamber of Commerce and Industry of Ukraine (regional chamber of commerce) and try to certify such circumstances under a specific agreement.

It is clear that the Civil Code of Ukraine in today's conditions requires not only theoretical understanding, but also generalization of existing practice of application of relevant provisions of the Civil Code of Ukraine and other acts of civil law, in order to determine the effectiveness of their legal regulation.

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# **Primary Paper Section:** A

**Secondary Paper Section:** AM

#### LEGAL REGULATION OF LABOR RIGHTS AND THEIR WARRANTIES DURING THE WAR

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Abstract: The article highlights the features of the legal regulation of labor in martial law. The study analyzes the labor legislation of Ukraine on the emergence, change and termination of labor relations under martial law. The content of the employment contract, its parties and the form of conclusion under current legislation have been studied. Scientific and theoretical conclusions and practical recommendations for improving the legal mechanisms of national labor legislation have been developed. improving the regal mechanisms of national labor legislation have been developed. states. The problem of legislative regulation of legal relations that arise between an employee and an employer in martial law is analyzed. Emphasis is placed on the fact that the intensive development of labor relations "requires" more detailed legislation on telework, in particular on the proper social security of teleworkers, ensuring the labor rights of the latter on a par with employees who are forced to perform duties directly in the workeless. directly in the workplace.

Keywords: Labor legislation, labor relations, the basis of labor relations, employment contract, termination of employment, martial law.

#### 1 Introduction

The Constitution of Ukraine recognized man, his rights and freedoms, life and health, honor and dignity, inviolability and security as the highest social value. Human rights and freedoms and their guarantees determine the content and direction of the state, the establishment and maintenance of which is its main duty. Fundamental and inalienable human rights are the right to work, to free choice of profession and freedom of creativity, to fair remuneration, to safe working conditions and to protection against unemployment. Current legislation of Ukraine enshrines the principle of freedom of labor in accordance with the Universal Declaration of Human Rights, approved by the UN General Assembly on December 10, 1948, and all legal framework governing the use of labor must be brought into line with generally accepted international labor standards.

Problems of legal regulation of public life, including in the field of labor, were studied by representatives of various branches of legal science, in particular: V. B. Averyanov, O. M. Bandurka, I. L. Borodin, Y. P. Bytyak, A. S. Vasiliev, I. P. Golosnichenko, R. A. Kalyuzhny, V. V. Kovalenko. S.M. Gusarov, L. A. Sidorchuk. N. P. Matvukhina. S. M. Prilipko, K. B. Levchenko, O. M. Yaroshenko, S. G. Stetsenko, N. B. Bolotina, V. I. Shcherbina, O. I. Protsevsky, G. I. Chanisheva and others. Considerable attention to the forms of employment in its various aspects was also paid in the research of such domestic scientists as V. D. Aveskulov, N.M. Vapnyarchuk, V. S. Venediktov, O. V. Demchenko, M. I. Inshin, I. Ya. Kiselyov, M. Yu. Kuznetsova, V. K. Tobacconist and others. However, new conditions are emerging that require timely legal regulation, in particular, various forms of flexible working, home and remote employment are gaining relevance, which increases the practical significance of the research topic. In addition, the practical significance of the research subject is growing in the context of the imposition of martial law throughout Ukraine in connection with the full-scale military aggression of the Russian Federation in Ukraine.

## 2 The initial presuppositions

Russia's armed aggression has negatively affected most aspects of the peaceful life of Ukrainians until February 24. Most spheres of life have changed due to the military actions of the occupiers. One of the components that has changed significantly and is now changing is the employment relationship. The urgency of terminating such relationships is facing many employers and employees. All this is due to the fact that some businesses are simply destroyed, other companies are unable to operate against the background of armed aggression in the Russian Federation, some companies for one reason or another were left without employees. The same applies to the workers themselves: many went in search of a safe place outside of Ukraine or their locality without the opportunity to work remotely. It is because of all these cases that the legal regulation of labor relations, including the procedure for their termination, during martial law is very important for the labor market.

#### 3 Methods

The methodology of the chosen problem is a systematic approach, as well as dialectical, formal-logical and structuralfunctional methods and other general scientific research methods, as well as special legal methods: comparative law and formal law. The methodological basis of the study is theory cognition, its general method of materialist dialectics. The following were used as general scientific research methods: formal-logical and systematic methods.

# 4 Results and discussion

The Constitution of Ukraine enshrined the principles of freedom of labor, the human right to work, free choice of profession, work, fair and acceptable working conditions and protection against unemployment, a decent reward for work, protection of their rights and legitimate interests. In the conditions of social and economic transformations of the Ukrainian society and crisis phenomena in economy the questions of legal regulation of labor relations become especially actual. There are both subjective and objective reasons that prevent a person from fully and harmoniously exercising his or her constitutional right to work. Many theoretical issues remain controversial in the implementation of such a form of regulation of labor relations as an employment agreement. The presence of social and political contradictions in society affects the legislation, the imperfection of which creates opportunities for violations of labor rights of man and citizen, their right to social protection.

At the same time, in accordance with Article 64 of the Constitution of Ukraine, in conditions of martial law or state of emergency, certain restrictions on rights and freedoms may be established, indicating the term of these restrictions. The rights and freedoms provided for in Articles 24, 25, 27, 28, 29, 40, 47, 51, 52, 55, 56, 57, 58, 59, 60, 61, 62, 63 of this Constitution may not be restricted.

In accordance with subparagraph 5 of paragraph 1 of Article 6 of the Law of Ukraine "On the Legal Regime of Martial Law" in the decree of the President of Ukraine on martial law indicates an exhaustive list of constitutional rights and freedoms of man and citizen, which are temporarily restricted the effect of these restrictions, as well as temporary restrictions on the rights and legitimate interests of legal entities, indicating the term of these restrictions.

According to paragraph 3 of the Decree in connection with the imposition of martial law in Ukraine temporarily, for the period of martial law, may restrict the constitutional rights and freedoms of man and citizen under Articles 30-34, 38, 39, 41-44, 53. Of the Constitution of Ukraine, as well as to introduce temporary restrictions on the rights and legitimate interests of legal entities within the limits and to the extent necessary to ensure the introduction and implementation of martial law measures provided for in part one of Article 8 of the Law of Ukraine "On Martial Law".

According to paragraph 2 of the section "Final Provisions" of the Law № 2136-IX Chapter XIX "Final Provisions" of the Labor Code of Ukraine is supplemented by paragraph 2 of the following content: "2. During the martial law imposed in accordance with the Law of Ukraine "On the legal regime of martial law", there are restrictions and features of the organization of labor relations established by the Law of Ukraine "On the organization of labor relations in martial law".

According to the second and third parts of Article 1 of Law  $N_2$  2136-IX, restrictions on the constitutional rights and freedoms of man and citizen are introduced for the period of martial law in accordance with Articles 43 and 44 of the Constitution of Ukraine. During the period of martial law, the norms of labor legislation shall not apply in the part of relations regulated by this Law.

In view of the above, the provisions of Law № 2136-IX, which regulate some aspects of labor relations differently than the Code of Labor Laws, have priority for the period of martial law.

At the same time, other norms of labor legislation that do not contradict the provisions of Law  $N_2$  2136-IX may also or should be applied in the relationship between the employee and the employer.

According to Article 119 of the Labor Code of Ukraine (hereinafter - the Labor Code) for the duration of state or public duties, if under current legislation of Ukraine these duties can be performed during working hours, employees are guaranteed to maintain jobs (positions) and average earnings.

Employees who are involved in the performance of duties under the laws of Ukraine "On Military Duty and Military Service", "On Mobilization Training and Mobilization" are provided with guarantees and benefits in accordance with these laws.

For conscripts, conscripts, conscripts during mobilization, for a special period, conscription for reservists in a special period or enlisted under contract, including including by concluding a new contract for military service, during a special period for the period until its end or until the day of actual dismissal, the place of work, position and average earnings at the enterprise, institution, organization, farm, agricultural production cooperative, regardless of subordination and forms of ownership and natural persons - entrepreneurs, in which they worked at the time of conscription. Such employees are paid financial support at the expense of the State Budget of Ukraine in accordance with the Law of Ukraine "On Social and Legal Protection of Servicemen and Members of Their Families".

Taking into account the above guarantees, conscripts, conscripts, conscripts during mobilization, for a special period or enlisted under contract, including by concluding a new contract for military service, during the special period for the period until its expiration or until the day of actual release, during the special period for the period before its expiration or until the date of actual release are not subject to release under paragraph 3 of Article 36 of the Labor Code, but only exempt responsibilities provided for in the employment contract, which is executed by the relevant order (instruction) of the employer.

The basis for maintaining a job, position and average earnings at the enterprise, institution, organization, farm, agricultural production cooperative, regardless of subordination and form of ownership and individuals is the fact of conscription or military service under a contract (confirmed by the to the owner or his authorized body with relevant certificates, extracts from orders, summons, orders, extracts from orders on inclusion in the personnel of the military unit, etc.) during a special period until its expiration or until the day of actual release.

It should be noted that according to the second part of Article 24 of the Law of Ukraine "On Fundamentals of National Resistance" members of voluntary formations of territorial communities during their participation in training of voluntary

formations of territorial communities, as well as their territorial defense tasks are guaranteed social and legal protection. provided by the Law of Ukraine "On social and legal protection of servicemen and members of their families".

In addition, we inform you that according to Article 1 of the Law of Ukraine "On Defense of Ukraine" a special period – the period following the announcement of the decision on mobilization (except target) or bringing it to the executors of covert mobilization or martial law in Ukraine or in in some of its areas and covers the time of mobilization, wartime and part of the reconstruction period after the end of hostilities.

In addition, Article 1 of the Law of Ukraine "On Mobilization Training and Mobilization" stipulates that a special period is the period of functioning of the national economy, public authorities, other state bodies, local governments, the Armed Forces of Ukraine, other military formations, civil defense forces, enterprises, institutions and organizations, as well as the fulfillment by the citizens of Ukraine of their constitutional duty to protect the Fatherland, independence and territorial integrity of Ukraine, which arises from the announcement of the decision on mobilization (except target) or situation in Ukraine or in some of its localities and covers the time of mobilization, wartime and the partial reconstruction period after the end of hostilities.

According to the first part of Article 119 of the Labor Code, while performing state or public duties, if under current legislation of Ukraine these duties can be performed during working hours, employees are guaranteed to retain their jobs (positions) and average earnings.

Given the specifics of the territorial defense service, which may involve not permanent but periodic involvement of the employee in the performance of their duties, we believe that the employer does not necessarily issue an order to dismiss the employee from work under an employment contract.

In each case, the level of involvement of the employee in the territorial defense, the amount of working time spent by the employee on this activity and the efficiency and ability to perform his duties under the employment contract.

At the same time, they are guaranteed to keep their jobs (positions) and average earnings during the working hours of the Territorial Defense. Documents confirming participation in territorial defense are the contract of the volunteer of territorial defense.

If the specifics of the work provides for the possibility of its implementation remotely, using information and communication technologies, the employer should decide to transfer the employee to remote work.

A significant event was the adoption on February 4, 2021 of the Law "On Amendments to Certain Legislative Acts of Ukraine to Improve the Legal Regulation of Telework, Homework and Flexible Working Hours" № 1213-IX. The validity of this Law is of great importance today, as it specifies the concept of remote work, improves the process of its design. The Labor Code was supplemented by important articles 60-1 "Homework" and 60-2 "Remote Work". It should be noted at once that these two concepts were finally separated from each other and now they are no longer identified in the science of labor law.

According to the first part of Article 602 of the Labor Code, remote work is a form of work organization in which work is performed by an employee outside the work premises or territory of the owner or his authorized body, anywhere chosen by the employee and using information and communication technologies.

According to paragraph 61 of the first part of Article 24 of the Labor Code, the employment contract is concluded, as a rule, in writing. Observance of the written form is obligatory at the

conclusion of the employment contract on remote work or on home work.

At the same time, the first part of Article 2 of Law № 2136-IX stipulates that during martial law the parties agree to determine the form of the employment contract.

However, the parties are not prohibited from using for standard work a standard form of employment contract for remote work approved by the order of the Ministry of Economic Development, Trade and Agriculture of Ukraine of May 5, 2021  $N_{\odot}$  913-21 "On approval of standard forms of employment contracts for home and remote work".

According to the second part of Article 3 of Law № 2136-IX during martial law, the provisions of the third part of Article 32 of the Labor Code of Ukraine and other laws of Ukraine on notifying the employee of changes in significant working conditions do not apply.

Therefore, the transfer of an employee to remote work does not require a mandatory notice of 2 months of significant changes in working conditions. Iasechko S., Ivanovska A., Gudz T., et al (2021).

The inability of an employee to perform remote work due to lack of appropriate communications, in our opinion, can not be considered a violation of labor discipline.

At the time of threat of epidemic, pandemic, the need for selfisolation of the employee in cases established by law, and / or in case of threat of armed aggression, emergency of man-made, natural or other nature, remote work may be introduced by order of the owner or his authorized body conclusion of an employment contract for remote work in writing. The employee gets acquainted with such order (instruction) within two days from the date of its acceptance, but before introduction of remote work. In this case, the provisions of the third part of Article 32 of this Code shall not apply. Pregnant women, workers with a child under the age of three or caring for a child according to a medical opinion until the child reaches the age of six, workers with two or more children under the age of 15 or a child with a disability, parents of a child with a disability Subgroup A I group, as well as persons who have taken care of a child or a person with disabilities from childhood Subgroup A I group, may work remotely, if possible, given the work performed, and the owner of the enterprise, institution, organization or authorized the body has the appropriate resources and means to do so.

If the employment contract for remote work was not concluded, and the employee was transferred to remote work by order of the employer, in order to properly organize the work of remote work, acquaint the employee with orders (orders), messages, instructions, tasks and other documents of the employer. parties during the remote work:

- identify electronic means of communication, such as email, telephone number, mobile application, etc.);
- conditions of the employee's reporting on the work performed (if necessary);
- conditions for notifying the employee of the occurrence of situations that make it impossible to properly perform remote work
- other conditions for communication and interaction of the parties

Please note that the total working time may not exceed the norms provided for in Articles 50 and 51 of the Labor Code, and an employee who performs remote work is guaranteed a period of free time for rest (period of disconnection), during which the employee may interrupt any information. telecommunication with the owner or his authorized body, and this is not considered a violation of the terms of the employment contract or labor discipline. The period of free time for rest (period of disconnection) is determined in the employment contract for

remote work. If possible, flexible working hours and home-based work may also be introduced (Articles 60, 60-1 of the Labor Code).

Yu. V. Shovkun, noting that, despite some shortcomings that create even more legal uncertainty and the lack of full legislative regulation of the issue of remote, homework, open questions remain: to determine the mechanism of organization and working conditions during remote work; powers to provide the employee with the necessary means for work and the procedure for compensation for depreciation (depreciation) in the case of the latter's own funds; settlement of terminological differences in the concept of remote (home) work, etc.). Shovkun Y. V. (2020).

It is difficult to agree with the opinion of some scholars, who note that "remote work is a type of work performed in a place away from the central office, which excludes the possibility of employee communication with management and employees" in terms of excluding communication, because performing work remotely does not preclude communication, because in the conditions of distribution of gadgets, many applications (Zoom, Google Meet, Skype, Telegram, WhatsApp, Viber), which allow you to communicate via video, conference, telephone, etc., on the contrary, close communication between employees, management, staff is possible. M. Inshin also draws attention to this in his study, which considers "remote employment of workers as the organization of all necessary conditions for quality work outside the employer's office, provided that communication with the employer in the process of performing the job function by telephone, facsimile language, e-mail, social networks (Facebook), special programs (Skype), using smartphones and gadgets. Inshin M. I. (2015). Based on this, O. Gulevich names five main types of remote employment:

- remote employment, which is divided into several places: partly – at home, partly – in the premises owned by the employer (most of the work is covered by collective agreements);
- homework, which consists of monotonous, often repetitive operations that do not require high skills (paid for the end result);
- freelance telework, which is based on homework and is carried out by freelancers on the basis of agreements with the employer (computer programming, design, etc.);
- mobile remote work, which involves the use of new technologies in traditional forms of mobile activity (work of sales representatives, inspectors, etc.);
- work in a specially equipped office, which is carried out by telecommunications ("telework" and "teleaccess"). Gulevych O. (2010).

Thus, this type of employment needs further legislative regulation. Appropriate conditions must be provided for the protection of the rights and freedoms of the parties to remote legal relations by prompt response of legislators to the needs of today's growing market relations and the challenges of epidemic or emergency nature. Plekhov D. O. (2021).

If possible, it is advisable to provide employees with paid leave (annual, social), as well as leave without pay, provided on a mandatory basis and leave without pay, provided by agreement of the parties in the manner prescribed by law (25, 26 of the Law of Ukraine "On Holidays").

According to the third part of Article 12 of the Law № 2136-IX during the martial law period the employer at the request of the employee may grant him unpaid leave without limitation of the period established by the first part of Article 26 of the Law of Ukraine "On Leave".

According to Article 34 of the Labor Code, a simple stop is a suspension of work caused by the lack of organizational or technical conditions necessary for the performance of work, inevitable force or other circumstances.

In case of downtime, employees may be transferred with their consent, taking into account the specialty and qualification to another job at the same company, institution, organization for the entire downtime or to another company, institution, organization, but in the same area for up to one month.

The introduction of downtime is formalized by an order of the manager, with which employees are acquainted in the possible way, including through electronic means. Payment for downtime is made at the rate of not less than two-thirds of the tariff rate set for the employee category (salary). Under the conditions stipulated in the collective agreement, payment for downtime may be made in a larger amount. Iasechko S., Kuryliuk Y., Nikiforenko V., et al (2021).

Heads of state bodies, enterprises, institutions and organizations financed or subsidized from the budget, until the termination or abolition of martial law in Ukraine within the salary fund provided in the budget, may determine the amount of downtime, but not less than two thirds the tariff rate of the tariff category (official salary) established for the employee (Resolution of the Cabinet of Ministers of Ukraine of March 7, 2022 № 221).

Suspension of the employment contract.

Article 13 of the Law № 2136-IX introduced a mechanism for suspending an employment contract. Suspension of an employment contract is a temporary termination by the employer of providing the employee with work and a temporary termination of the employee's performance of work under the concluded employment contract. The employment contract may be suspended due to military aggression against Ukraine, which excludes the possibility of providing and performing work. Termination of the employment contract does not entail termination of employment. Suspension of the employment contract The employer and the employee should, if possible, inform each other in any available way.

In view of the above, the main condition for the suspension of the employment contract is the absolute impossibility of the employer and the employee to perform the relevant work. Both the employer and the employee can initiate the suspension of the employment contract. At the same time, in order to eliminate legal uncertainty, we recommend that the parties notify each other of the suspension of the employment contract in writing or electronically using technical means of electronic communications.

According to the third part of Article 13 of Law № 2136-IX, the state that carries out military aggression against Ukraine is fully reimbursed for compensation of wages, guarantee and compensation payments to employees during the suspension of employment. Thus, when suspending an employment contract, the employer must continue to keep records of the accrual of wages and compensation payments that would have been due to the employee in the absence of such suspension.

### **5 Conclusion**

Given the above, it should be understood that during the martial law restrictions on constitutional rights and freedoms of man and citizen were introduced in accordance with Articles 43 (right to work), 44 (right to strike) of the Constitution of Ukraine, and therefore during martial law labor legislation in the part of relations regulated by the Law of Ukraine "On the organization of labor relations in martial law". Therefore, the norms of the labor legislation that contradict the provisions of this Law shall not be applied for the period of martial law. Thus, the regulation of labor relations today is a particularly important and complex matter and requires considerable research to adopt rules that would improve labor law and bring it into line with the realities of the modern world. In the conditions of aggravation of a pandemic and a wide range of application of various forms of work the important characteristic of legal regulation in the specified sphere remains its timeliness. Despite the changes and demarcation of the concepts of remote and home-based forms of labor organization, many issues in the field of legal regulation of this type of public relations need to be addressed.

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**Primary Paper Section:** A

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# THE CONCEPT OF EUROPEAN ADMINISTRATIVE SPACE AND ITS IMPLEMENTATION IN UKRAINE

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Abstract: The article establishes the essence of the category "European administrative space" and determine the directions of implementation of its principles in Ukraine. Understanding the category "European Administrative Space" as a system of standards and principles for determining the effectiveness of public administration, aimed at implementing and protecting human rights and freedoms, building a service model of the state, achieving a balance of private and public interests. The concept of "European administrative space" is defined, the factors and sources of its formation are determined. The history of the origin of the concept of "European administrative space" is studied. Existing views on the emergence of the concept of "European administrative law are considered, the necessity of carrying out of domestic researches of problems of introduction in national and law-making practice of requirements of the specified principles taking into account domestic administrative traditions is defined.

Keywords: European legal space, European administrative space, principles of administrative law, European governance.

#### 1 Introduction

In the European Union, the review of the content, nature, legal regulation of administrative proceedings was carried out in the middle of the twentieth century. in order to create a European administrative space in which public services should have a common legal basis and increase the efficiency of public administration, promote economic processes and reduce corruption in administrative activities by introducing common democratic standards of good governance and administration that conceptually renewed national administrative regulation. proceedings.

The signing of the Association Agreement with the European Union in 2014 finally determined the vector of development of Ukrainian society and state. In this regard, Ukraine must gradually adapt to the standards of the European legal space, which is a necessary condition for the implementation of the provisions of the Association Agreement. Virtually all international documents concluded by Ukraine in order to ensure the implementation of European integration processes use the category of "European legal space". This applies to both multilateral declarations and bilateral intergovernmental agreements. In addition, the category "European legal space" is used in scientific publications, documents of the European Union and the Council of Europe. Thus, the idea of implementing the "European legal space", the study of its essence and components is an urgent problem, the solution of which depends in part on the achievements of modern legal science of Ukraine.

The general principle used to define the essence of the "European legal space" is the understanding of law as the only guarantor of the formation of a civil society and the rule of law, in which the development of economy, politics, culture is characterized as progressively stable. Back in 1988, the French scholar Emma Grabby stressed that the components of the European legal space are not only a system of regulations, but also to ensure the implementation of common principles of economic, financial and political development (Polat, E. S., 2008).

Currently, domestic administrative law is at the stage of profound transformation, this process of change and transformation is quite complex, accompanied by constant obstacles and difficulties, including mental and philosophical content. Such complications are mainly related to the perception of administrative law (as a science, as a discipline, as a field of law) by scholars and legal practitioners, including representatives of public administration. In particular, if we look at the columns of administrative and legal literature, an example of new trends, most of which are borrowed from the experience and legislation of the European Union (hereinafter – the EU), is the expansion of terminology due to the so-called European administrative legal space. research of new spheres of legal relations as components of the subject of administrative law and forms of their consolidation: administrative and economic law. Melnik R.S. (2010)

### 2 The initial presuppositions

The overall goal of the European Legal Area is to ensure the convergence of national legal systems of the Member States of the European Union in order to develop and implement common standards of public administration, ensuring and protecting human rights and freedoms, public and private interests. It seems necessary to develop a long-term concept of sustainable development of institutional support for public administration, as well as constant monitoring of existing and emerging problems in this area. At the same time, the concept of the European administrative space should be a guideline.

#### 3 Methods

The methodological basis of the study is a set of general and special methods of scientific knowledge, the use of which allowed to provide a systematic approach to the disclosure of content, specifics of the European administrative space, opportunities for development and improvement of legal regulation in Ukraine.

### 4 Results and discussion

In general, the concept of the European Administrative Space is the direction of reform and development of administrative law, in which the functioning of public administration is carried out in accordance with the democratic principles of good governance and European Union standards in this area.

The creation of the European Administrative Space is aimed at establishing framework administrative cooperation between the Member States of the European Union on the basis of mutual assistance, ensuring openness and transparency of public administration bodies of the European Union, compliance with the principles of proportionality and confidentiality (1998).

The term "European administrative space" was first used in the documents of the Program to Support the Development of Public Administration and Management (hereinafter – SIGMA) in 1998 to denote the environment shaped by policies and norms of the European Union, which requires national standards and practices on the regulation of public relations, which are part of the subject of administrative law to ensure a uniform level of human rights and freedoms and citizen Kushnir I., Kuryliuk Y., Nikiforenko V. et al. (2021).

The SIGMA program covers a set of specialized reports that focus on specific governance and management issues, namely: expenditure control, administrative oversight, interagency coordination, public procurement, public service management, and more. A well-functioning public administration is a prerequisite for transparency and efficiency in democratic governance, but it is not a static phenomenon. One of the directions of the SIGMA program is to develop proposals and algorithms for implementing the concept of the European Administrative Space in various national legal systems. At the same time, the changes that need to be implemented in the

practice of a particular state may differ qualitatively and quantitatively, but will be aimed at achieving a common goal Iasechko S., Kuryliuk Y., Nikiforenko V., et al (2021).

Ukrainian scholars (in particular, M. Hnatovsky, V. Marmazov, I. Pilyaev) also contributed to the development of the content of the concept of "European legal space". They note that coordination and integration of the processes of entry into the legal space of the Council of Europe with the introduction into Ukrainian law of norms and standards of the Organization for Security and Cooperation in Europe, EU, because the law of these institutions together with Council of Europe law is the foundation of European law. (Hnatovskyi M., 2002)

It should be emphasized that the key role in the concept of "European legal space" is given to the category of "law". It should be noted that in this context, the law is the only guarantor of the new European legal order, in which the leading role is objectively played by the principles related to the long-term goals of sustainable economic, political and other development. In a more general form, the law of the European Union means a set of legal norms governing the processes of European integration carried out within the European Union (Luts L. A., 2003)

It should be noted that according to the subject of regulation, the norms of European Union law are differentiated into such areas as: constitutional, administrative, financial law, etc. It should also be noted that the existence of such specific areas of EU law as: institutional, economic, banking, tax, trade, competition, corporate, migration, internal market, intellectual property. Thus, the European legal space can be differentiated into the European constitutional, administrative, financial, economic, tax, trade space, etc.

Regarding the relationship between the European administrative space and the European legal space as part and whole. For the first time, such an approach among representatives of Ukrainian legal science was proposed by Hnatovskyi M. (2002).

Despite the fact that the category "European Administrative Space" has been used for over 20 years, the unity of scientific approaches to understanding its essence is still unclear. According to the provisions of the international program of presentation of the European Administrative Space program, it is understood as a form of European cooperation in the functioning of public administrations.

According to M. Hnatovsky, in a more general form, the European legal space can be defined as a system of legal norms and standards developed within European regional organizations (EU, Council of Europe, OSCE), as well as international and national mechanisms for their implementation in national legal systems. states. Hnatovskyi M. (2002).

It should be noted that the states operating in the European legal space should share the whole set of democratic values, which will contribute to the development of various forms of their interaction, will preserve all the positive things achieved during the development of legal forms of cooperation.

Numerous scientific studies of the concept and nature of the European legal space have contributed to the emergence of the concept of the European administrative space. We believe that the emergence of this concept is due to the need to ensure the proper implementation of the rights and freedoms of EU citizens, their effective protection, settlement of disputes over the activities of public administrations. Of course, the gradual formation of the European administrative space has taken place and is taking place within the framework of the European legal space.

There is an approach that defines the European administrative space as a set of standards of public administrations, which should be defined at the legislative level, the implementation of which is guaranteed by establishing mechanisms for their accountability Gnidyuk N. (2003).

The basis for the formation of the European administrative space, of course, are the results of the rule-making activities of the European Union, in particular, the legal provisions of its founding treaties, which define certain basic principles of such intergovernmental association. It is worth highlighting the legal provisions - Art. Article 2 of the Treaty on European Union defines human dignity, freedom, democracy, equality, the rule of law and respect for human rights as the highest value of the European Union, based on pluralism, non-discrimination, justice, tolerance, solidarity gender and equality (Konstanty O. V., 2010).

In Ukrainian jurisprudence, a scientific approach to understanding the category of "European administrative space" has not yet been developed. It is possible to meet views, the essence of which comes down to the identification of the "European administrative space" and the "European legal space". This is the position of O. Pylypchuk, who defines the European administrative space as a certain environment, the formation of which is influenced by political, economic, legal and other factors, based on ensuring the proper functioning of governments, which must ensure standards of public service state (Pylypchuk O., 2016).

The European administrative space has its own traditions, which, although based on the typical administrative traditions of the EU, have surpassed them.

The key features of this space have been administrative reliability, which is necessary to guarantee the rule of law, and the effective implementation of economic development and European policy. Definitions (European principles of administrative law) should be considered as a set of principles of European administrative law and the European administrative space, which reflect the processes of administrative convergence and deepening integration in Europe. Administrative principles are not just ideas based on the will of managers. They are contained in organizational structures and administrative procedures at all levels of government. Public (public) entities are obliged to adhere to these legal principles, which are ensured by independent control bodies, justice systems, the judiciary and parliamentary oversight.

In the field of European law, the Court of Justice of the European Union, based on general legal principles of administrative law common to the Member States, has identified a significant number of principles of administrative law. The list includes: principle of legality, principle of non-discrimination, principle of abolition of illegal administrative act, principle of legal certainty, right to protection, principle of proportionality, principle of respect for fundamental human and civil rights, principle of subsidiarity, principle of good governance, principle of transparency, principle of application. Based on them, modern principles of the European administrative space were formed.

It is necessary to highlight another humanistic approach to the understanding of the European administrative space as a complex structure of the relationship between vertical and horizontal power structures, which is due to territorial and functional ties. The European Administrative Space within this understanding includes not only public authorities at supranational and national levels, but also polycentric institutions, which include, in particular, the media system, public initiative groups and 133 associations for the formation and implementation of European integration policy. territorial proximity and functional similarity are inherent (Orzhel O., 2011).

Based on the above, in the framework of this study the European Administrative Space will be understood as a system of standards and principles for determining the effectiveness of public administration, whose activities are aimed at implementing and protecting human rights and freedoms,

building a service model of the state, achieving a balance of private and public interests. This approach is the basis for further implementation of this research, because its application allows us to separate the specifics of the implementation of certain types of sectoral legal regulation of public relations Iasechko S., Ivanovska A., Gudz T., et al (2021).

To date, there are many points of view on defining the content of the European administrative space. The most common are the following:

- the European administrative space is a set (group) of common standards of public administration, which are determined by law and the implementation of which in practice is ensured by appropriate procedures and accountability mechanisms;
- the European Administrative Space is a set of common standards for governance, which are defined by law and implemented through a system of measures, procedures and accountability mechanisms;
- the European administrative space is a specific branch of administrative law, a set of principles and rules that apply to the organization and management of public administration, as well as regulate relations between the administrative system and citizens;
- the European Administrative Space is a European policy and regulation that requires the active role of national public administrations – in which national administrations are called upon to ensure, in order to ensure equal rights of citizens and legal entities established within the European Union, quality of service provision.

#### **5 Conclusion**

Further reform of administrative law in Ukraine should be focused on the implementation of the concept of the European administrative space through the transformation of fundamental leading ideas of public administration. From the above it can be concluded that the European administrative space is an environment shaped by the policies and norms of the European Union, which provide for the active role of national governments. Within the European administrative space, the governing bodies of the Member States of the European Union are obliged to guarantee a uniform (equal for all) level of quality and efficiency of the provision of administrative services in order to effectively and comprehensively ensure the rights of citizens and business freedoms in the European Union.

The European administrative space means a system of legal norms and standards developed within European regional organizations, international and national mechanisms for their implementation in the national legal systems of European countries, designed to ensure equal rights of citizens and legal entities, ensuring quality administrative services, regulation of relations between the administrative system and citizens. The aim of creating the European Administrative Space is to ensure the equal realization of the rights of citizens and legal entities operating within the EU, as well as to ensure the effective quality of public administration of administrative services.

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# **Primary Paper Section:** A

**Secondary Paper Section:** AM

# THEORETICAL BASES OF IMPROVEMENT OF MECHANISMS OF MANAGEMENT OF THE PERSONNEL OF THE ENTERPRISE

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Abstract: The article considers the strategic personnel management, which can proceed effectively only within the framework of the strategic personnel management system. It means an ordered and purposeful set of interrelated and interdependent subjects, objects and means of strategic personnel management, interacting in the process of implementing the "strategic personnel management" function. The main working tool of such a system is the personnel management strategy. It is shown that the system of strategic personnel management ensures the creation of structures, information channels, and most importantly, the formation of a personnel management strategy, its implementation and control over this process.

Keywords: Strategic management, management, managerial skills, organization's personnel.

#### 1 Introduction

The market economy poses a number of fundamental tasks, the most important of which is: the most efficient use of human resources. In order to achieve this, strategic personnel management of the organization is necessary, which is closely interconnected with the strategic management of the entire organization. This explains the relevance of this course work. In addition, for the implementation of the strategic personnel management of the organization, highly qualified specialists are needed, who are sorely lacking in this area, as well as literature on this issue in Ukraine.

The subject of study in this article is the entire system of strategic management of the organization's personnel.

The purpose of the article is to consider the theoretical foundations of strategic personnel management and to get acquainted with the world practice. Polat (2021).

## 2 The initial presuppositions

In the article, the following research methods were used to solve the set tasks: theoretical (study and analysis of scientific and pedagogical, psychological and pedagogical, reference, specialized literature, regulatory documentation on the topic of research, additional professional advanced training programs; analysis, comparison, classification of the information received and generalization); empirical (pedagogical experiment, observation, questionnaire survey, survey, conversation, testing); mathematical (statistical data processing).

# 3 Methods

Understanding the strategic management of an organization's personnel is impossible without a definition of the term "strategic management of an organization" in general. Moreover, the strategic management of the organization is the initial prerequisite for the strategic management of its personnel. Iasechko, Shelukhin, Maranov (2021).

The term "strategic management" was introduced in the 60–70s of the 20th century to distinguish the current management carried out at the level of business units from management at the top level of management (Iasechko, Iasechko S., Smyrnova, 2021). In the process of its development, management as a practical activity in the 80s moved to a new stage, a distinctive feature of which is the shift in the attention of top management

towards the external environment, which allows timely and adequate response to the changes taking place in it and provide the organization with an advantage over competitors (Harris, Sutton, 1986).

The need for strategic management in Ukrainian conditions is explained by the following reasons. First, over the past ten years, the environment in which organizations operate has changed radically. The unstable economic situation of many organizations is due to the lack of deep economic knowledge, managerial skills and experience of working in a competitive environment among the majority of managers, the need to adapt organization to constantly changing environmental conditions. Secondly, moving away from centralized planning, privatization and the entire course of economic transformations in Ukraine require leaders to be able to foresee, formulate a strategy, determine advantages and competitive advantages, eliminate strategic threats and dangers, i. e. use all the tools of strategic management. Thirdly, the application of the ideas and principles of strategic management, the need for changes in the management system are relevant not only for large companies, which were associated with the emergence of strategic management, but also for medium and even small enterprises. Strategic management is such management of an organization that relies on human potential as the basis of the organization, responds flexibly to challenges from the external environment, makes timely changes in the organization that allow achieving competitive advantages, focusing in its activities on the needs of customers, which together makes it possible organizations to survive in the long term while achieving their goals1.

That is, strategic management is a process that covers the actions of the leaders of the organization to develop, implement and correct the strategy.

The main principles of strategic management are:

- long-term prospects being assessed and decisions being made, the direction of managerial influences on changing the potential of the management object (production, services, technology, personnel, etc.) and creating opportunities for more effective implementation of this potential;
- priority consideration in the development and adoption of managerial decisions of the state and possible changes in the external environment;
- alternative choice of management decisions depending on the state of the internal and external environment of the organization;
- implementation of constant monitoring of the state and dynamics of the external environment and the timely introduction of changes in management decisions.

The strategic management process includes 5 interrelated stages. They logically follow one from the other. At the same time, there is a stable feedback and the reverse influence of each stage on all the others.

The analysis of the external and internal environment is usually considered the initial stage of strategic management, since it serves as the basis for determining the mission and goals of the organization, and for developing a strategy of behavior in the surrounding competitive environment that allows you to carry out the mission and achieve goals (Iasechko, Kharlamov, Skrypchuk, Fadyeyeva, Gontarenko, Sviatnaia, 2021).

Determination of the mission (purpose) of the organization, strategic goals and objectives for their implementation.

Formulating and choosing a strategy to achieve the intended goals and performance results.

Effective implementation of strategies, implementation of the planned strategic plan.

Evaluation and control over the course of the implemented strategy, adjustment of activities and methods of its implementation.

Strategic personnel management is based on the same principles and foundations as the strategic management of the entire organization as a whole, since it is an integral part of it.

Strategic personnel management is the management of the formation of a competitive labor potential of an organization, taking into account ongoing and upcoming changes in its external and internal environment, which allows the organization to survive, develop and achieve its goals in the long term.

The purpose of strategic personnel management is to ensure a coordinated and adequate state of the external and internal environment, the formation of the labor potential of the organization for the coming long period.

The competitive labor potential of an organization should be understood as the ability of its employees to withstand competition in comparison with employees (and their labor potential) of similar organizations. Competitiveness is ensured by a high level of professionalism and competence, personal qualities, innovative and motivational potential of employees (Iasechko, Kharlamov, Skrypchuk, Fadyeyeva, Gontarenko, Sviatnaia, 2021).

Strategic personnel management allows you to solve the following tasks.

- Providing the organization with the necessary labor potential in accordance with its strategy.
- Formation of the internal environment of the organization in such a way that the intra-organizational culture, value orientations, priorities in needs create conditions and stimulate the reproduction and realization of labor potential and strategic management itself.
- 3. Based on the installations of strategic management and the final products of activity formed by it, it is possible to solve problems related to the functional organizational structures of management, including personnel management. Strategic management methods allow you to develop and maintain the flexibility of organizational structures.
- 4. The possibility of resolving contradictions in matters of centralization-decentralization of personnel management. One of the foundations of strategic management is the delimitation of powers and tasks both in terms of their strategic nature and the hierarchical level of their execution. The application of the principles of strategic management in personnel management means the concentration of strategic issues in personnel management services and the delegation of part of the operational and tactical powers to the functional and production divisions of the organization.

The subject of strategic personnel management is the personnel management service of the organization and the top line and functional managers involved in the type of activity.

The object of strategic personnel management is the total labor potential of the organization, the dynamics of its development, structures and target relationships, personnel policy, as well as technologies and management methods based on the principles of strategic management, personnel management and strategic personnel management (Kushnir I., Kuryliuk Y., Nikiforenko V. et al., 2021).

What is the reason for the need to apply the principles of strategic management in personnel management?

Since the end result of strategic management as a whole is to increase the potential (which includes production, innovation, resource, human components) to achieve the goals of the organization in the future, an important place in the process of strategic management is given to personnel and, in particular, to increase their level of competence.

The competence of the organization's personnel is a set of knowledge, skills, experience, knowledge of methods and methods of work that are sufficient for the effective performance of job duties.

#### 4 Results and discussion

Competence should be distinguished from competence, which is a characteristic of a position and is a set of powers (rights and obligations) that a certain body and officials have or should have in accordance with laws, regulations, charters, regulations.

In the conditions of strategic management, the role of the personnel management service in the constant increase of the competence of employees is significantly increasing.

However, the technologies of strategic personnel management are not yet sufficiently developed, which is one of the reasons for the problems of the personnel management system.

The human resources of organizations, unlike other types of resources (material, financial, informational), have a long-term nature of use and the possibility of transformations in the process of managing them. They are subject to some form of wear and tear, so they need to be restored and reproduced.

The inefficiency of applying the principles of operational-tactical management in personnel management within the framework of the strategic management of an organization is precisely due to the fact that it does not take into account the above features and characteristics of personnel as an object of strategic management.

The use of personnel as a resource is characterized by the fact that its reproduction is carried out after a certain period of its activity, determined by "wear and tear"; its acquisition and maintenance in working order require large capital investments. It follows from this that the use and reproduction of personnel is of an investment nature, since personnel is an object of capital investment. But the investment of funds can be made only from the standpoint of strategic expediency.

In strategic personnel management, the "substantial" characteristics of personnel (knowledge, skills, abilities, social status, norms of behavior and values, professional qualification, hierarchical and demographic structures) are considered as an object of management. These characteristics, of which he is the bearer, express the potential of the organization's personnel from the point of view of the long term. In addition, the technology of personnel management (technologies for the realization of labor potential, reproduction and development of personnel) is also an object of strategic management. Together, they form the labor potential of the organization.

The application of strategic management methods is becoming a real practice in managing the labor potential of enterprises. Examples are companies such as IBM, Toyota, which use strategic workforce planning methods based on a well-thought-out, market-based strategy.

The management of personnel services becomes a full member of the general management of enterprises and participates in the development of corporate strategies. A special place is given to the assessment and formation of personnel potential, its professional growth and development, and increasing creative and organizational activity.

Assessing the activities of organizations that have the opportunity to use advanced methods of personnel management, we can distinguish three established types of organizations.

1st type. Comprehensively deal with issues of strategic planning and apply elements of strategic personnel management. This is a small part of widely diversified financial and industrial associations and enterprises with great financial and organizational capabilities, a developed regional network.

2nd type. Use methods of strategic personnel planning. These are organizations with a stable financial position, stable technologies and a diversified product. They can be quite compact in size and have an average number of staff.

3rd type. Delegate functional tasks of a strategic nature to the personnel management service. Develop strategies for staff development and focus on them in their activities. These include medium and large enterprises of various organizational forms, regional branching, diversification of technologies and products.

Strategic personnel management can proceed effectively only within the framework of the strategic personnel management system. It means an ordered and purposeful set of interrelated and interdependent subjects, objects and means of strategic personnel management, interacting in the process of implementing the "strategic personnel management" function. The main working tool of such a system is the personnel management strategy.

Thus, the strategic personnel management system ensures the creation of structures, information channels, and most importantly, the formation of a personnel management strategy, its implementation and control over this process.

From the definition of strategic personnel management it follows that it is aimed at creating a competitive labor potential of the organization in order to implement the personnel management strategy. Based on this, all the functions of the personnel management system can be grouped into the following three areas: providing the organization with labor potential; development of labor potential; realization of labor potential.

Strategic personnel management is dual in nature. On the one hand, it is one of the functional areas within the strategic management of an organization (along with marketing, investment, etc.), on the other hand, it is implemented through specific personnel management functions aimed at implementing the personnel management strategy, and from this point of view it is functional subsystem of the personnel management system.

Organizationally, the system of strategic personnel management is built on the basis of the existing organizational structure of the personnel management system. There are three main options for the organizational design of the system:

- Complete isolation of the system into an independent structure (but at the same time there is a danger of separation from the operational practice of implementing the strategy).
- Separation of the strategic management body into an independent structural unit (strategic management department) and the formation of strategic working groups based on the divisions of the personnel management system.
- Formation of a system of strategic management of personnel without separation into structural units (but at the same time, issues of strategic management are given a secondary role).

The most effective option is to create a "headquarters" strategic department within the framework of the personnel management system and coordinate the activities of other departments on strategic planning issues, when part of the personnel of already existing divisions of this system is assigned responsibilities for the "strategic personnel management" function.

The implementation of the personnel management strategy is an important stage in the strategic management process. For its successful course, the leadership of the organization must follow the following rules:

- goals, strategies, tasks for personnel management should be carefully and timely communicated to all employees of the organization in order to achieve on their part not only an understanding of what the organization and the personnel management service are doing, but also informal involvement in the process of implementing strategies, in particular development of employees' obligations to the organization for the implementation of the strategy;
- the general management of the organization and the heads of the personnel management service must not only ensure the timely receipt of all the resources necessary for the implementation (material, office equipment, equipment, financial, etc.). but also to have a strategy implementation plan in the form of targets for the state and development of labor potential and record the achievement of each goal;
- the purpose of the strategy implementation process is to ensure the coordinated development and implementation of strategic plans for the structural units of the organization as a whole and the personnel management system.

During the implementation of the strategy, 3 tasks are solved:

First, the priority among administrative tasks (general management tasks) is established so that their relative importance corresponds to the personnel management strategy that the organization and the strategic personnel management system will implement.

Secondly, a correspondence is established between the chosen personnel management strategy and internal organizational processes, processes within the personnel management system itself. To ensure that the activities of the organization are focused on the implementation of the chosen strategy.

Thirdly, it is the choice of the style of management of the organization as a whole and in individual units that is necessary and appropriate for the personnel management strategy.

The tools for implementing the personnel management strategy are personnel planning, personnel development plans, incl. his training and career advancement, solving social problems, motivation and remuneration.

The management of the implementation of the personnel management strategy is assigned to the deputy head of the organization for personnel. But he must rely on the active support of middle managers.

The implementation of the personnel management strategy includes two stages: implementation of the strategy and strategic control over its implementation and coordination of all actions based on the results of control.

The implementation stage includes:

- development of a plan for the implementation of a personnel management strategy;
- development of strategic plans for the divisions of the personnel management system as a whole;
- activation of start-up activities for the implementation of the strategy.

The purpose of the strategic control stage is to determine the compliance or difference between the implemented personnel management strategy and the state of the external and internal environment; outline the directions of changes in strategic planning, the choice of alternative strategies.

## **5 Conclusion**

In conclusion, the following conclusions can be drawn:

Strategic personnel management is the management of the formation of a competitive labor potential of an organization, taking into account ongoing and upcoming changes in its external and internal environment, which allows the organization to survive, develop and achieve its goals in the long term.

The purpose of strategic personnel management in an organization is to ensure a coordinated and adequate state of the external and internal environment, the formation of the organization's labor potential for a long period.

The subject of strategic personnel management is the personnel management service of the organization and the top line and functional managers involved in the type of activity, the object of strategic personnel management is the total labor potential of the organization, the dynamics of its development, structures and target relationships, personnel policy, as well as technologies and management methods based on on the principles of strategic personnel management.

Strategic personnel management of an organization is based on the strategic management of the entire organization, in addition, there is an inverse relationship.

In Ukrainian organizations, strategic personnel management technologies have not yet been sufficiently developed, which is one of the reasons for the problems of the personnel management system.

In Ukrainian science, there is also little information, research, literature on the issues of strategic management of the organization's personnel.

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**Primary Paper Section:** A

Secondary Paper Section: AM

## UKRAINIANS IN THE DEVELOPMENT OF THE CULTURAL AND EDUCATIONAL SPACE OF **EUROPE XVIII-XIX CENTURIES**

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Abstract: The article objectively highlights the relevance of the study of the socio-cultural paradigm of Ukraine and Europe at the turn of the XVIII–XIX centuries in the context of ethno-national and European integration aspects. The specifics of the Enlightenment and active education of Ukrainian youth in European universities are described, which ensured the entry of contemporary Ukraine into the cultural, educational and intellectual world space. The scientific understanding of the essence of national historical and ethnopedagogical education, their content, the importance of methodological principles of systemicity, continuity and continuity and ensuring their ethno-national orientation, which now acquires the latest theoretical and methodological content. After all, ethno-national factors have moved from the problems of meaning-making, holistic understanding, which are updated, to personal knowledge. The approach to the study of the science of Ukrainian studies of the classical type from the point of view of axiological, archetypal-symbolic and conceptual is presented. Accordingly, Ukrainian historical, pedagogical and culturological thought is aimed at modeling the cultural and educational system, taking into account the synergetic principles of self-organization of interdisciplinary holistic knowledge, axiological, archetypal-symbolic, conceptual approaches. The solution of these problems will provide an opportunity to consistently clarify the historical and cultural stages of culturological concepts at the turn of the XVIII-XIX centuries, as well as prospects for the development of Ukrainian science during the XX–XXI centuries; to substantiate the methodological capabilities of modern humanities and education to solve specific problems in the scope of general areas of historical, Ukrainian and cultural sciences

Keywords: National historical education, humanitarian concepts, culturological workshop, integration processes, European space, cultural and educational paradigm, cultural self-identification, national cultural policy, Ukrainian studies concepts, Ukrainian studies priorities.

## 1 Introduction

Among the priority problems of Ukrainian studies is the coverage of the role of Ukraine and Ukrainians in the formation and provision of European integration processes in the field of education, science and culture. Thus, in the Ukrainian philosophical and historical-cultural thought of the XVIII - early XIX centuries. The Enlightenment movement stands out, the early stage of which dates back to the first quarter of the 18th century. Socio-economic factors led to the uniqueness of the Enlightenment as a synthesis of ideas of humanism and the Reformation, as well as the manifestation of its specific features: the liberation of philosophy from the influence of theology, interest in science, culture, ethnicity, personality and more. At this stage, one of the main ideas of the Enlightenment was born - the idea of the dependence of social progress on the spread of education and culture, which clearly acquired a national character, as evidenced by the famous monument of this time "History of Rus" Gorenko L. I. (2010).

## 2 The initial presuppositions

A characteristic feature of this era was the education of Ukrainian youth in European universities, which ensured Ukraine's entry into the cultural, educational and intellectual world space. Great importance was attached to the humanities and the educational process in German universities. Universities such as Heidelberg, Württenberg (Wittenberg), Würzburg, Strasbourg, and Nuremberg universities in some periods were dominated by the spirit of Protestantism, which contributed to the study of Eastern Slavs in these institutions Lossky I. (1931). One of the bearers of progressive thought in Europe was the University of Heidelberg (Ruprecht; founded in 1386) and was

one of the oldest in Germany. After the Reformation, scholasticism was expelled from this institution and humanism prevailed in it. As I. Lossky notes, "Ruprecht began to enjoy special affection from the time she became a fortress of Protestantism. At the same time as the new faith in the Polish-Lithuanian Commonwealth grew, so did the number of students at the University of Heidelberg, who were required to write down their place of origin in the register books. It was here that one of the world's most famous philosophers, G.-W.-F. Hegel (Hegel; 1770-1831), taught, who initiated the systematic study and theoretical development of the principles of the dialectical way of thinking. The university had a botanical garden, a planetarium, an observatory, as well as a large library collected during all the years of its existence. In the records of the University of Heidelberg, Ukrainians are recorded as early as 1387, ie after its discovery. The first of them was Adam Kuzelya. From Ukraine it studied mainly people from rich families: O. Pronsky - son of Kyiv voivode F. Pronsky; I. Malyshko – a nobleman from Mokratytsia in Volyn; brothers Abraham and Christopher Senyuta from Lyakhovets in Volyn, who came from a family of activists of the Reformation movement in Ukraine, founders of the anti-Trinitarian community in Lyakhivtsi, Shchenyativ and Tykhomly in Volyn; P. Bokhnatsky (Bozhnytsky) from Podillya. But, in the second half of the 18th century, when the leadership of the university passed to the Jesuits, there were fewer and fewer Ukrainians there. I. Borisovich (1859–1907) listened to lectures abroad at the Universities of Heidelberg and Strasbourg. After studying abroad, he received a doctorate in law. He graduated from Moscow University, where in 1886 he defended his dissertation for a master's degree in political economy. But during the years 1890-1905 he lived in Berlin, from where he sent his articles to the newspaper Russkaya Vedomosti and the magazines Vestnik Evropy and Russkoye Bogatstvo Pavlovsky I. F. (2009).

## 3 Methods

The theoretical and methodological basis of this study are the principles of historicism, system, objectivity, continuity, dialectical comprehensiveness. understanding of the historical process in the system of unity of its components. At the same time, methods of historical and cultural, analysis, synthesis and generalization are involved, simultaneously with logical, comparative, retrospective, biographical, descriptive, historical and chronological methods that allow to optimally solve the problem of the above topic of this article.

## 4 Results and discussion

Young people from Ukraine willingly chose the University of Württenberg (Wittenberg) (founded 1502-1518), later merged with the University of Halle. A well-known professor at this university was a German physician and philosopher, a supporter of the atomistic teachings of D. Senert (1572–1637). Labun from Kamianets-Podilskyi (1512) and S. Orikhovsky from Przemyśl, who signed the Orichovii Rutheni (1528), were among the first Ukrainians to join this institution. As it turns out, the famous Ukrainian-Polish thinker S. Orikhovsky (Orikhovsky-Roksolan; 1513-1566), in addition to the University of Württenberg, lectured at the universities of Cracow, Vienna, Padua and Bologna, where he received a thorough humanitarian education, mastered Latin, ancient Greek and Greek Litvinov V. D. (1991). While here, S. Orikhovsky got acquainted with the founder of the German and European Protestant movement M. Luther and his contemporary F. Melanchthon. Subsequently, the works of S. Orikhovsky were repeatedly published in Germany. Thus, in Frankfurt his most famous work "On the Turkish threat word I and I' (1548) was published, and later in Cologne (1569 and 1586). Gulevych O. (2010). Most Ukrainian youth came to this university in the 30s and 40s of the 16th century. In the student lists for 16 years (from 1533 to 1549) 22 Rusyn students were

recorded at the studio, in particular, V. Gesner ("Ruthenians", 1533), S. Mykytko and I. Lisnytsky (1537)), Ivan from Lviv, M. Zhuravets (1538). In the following years, four young people from Ukraine entered each year, and then five. From the beginning of the XVII century. M. Smotrytsky studied here, in the late XVII - early XVIII centuries. T. Prokopovych was here, later - his student S. Todorsky, and later a student of S. Todorsky - G. Skovoroda. During the XVIII century. the sons of the regimental convoy M. Khanenko, pupils of the Kyiv-Mohyla Academy D. Nashchynsky and S. Gorgoli from Nizhyn, as well as O. Shafonsky studied here. Among the prominent Ukrainian figures and students of the University of Württenberg was M. Smotrytsky - the future rector of the Kyiv Brotherhood School, Archbishop of Polotsk, Vitebsk and Mstislavl, the son of polemic writer G. D. Smotrytsky. He received a brilliant humanities education and a doctorate. Author of "Grammar of the Slavic correct syntagm" (1619), which until the early XIX century. Was the main textbook of the Church Slavonic language. M. Smotrytsky codified the Church Slavonic language of the East Slavic edition. By the beginning of the XIX century. M. Smotrytsky's "Grammar" was the main textbook of the Church Slavonic language, it was republished in Moscow (1648, 1721), in Snagov (Romania) - in 1699, in Rimnik (Romania) in 1755 Nichik V. M. (2001).

In the middle of the XVIII century. At the University of Württenberg, the sons of the Cossack-Hetman officer of the Left Bank of Ukraine, in particular, General Cornet Mykola Khanenko, acquired knowledge. But a large audience were students from Ukraine at the University of Leipzig - one of the oldest universities in Germany (founded in 1409), where it was "the very core of German culture". It was famous for the fact that G. Leibniz, G. Lessing, J.-W. Goethe, R. Wagner, R. Schumann and other prominent figures of world culture studied there. In Leipzig lived and worked the outstanding German philosopher G.-W. Leibniz (Leibniz, Leibnitz; 1646-1716) - who laid the groundwork for the emergence and development of German classical idealist philosophy of the XVIII-XIX centuries). Many students of the Kyiv Academy were in Leipzig. Continuing their studies at the university, they could see and hear these outstanding German thinkers, scientists, artists, who remained for them high role models for life. But long ago Ukrainians came here to study at the University of Leipzig. Students with the note "Rusyn" in the lists of students are found from the middle of the XVI century: P. Korsak, Y. Kelyanovsky and M. Taranovsky (1562); P. Boim from Volyn and M. Gelingius. The following year, 1563, six of them enrolled at the University of Leipzig, as well as two Frederic brothers from Plishovich, I. Herburt from Felsztyn in Volhynia, who belonged to the family of the famous writer and printer J. Herburt (Herburt) – author of "Words about the Russian people" (1616).

Until the middle of the XVIII century. Ukrainian youth from Volhynia and Western Ukraine studied at the University of Leipzig. But the composition of Ukrainian students changed dramatically in the XVIII century, when young people began to come here from the Left Bank of Ukraine - the sons of Cossack-Hetman officers, Cossacks and wealthier peasants, especially from Kiev, Pereyaslav, Gadyach, Poltava, Nizhyn, Kharkiv. Among them was G. Kozytsky from Kyiv (1739), a former student of the Kyiv Academy and the University of Leipzig, later - official translator, secretary of state of Catherine II, literary editor of famous and popular magazines. Inshin M. I. (2015). He was followed to Leipzig by his relatives I. Kozytsky and M. Motonis from Nizhyn (1752); two brothers, Ostrogradsky Ivan and Pavlo, sons of the Omelnytsia centurion Gr. Ostrogradsky (1752); I. Klechanov from Kyiv, son of Pereyaslav centurion I. Bilotserkovets and son of Pereyaslav centurion A. Bezborodko (1753); from Poltava region - brothers Petro and Mykhailo Bilushenko and F. Paskevich (1777), brothers Miloradovich, Fedir and Yakov Paskevich, Gr. Galagan and the first Kharkiv resident R. Zebrytsiv. From Gadyach he studied at the University of Leipzig V. Kryzhanivsky, who also attracted his relatives from Romen, among them - K. Kryzhanivsky, who in 1767 went for two years to Leipzig, where the sons of his brother, Gadyach Colonel A. Kryzhanivsky. While in Leipzig, K. P. Kryzhanivsky bought for the Kyiv Academy "a pair of globes for 12 chervonets with their delivery to the Russian border, in Vasilkov". Gorenko L. I. (2007). But most of the young men from "Cossack Ukraine-Russia" were from Kyiv and Poltava. For example, Petro Hnidych (1750-1817), a graduate of the Kyiv Academy, studied at the universities of Leipzig, Berlin, and Vienna for eight years. During his studies at the University of Leipzig he published a scientific work "On some drugs and diseases of the Russian peoples" (1778) and together with his teacher the famous pathologist H. F. Ludwig (1709-1773) wrote a book "On the powder of anterarum" (1778). In 1780 he defended his doctoral dissertation "De morbis membranae tympani" in Leiden (Netherlands). In 1782, after passing the exams, PP Gnidych received the right to practice medicine in Russia.

Among Ukrainians, the University of Leipzig was considered one of the most prestigious, it attracted a high level of teaching in the fields of philosophy, mathematics, physics and science. According to V. Nichyk, "Leibniz's interpretation of philosophy met the needs of the development of contemporary science and especially science, and the convergence of logic and mathematics laid the foundations for further development of mathematical logic", which later contributed to the work of Ukrainians, including P. Poretsky and Odessa logical and mathematical school Dzyuba O. M. (2001). During the XVIII century. Here the children of famous noble families, Cossack officers, who were related to the ideas of Ukrainian autonomy, were educated. Therefore, after returning home, the students held positions in the hetman's, general, regimental and hundreds of chancelleries, as well as in state institutions of Russia, the Synod, the Senate, surrounded by Chancellor O. Bezborodko in St. Petersburg. There were also clergymen at the University of Leipzig, such as I. Peshkovsky and D. Sukhozagnit, former students of the Kyiv Academy. According to archival documents, during his studies at the Kyiv Academy in the class of theology (1754) I. Peshkovsky expressed a desire to study medical sciences. As a rule, students of that time, and in particular from Ukraine, studied at several universities and traveled throughout Europe. Thus, the son of Pereyaslav centurion I. Bilotserkovets first studied at the University of Leipzig during 1753/1754 year, but feeling the urge to philosophy, decided to move to another university. An outstanding Ukrainian composer, pedagogue and cultural and public figure, the founder of the Ukrainian school of composers M. V. Lysenko after graduating from Kharkiv Gymnasium and Kyiv University, studied at the Leipzig Conservatory.

In the second half of the XVIII century. Specialists in medicine were particularly interested in the University of Strasbourg (founded in 1587), located on the border of Germany and France, was a center of interaction between the two Western European cultures. This institution was also marked by democratic traditions. Most of the students of the Kyiv Academy who acquired or improved their knowledge in the field of medicine went to this institution. Most Ukrainian students not only successfully graduated from the University of Strasbourg, obtained scientific degrees, but also became the pride of domestic and Western European science, the creators of its new directions. As early as 1760-1761, the first group of fifteen graduates of the Kyiv Academy was sent to Strasbourg. In 1767, the University of Strasbourg successfully graduated from the Academy S. Leontovych, and also defended his doctoral dissertation "De partu praeternaturali ex vitiis trunci foetus orto" (1766). Inshin M. I. (2015). After returning from abroad, he was appointed professor at the St. Petersburg Admiralty Hospital (1768). Inshin M. I. (2015). Ukrainian students at the University of Strasbourg received academic degrees and academic titles. Among them were prominent reformers in the field of higher medical education, such as M. Terekhovsky (1740-1796), the son of a priest from Hadiach in Poltava region. He graduated from the Kyiv-Mohyla Academy (1763) and the St. Petersburg Land Hospital School, where he received the title of doctor (1765). In 1770, on a scholarship from E. D. Golitsyna-Cantemir, he went to the University of Strasbourg, where he studied medicine for 5 years and defended his doctoral dissertation "Dissertatio inaugularis zoologico phisiologica de chao infusorio Linnaei" (1775). This work became a model of that experimental-scientific path in medicine. He studied at the University of Strasbourg with the future famous German poet, philosopher and scientist J.-W. Goethe.

Another prominent Ukrainian, N. Maksymovych, known as N. M. Ambodyk-Maksymovych (1742–1812), became the founder of new directions in the field of medicine. After graduating from the Kyiv Academy (1755-1768) and the Main People's School (St. Petersburg), he attended lectures at the St. Petersburg Military Hospital. Together M. M. Terekhovsky he entered the medical faculty of the University of Strasbourg. A year later he received a scholarship from Princess E. D. Golitsyna-Cantemir, intended for gifted young men who studied abroad. He studied with the famous professor Riderer. In 1775 he successfully defended his doctoral dissertation "De hepate humano" and returned to St. Petersburg. Knowing foreign languages well, he published a large number of translations of medical literature and works of general cultural content Lossky I. (1932)

The most famous student of the Kyiv Academy and the University of Strasbourg was D. Samoilovich (Sushkovsky) - a doctor of medicine, the founder of epidemiology in Russia, a member of 12 foreign academies. D. Samoilovich owes his entry into the medical field to I. Politika (Poletica), a senior physician at the St. Petersburg General Land Hospital and a professor at the St. Petersburg Land Hospital, who in 1761 during a special trip to Ukraine to recruit students for hospital schools among 55 students of the Kiev Academy and selected a student of rhetoric - D. Samoilovich. Continuing his medical and research work, in 1776 he went to study at his own expense in Strasbourg and later in Leiden University, where in 1780 he defended his doctoral dissertation "Tractatus de sectione sysphyseos ossium pulis et. sectionem Caesareum", which was twice over. D. Samoilovich was the first doctor of the Russian Empire to publish not only his doctoral dissertation abroad, but also his other scientific works. But most importantly, D. Samoilovich – one of the initiators of the reform of medical education in Russia in the late XVIII century. He first highlighted its main tasks, raised the question of the moral face of the doctor (1782).

Brothers Oleksandr and Pavlo Shumlyansky, representatives of the Cossack officers' family, made a significant contribution to the development of national medical science. Both graduated from the Kyiv Academy. Taking advantage of his acquaintance with M. Terekhovsky and N. Ambodyk-Maksimovich, in 1773 he moved to St. Petersburg. From 1777 O. Shumlyansky (1748-1795) on a scholarship to Princess E. Golitsyna-Cantemir did an internship at the University of Strasbourg, where he defended his doctoral dissertation "Dissertatio inauguralis anatomica de structura renum" in 1781, which brought the author great fame. She made a great impression on the scientific world of Europe. It has been republished twice abroad, and has been cited in foreign textbooks on anatomy and physiology. From 1781 to 1783 O. Shumlyansky was an intern in Paris, Vienna and Marburg in therapy and surgery, while studying the system of higher medical education at European universities. In 1785-1786, on behalf of the State Medical Board, together M. Terekhovsky, he studied the production of medical education in European universities Ivy V. (1970). In 1789, Olexander Schumlansky was elected a corresponding member of the Paris Museum, as well as an honorary member of the State Medical College (1794). Pupil of the Kiev Academy P. Shumlyansky on the advice of his older brother Alexander in 1784 retired and at the expense of the St. Petersburg Orphanage went to study at the University of Strasbourg, where he successfully defended his doctoral dissertation "De proxima topicae inflammationes causa" (1789). which became widely known abroad and was translated and published in German. P. M. Shumlyansky was at the origins of the development of higher medical education in Ukraine, where he organized the first surgical clinic. He is the author of numerous scientific papers on medicine and health prevention, as well as his article (he wrote in Latin) and was published in German journals.

The sons of the Cossack-Hetman's sergeant also gained great respect in the scientific world. Several Ukrainians were educated and defended their doctoral dissertations at the University of Strasbourg. Thus, I. Ruzky (Rutsky; 1741–1786) was a young man from the Kyiv governorate, a graduate of the Kyiv-Mohyla Academy (graduated in 1761). After studying in the leading medical institutions of Russia and medical practice in Ukraine and Russia (1761-1778), in 1778 I. V. Rutsky went to study at the University of Strasbourg, where in 1781 he defended his doctoral dissertation in medicine "De peste", which was highly praised by D. Samoilovich. I. V. Rutsky's dissertation was one of the first in the world on the history and methods of treatment of this disease Sumtsov N. F (1988). Two years later, in Strasbourg, he defended his doctoral dissertation "Cossack Son" D. Ponyrko, who first graduated from the Kyiv-Mohyla Academy (1767). In 1774 he went to the University of Strasbourg to improve his knowledge, where he successfully completed and defended his doctoral dissertation "De anathymiasi cinnabaris" (1780). He became one of the first Russian doctors sent abroad to study the method of vaccinations (variation) of the English doctor Dimsdale.

In the 90s of the XVIII century. At the University of Strasbourg studied D. Ogievsky, a representative of the Ukrainian noble family of Ogienkos, the grandson of G. Ogievsky, the son of M. Ogievsky, a centurion from Krolevets, who graduated from the Kyiv-Mohyla Academy, was a translator at Russian diplomatic missions. Venice Usatenko T. P. (1995). A pupil of the University of Strasbourg, the son of a Cossack of the Lubny Regiment N. Karpinsky, who received a doctorate in medicine (1782), later became a professor of anatomy and physiology, author of the famous work "Pharmakopea Rossica" and successfully worked after returning to Russia. professor in educational and outpatient institutions of St. Petersburg. Shovkun Y. V. (2020). In the last decade of the XVIII century. G. Bazylevych was sent to the University of Strasbourg to improve his skills, where he defended his doctoral dissertation "Dissertatio de systemale resorbente. Argentorati "(1791) and received a diploma and a doctorate in medicine and surgery. For scientific purposes G. I. Bazylevych was in Germany and France, for two years he remained at the University of Gottingen, where he studied with famous scientists.

In Strasbourg, Ukrainians received not only professional medical education. The Faculty of Philosophy of the University of Strasbourg was well known. Thus, in 1754 P. Fotvynsky from Poltava studied here, and in 1774 - M. Dunin-Borkovsky from Chernihiv region - "Polish lieutenant colonel of the Polish crown", son of V. Dunin-Borkovsky, Bunchuk comrade and deputy of the Starodub regiment to the Commission. on drafting a New Code". Khyzhnyak Z. I. (2001). Among the representatives of the hetman-officer environment at the University of Strasbourg, Skoropadsky, Lyzoguby, Storozhenka, Rozumovsky and others studied. As it turns out, in addition to faculty enrollment books, the university also conducted special enrollment registers for young aristocrats who came from all over Europe to Strasbourg to "obtain a cavalier upbringing". These registers "serenissimorum et illustrissimorum" contain representatives from aristocratic Ukrainian families. Thus, in 1765, they recorded the two sons of Hetman K. G. Rozumovsky - Peter and Andrew, along with his governor Louis de Marignac. A. K. Razumovsky later became a Russian diplomat in Vienna.

There is historical and documentary evidence that M. I. Kovalinsky, a friend, student and biographer of G. S. Skovoroda, also studied at the University of Strasbourg. It is known that M. Kovalinsky was the tutor of one of the sons of ex-Hetman K. G. Rozumovsky – Leo. In addition, in 1783, two more Ukrainians were mentioned in the matriculations for the aristocracy – brothers Mykola and Andriy Kolosovsky from Kyiv. Among the Ukrainians who studied in Strasbourg, we should mention O. Shafonsky, who also studied at the

Universities of Halle and Leiden, where he defended three doctoral dissertations: in law, philosophy and medicine. D. Chyzhevsky reports the discovery of two dissertations by O. Shafonsky in Latin, which were defended in Leiden and Strasbourg in 1763 and 1768.

I. G. Borysovych (1859–1907), who had previously graduated from the Odessa Gymnasium and the University of Kyiv, lectured abroad at the Universities of Heidelberg and Strasbourg. After studying abroad, he received a doctorate in law. He graduated from Moscow University, where in 1886 he defended his dissertation for a master's degree in political economy. But during 1890–1905 he lived in Berlin, mockingly sending his articles to the newspaper Russkaya Vedomosti, to the journals Vestnik Evropy and Russkoye Bogatstvo. Ukrainian youth studied not only in the most famous and most prestigious universities of the central German states.

The Magdeburg Academy and the University of Halle, founded in 1694 (Halle, Germany), were considered the world center of oriental studies. Mathematics, physics, philosophy, medicine, and especially languages were taught at a high level at the of Gaul. D. Tuptalo, J. Blonitsky, V. Hryhorovych-Barsky showed considerable interest in the problem of Oriental studies. Pupils of the Kyiv Academy, who later studied in Halle, were able to transfer their interest in Oriental studies to scientific fields, continuing its study under the guidance of the brothers Michaelis, Kahlenbert and other professors at the university. Thus, S. Todorsky brought to Kyiv many books donated to him by G. Michaelis. The University of Halle was famous not only for its good study of Oriental languages. At the beginning of the XVIII century. In the countries of Western Europe a new discipline was born scientific Slavic studies. "This direction", says D. Nalyvaiko, "was the first to develop significantly in Germany. Ukrainian studies has been one of its components since then". This shows that Ukrainian studies was a component of humanitarian education and the educational process at the University of Gaul. In the XVII-XIX centuries. Many Ukrainians studied here, among them pupils of the Kyiv-Mohyla Academy: V. Lyashchevsky (Lashchevsky), D. Nashchynsky, S. (Simeon) Todorsky and others. Among the most prominent educators, linguists of the mid-XVIII century. was S. Todorsky - later known as Archbishop of Pskov, Izborsk and Narva. He came from a Ukrainian Cossack family (son of a Cossack from the Zolotonosha Hundred of the Pereyaslav Regiment) and studied at the Kyiv-Mohyla Academy (1718-1727). At the beginning of 1727, without completing a theological course, he left for St. Petersburg, Revel (now Tallinn) to Germany. From 1729 to 1735 he lived in Halle, studied for six years at the Magdeburg Academy of Theology, Hebrew, Greek and Other Oriental Languages with the well-known Hebrewist J.-G. Michaelis in Europe at the time, who founded the academy. Oriental Collegium Theologicum. Discovering the abilities of S. Todorsky, J.-G. Michaelis involved his practical training with students studying Hebrew, to check their translations of Bible texts, and especially - to teach the basics of East Slavic languages. During this period S. Todorsky traveled a lot, repeatedly visited Leipzig, Hungary, the Balkans, where he taught. He visited Orthodox, Uniate and Catholic monasteries, got acquainted with Reformation and Counter-Reformation ideas and movements. Fascinated by enlightenment ideas, S. Todorsky translated "Four Books on True Christianity" by J. Arndt - a programmatic and fundamental pietistic work, which is characterized by religious tolerance, a call for primitive Christian equality, a combination of reason and faith. In addition, S. Todorsky translated several pietistic works, including "Catechism", composed by A. G. Franke, as well as spiritual hymns, psalms, including those written by Luther himself. All these rare editions were found and analyzed by D. Chizhevsky. German educators highly valued the knowledge and work of the Ukrainian scientist-educator S. Todorsky, admired his translations. Thanks to the initiative of the German pastor in Narva J.-F. Budde and other German scholars, 3,500 copies of "True Christianity" translated by S. Todorsky were sent to Russia, and 500 copies were purchased by the St. Petersburg Academy of Sciences Khyzhnyak Z. I (2001) As the German Protestant pastor H.-W. Hegelmeier emphasized in his work "Impartial Messages about Various Sights of the Russian Empire" (Sturgart, 1739), in the first half of the XVIII century. S. Todorsky was one of the leading figures in Ukrainian-German cultural relations. According to E. Winter, a researcher of early enlightenment in Germany and Ukraine, at the center of "German-Ukrainian-Russian relations of the early Enlightenment was the Ukrainian Todorsky with his translations", and he deserves to be worn in Ukrainian early enlightenment. name.

Representatives of the hetman-elite elite and wealthy families came to the University of Göttingen (founded in 1737), which enjoyed a good reputation and considerable influence in scientific circles. Already in the second half of the XVIII century. and especially in the end the university becomes the center of rationalist philosophy. And at the beginning of the XIX century. It became one of the powerful centers of the cultural and national-political movement, thanks to the work of famous scientists, educators, professors: Gauss, Dalmon, the Brothers Grimm, Hugo, Miller. The professor of this university was the well-known J.-F. Herbart (Herbart; 1776–1841) German philosopher-idealist, psychologist and educator, as well as M. Gartman (Gartman). This institution respected scientific research in the field of astronomy, as evidenced by the work of G. Olbers (Olbers; 1758-1840). It was in the middle of the XVIII century. The center of Slavic studies in Germany is moved to Göttingen, to his famous university, where a group of educators who were actively interested in the Slavic world and its culture and made a significant contribution to their study (A. von Haller, Gebgardi, Heine, Gmelin, Miners, A.-L. Schletzer, etc.). Their scientific body "Gottingenischen Gelehrten Anzeigem" systematically published intelligence and reviews on Slavic studies, aroused public interest in Slavic peoples and their cultures and "sought to influence its perception of processes and events in the Slavic world". Göttingen scholars connected with the Slavic countries through educational institutions, universities where people from these countries studied, who, returning to their homeland, sent books and wrote reviews Kulvabko A. A. (1930). The university gave lectures on the history of Russia and Poland in the context of world history and the history of Europe, they covered the history of Kievan Rus and later epochs of Ukrainian history, who made a complete translation of the chronicle of Nestor in German (published in the early XIX century.), and also important is his contribution to the study of the history of Ukraine-Russia. Publications about Ukraine and reviews of books about its history and culture also appeared on the pages of the Gottingen scientific journal. In particular, in 1772 it published "Notes on the way from St. Petersburg to the Crimea in 1771" by an unknown author.

The Cossack theme of the Gottingen Slavists occupied an important place. He was associated with the University of Göttingen by J.-H. Engel (1770–1814), a well-known Austrian historian and researcher of Ukrainian history. He is the author of "History of Halych and Volodymyr" (1792), "History of Ukraine and the Ukrainian Cossacks" (1796), which used important documentary sources and literary materials. The head of the Gottingen educators of the mid-18th century, the famous scientist and writer A. Haller, also addressed the Cossack theme. In his socio-political novel Alfred, King of the Anglo-Saxons (1772), he involved Cossacks "as the fullest expression of constitutional principles". It is important that scientists in this field have introduced into scientific circulation a significant number of previously unknown in Germany Ukrainian studies sources and research. According to J.-H. Engel, it was A.-L. Schletzer who used the "Short Description of Little Russia", which he rewrote in the house of Hetman K. G. Rozumovsky in St. Petersburg and brought to Germany. Lectures of prominent philosophers of the University of Göttingen were listened to by students of the Kyiv Academy - representatives of famous statesmen and politicians and Ukrainian magnates: Miloradovich, Bazilevsky, Danilevsky, Ogievsky (Ogienko) and many others Russian D. M (1956). As is known, two Myloradovych brothers studied here in 1786: Hryhoriy and Mykhailo, as well as G. P. Myloradovych (1756–1828), the son

of the last Chernihiv colonels P.S. Myloradovych and S. S. Polubotok, great-grandchildren of the Ukrainian ex-Hetman P. Polubotko. In addition, Peter Stepanovich's youngest brother, O.S. Miloradovich, studied in Saxony. Another pupil of the Kyiv Academy, I. L. Danilevsky (Danilovsky), continued to study medicine at the Medical and Surgical School at the Moscow General Hospital, then studied at the University of Göttingen, where he defended his doctoral dissertation "De magistratu medico felicissimo" (2184). Prominent German clinician and hygienist of that time P. Frank, one of the founders of the science of social hygiene, fully published the text of I. L. Danilevsky's doctoral dissertation in his journal "Delecta opuscula" ("Selected works") as a model. In total, the German press at the time received nine positive reviews. Brothers Andriy and Mykhailo Bazylevsky studied at the University of Göttingen. In 1785 he defended his dissertation "Theses medicae" ("Medical Theses") for the title of doctor of medicine. Later he worked as a doctor, engaged in translation activities. He translated Voltaire's Poetry of Military Art into poems from French (St. Petersburg, 1780).

Paul of Krosno, later a poet and professor at the University of Cracow, received his bachelor's degree from the University of Greifelwald (founded in 1456). Students from Ukraine studied at the University of Cologne, but this institution, as G. Nudha emphasizes, was not very popular. Apparently because this school gained the glory of the stronghold of Catholicism, where "forged its theological and philosophical weapons". Lists of students (XVI-XVIII centuries) are almost non-existent, but researchers found about 20 names of students from Poland, two of whom could be Ukrainians - Andriy Rozhanka (1581) and Mykhailo Skoshovsky (1610), but the lists do not any notes on their origin. Many professors at the University of Cologne developed the concept of Thomism and were committed to the followers of St. Thomas. Particularly frequent appeals to the critique of Thomism were in the courses of the Kyiv-Mohyla Academy.

At the beginning of the XIX century. The center of German scientific thought was the University of Berlin (founded in 1809) and attracted special attention of young people. Initially, the university consisted of seven faculties: law, philosophy, medicine, theology, pharmacy, dentistry and agriculture. A number of institutes soon joined it. The activities of many prominent scientists are connected with the University of Berlin: philosophers G. Hegel, J. Fichte; philologists Jacob and Wilhelm Grimm; historian T. Mommsen; physicists G. Helmholtz, A. Einstein, M. Planck; physicians A. Grefe, R. Koch, R. Virkhov and others. The rector of this estate was the famous G. Hegel. Among the students of the University of Berlin were P. S. Pallas (1741-1811) - a famous researcher, academician of the St. Petersburg Academy of Sciences (since 1767); P. Gnidych (1750–1817) – author of the scientific work "On some drugs and diseases of the n peoples" (1778), together with his teacher, the famous pathologist H.F. Ludwig (1709-1773) wrote a book "On the powder of anterarum" (1778).

From 1847, the son of the famous dramatic actor M. S. Shchepkin, Mykola Shchepkin (1820-1886), was also abroad, where he lectured on chemistry and agriculture in Berlin. After returning to Moscow, he became a well-known public figure, then - director of the Moscow Credit Society. Prominent scholar-philosopher, lawyer (1808-1891), received his legal education at the Universities of Dorpat and Berlin (since 1828), where he listened to lectures by G. Hegel. P. Redkin was one of the first followers of the German philosopher in Russia: he made the first attempt to systematically present the philosophy of Hegel ("Review of Hegel's logic", 1841). Among the students of the University of Berlin was a Ukrainian K. F. Rozhalin (1740-1795), "Cossack son" of the Lubny Regiment, who later became a doctor of medicine, a prominent organizer of medical affairs in Ukraine and Russia. In 1765 he defended his doctoral dissertation "De scorbuto", spoke several foreign languages, corresponded with a prominent German scientist and poet W. J. Goethe. A descendant of the famous Ukrainian Cossack family Kulyabko O. O. studied at the universities of Berlin and Leipzig. (1866–1930) – a famous Soviet physiologist. He first graduated from St. Petersburg (1888), Tomsk (1893), then the Universities of Berlin and Leipzig. Student of I. M. Serov and F. V. Osvyannikov. In 1903–1924 he was a professor, head of the Department of Physiology at Tomsk University, and from 1925 he worked at the Clinical Institute of Moscow.

## **5 Conclusion**

All the above facts confirm that the culture of the Ukrainian people in the context of the ideas of the Enlightenment has organically merged into the Enlightenment movement both in Europe and in Ukraine. It was culture and education that reflected the inherent way of life of Ukrainians, thinking, worldview, aesthetic preferences, moral and legal norms, political aspirations and cultural and educational landmarks. All this characterizes the historical and cultural paradigm of the XVIII-early XIX centuries. Ukrainian youth, being in European and foreign universities, adopted the latest knowledge, technologies, cultural and educational areas, which they spread in Ukraine and Russia. In addition, there has been a significant expansion of borders for intellectual influences and cultural forms of cooperation. Related to this is, first of all, the desire for cultural and educational reforms in Ukraine, initiated and authored by representatives of the Ukrainian national elite - as a new generation of "leading class" of Ukraine in the late XVIII-early XIX centuries. All this testifies that the direction in the development of education in Ukraine has become national. At the same time, the active participation of Ukrainians in the educational and cultural space of Europe at that time included Ukraine in the world integration processes, which later provided a dynamic cultural workshop aimed at a holistic understanding of the continuity of Ukrainian national culture. In further Ukrainian studies it is necessary to highlight the role of representatives of the Ukrainian national elite in the formation of humanitarian time and space both in Ukraine and abroad on the basis of integration, democracy and ethnocultural identity.

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**Primary Paper Section:** A

**Secondary Paper Section:** AM

# TRAINING OF TEACHERS FOR THE IMPLEMENTATION OF UNIVERSAL DESIGN IN EDUCATIONAL ACTIVITIES

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Abstract: The relevance of the research implies the need to clarify the priority methods and their components in order to train teachers for the implementation of a universal design in educational activities at secondary education institutions based on an understanding of the inclusive needs of students and the effectiveness of the educational process. The purpose of the research is to determine ways in order to train teachers for the implementation of a universal design in educational activities at secondary education institutions. 378 teachers (Ukraine) on the Google-forms platform took part in the survey. It has been highlighted that the basic differences between the theory and practice of the implementation of inclusion and universal design are as follows: inclusion is more difficult to apply in practice; design needs clarification of some practical concepts. It has been determined that the most common methods of involving into the implementation of universal design are manifestation of enthusiasm, providing examples and feedback to students; representation through class discussions. laboratory experience and images; group discussions in the classroom, projects, workshops and tests. It has been noted that UD can be used to create educational applications in order to adapt the learning space to the needs of the student (elements of physical spaces and instructions in order to make them more accessible, useful, and comprehensive). It has been revealed that universal design should be manifested in the context of massification; digitization; transdisciplinarity; deformalization. The system of barriers that prevent the implementation of UD has been outlined, namely: state support of teachers; the need for administrative support, the need to improve the general knowledge components; additional on-site training on universal design; additional advanced training on the implementation of universal design. It has been noted that teachers analyze the system of implementation of universal design through information about the participants, courses and mode of conducting, independent and dependent variables, strategies for introducing the effectiveness of implementation. Recommendations have been given on the involvement of computer communication, web-based classroom management systems, and links with technologies. The practical significance of the research was the presentation of the system of teachers' training for the implementation of universal design in educational activities through the basic semantic and structural elements of UD in the environment of SEI.

Keywords: Secondary education institution (SEI), pedagogical activity, universal design, concept implementation, teachers' training.

## 1 Introduction

The introduction of universal design for learning (UDL) is a critical issue for educational institutions not only in Ukraine but also abroad, forasmuch as UDL is an inclusive system based on learning science that supports and eliminates barriers to education for everybody, while maintaining high expectations for results.

Universal Design for Learning (UDL) is a framework for curriculum and lesson planning through which educators can maximize accessibility and minimize barriers often experienced by students.

Global learning practices strengthen and complement UDL, defining accessibility as a goal for the equity of education and encouraging educators to study the latest technologies for implementing this accessibility.

In such a way, the need to clarify the priority methods and their components to train teachers for the implementation of universal design in educational activities in secondary education

institutions is actualized on the basis of understanding the inclusive needs of students and the effectiveness of the educational process.

## 2 Literature review

Universal design (UD) has recently become increasingly important as a new paradigm aimed at a holistic approach that varies within the scope of public services, including education (Moezzi, Muhammad, Kamarudin, & Wahab, 2014).

The term "Universal Design for Learning" is one of the most commonly used terms in the literature to describe UD in education when compared to other terms such as "universal instructional design" and "universal learning design". On this basis, the results of investigations of Seok, DaCosta, & Heitzman-Powell (2020) emphasize the benefits of using UD. Learning communities (for instance, discussions or groups of classes) and practical activities (for instance, modification of individual curricula and implementation of learning technologies) conducted both online and directly (F2F) are one of the two most common forms of educational activity used in the application of UD principles.

Fundamentals of Universal Design (UD) and Universal Design for Learning (UDL) offer unique ways to create inclusiveness in education systems (Dalton, Lyner-Cleophas, Ferguson, & Mckenzie, 2019).

Adopting and combining both principles of universal design and principles of universal design for learning is not about facilitating it, however about proposing a framework of principles (McNutt, & Craddock, 2021) and guidelines with the aim of creating an adapted education scheme for all participants of the educational process.

Global changes in higher education (Tabrizi, & Sungur, 2017; Jacobs, 2021) are most clearly manifested in the sequential progression of functional university models (from university 1.0 to university 4.0), accompanied by equally important changes in educational processes (Pavlovskaya, 2020). Universal design opportunities should be provided for all students, including students with disabilities, while studying at university campus. The design of the university campus is an important factor in the functioning and maintenance of higher education. Universal design concept of lecture space in CADL ITB building can facilitate the activities of students with hearing impairments (Harahap, Martokusumo, Wahjudi, & Santosa, 2019). Scientists argue that using the parameters of the universal design principles, the factors involved in the application can be classified to define the lecture space problem in CADL ITB builling as a case study. The universal concept of design in the lecture space in CADL ITB is not optimal; however, such an example can serve as a design solution to maximize the universal design concept for students with hearing impairments.

On the basis outlined, young graduate teachers of HEIs are more likely to apply inclusive teaching practices such as UDL when they have a positive attitude towards them, shaped by their culture, experience and training. Administrators have a unique position to influence the teacher's attitude by creating an inclusive school culture and providing leadership guidance (Gothberg, 2021). UDL yields benefit to all students, not just those with unique needs, forasmuch as it engages in learning and removes learning barriers (Grillo, 2021; Hickey, 2021).

Teachers' perception of their disciplines in the context of universal design should be consistent with the current educational goal for all students, as well as the appropriate level of training of teachers. In order to successfully implement Universal Design technologies, the classroom environment,

accessibility, and flexible materials needed to conduct the classes must be prepared (Lee, & Kim, 2018).

Adherence to the principles of universal design in education makes it possible to configure the convenience and accessibility (Cressey, 2020) of the base of the proposed knowledge and concepts.

Scholars Scott, Bruno, Gokita, & Thoma (2019) describe this possibility of the UDL and UDT frameworks (Copeland, & Mallary (2020), which makes it possible to develop lesson plans for all students, including students with disabilities in general education classes. UDT frameworks make learning opportunities more engaging and relevant to students.

Based on new investigations in neuroscience sphere, Universal Design for Learning (UDL) constitutes an educational approach that promotes access, participation and progress in a general curriculum for everybody. UDL recognizes the need to create opportunities in order to engage students with different abilities by offering curricula and learning activities that allow using a variety of means of representation and expression of their own opinions.

UDL requires joint planning of teachers' activities with different knowledge and skills of the curriculum. Complaints that often arise include a lack of time for joint planning as well as a lack of resources for teaching a differentiated curriculum (Riviou, & Kouroupetroglou, 2014).

Some scholars, including Hromalik, Myhill, Ohrazda, Carr, & Zumbuhl (2021), argue that universal design for learning (UDL) supports educators in developing inclusive learning environments. However, few scientists have examined the implications of the content of UDL professional development programs for teachers. After undergoing specialized training on the introduction of universal design technologies in their work, teachers and staff have statistically deepened knowledge about UDL; consequently, they could better provide examples of how to apply them in practice.

Denning, & Moody (2018) argue that teachers can apply the principles of UDL to the curriculum and materials as a first step to support all students. UDL methods (Hamraie, 2017) may encourage application of research practices that offer the opportunity to individualize learning needs. UDL strategies can help students better understand information by allowing them to share their knowledge in different forms. The main focus of UDL lies in creating lessons aimed at specific mechanisms of the brain. UDL provides teachers with a framework for implementing materials and assessments to cover the competencies of all students.

In order to properly understand the functioning of UD in education, it is necessary, according to Edyburn (2020), to identify three types of examples of its implementation, namely: platform tools, web applications and built-in support.

Roski, Walkowiak, & Nehring (2021) emphasize the importance of carefully adopting and implementing UDL principles for learning and ensuring its accessibility in the conditions of inclusive education.

Students may have different opportunities even in an ordinary classroom; however, school closures and the technological requirements of distance learning can disproportionately affect students, especially those with special educational needs or those at risk group. From the point of view of inclusive education and the principles of universal design, teachers take on new roles and responsibilities forasmuch as they are expected to meet the needs of all students in their class (Frumos, 2020).

Thus, despite such a wide range of scientific research related to the introduction of universal design in the education system, the issue of how to train teachers for the implementation of universal design in educational activities in secondary education institutions still remains poorly studied.

#### 3 Aims

The aim of the research is: to identify ways in order to train teachers for the implementation of universal design in educational activities at secondary education institutions.

Research objectives:

Achieving the research aim involves solving a system of problems, as follows:

- outlining the main differences between the theory and practice of implementing inclusion and universal design;
- establishing the most common methods of engaging in universal design implementation;
- representation of trends in the introduction of universal design; creative experience of primary school students;
- outlining barriers to the implementation of a system of universal design;
- categorization of the system of universal design implementation;
- description of independent and dependent variables of UD implementation;
- identification of systems of educational strategies;
- coverage of a variety of designs for UD implementation;
- providing recommendations for the systematic training of teachers for UD implementation.

#### 4 Research methods and methodology

The methodological framework is based on sociological and statistical methods of the research, as well as on a systematic analysis of the importance of understanding the role of teachers' training for the implementation of universal design in educational activities. Sociological methods (sociological survey, method of information analysis); statistical methods (ranking method, descriptive statistics) have made it possible to identify a system of components applied in teachers' training for the implementation of UD.

378 teachers (Ukraine) were involved in the research by applying the Google-forms platform. Respondents were asked to answer different types of questions in order to determine the system of components in teachers' training for the implementation of UD at SEIs.

## 5 Results

378 teachers from Ukraine took part in the sociological survey. The survey was conducted on the online Google-forms platform. The respondents were teachers who had a need to apply the components of the universal design concept in their professional activities. The questionnaire has been compiled in such a way as to determine the basic elements of UD, requiring a particular attention and further identify the means of its implementation. Respondents were asked to answer the question in the affirmative or in the negative form, as well as to rank certain categories.

The first question was regarding the search for the main differences between the theory and practice of the implementation of inclusion and universal design. 187 respondents – teachers have answered that inclusion is more difficult to apply in practice; 191 respondents have identified that universal design needs clarification of some practical concepts. The results are presented in Figure 1.

universal design inclusion is more requires clarification of difficult to put into some practical concepts practice

51% 49%

Figure 1. The basic differences between the theory and practice of inclusion and universal design.

In the second question, teachers were asked to rank the most common methods of involvement in the implementation of universal design in descending order. According to the respondents' answers, the first place with a result of 38 % was occupied with manifestation of enthusiasm; providing examples

and feedback to students was in second plac(21 %); the representation through class discussions was in third place with a result of 17%; laboratory experience and images received 12%; group discussions in class and projects, workshops and tests received 6% each. The results are presented in Figure 2.

38 manifestation of enthusiasm 40 35 30 25 providing examples and projects, workshops and tests 20 feedback to students 15 21 10 6 17 group discussions in class and representation through class 12 projects discussions laboratory experience and images

inclusion is more difficult to put into practice universal design requires clarification of some practical concepts

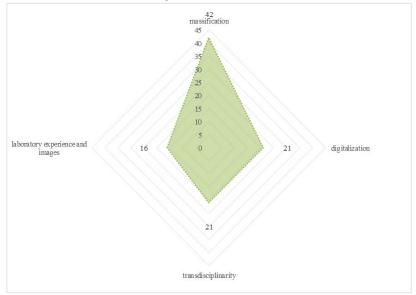
Figure 2. The most common methods of involvement to the introduction of universal design.

Source: author's development; concluded on the basis of the answers of the respondents.

In the third question, teachers were asked to rank the trend of universal design in descending order. According to the respondents' answers, the first place with a result of 42 % was occupied with massification; the second place was shared

between digitalization and transdisciplinarity (21 % each); deformalization was in third place with a result of 16 % . The results are presented in Figure 3.

Figure 3. UD tendencies to the introduction of universal design.



The next question was related to identifying a system of barriers that hinder the inclusion of students with disabilities in the education system, even when teachers have applied inclusive strategies. The teachers- respondents outlined the barriers as follows: the poor support of teachers by the state; the need for

administrative support; the need to improve general knowledge components; additional on-site training on universal design; additional advanced training on the implementation of universal design with results of 39 %; 21 %; 18 %; 15 %; 7 %, respectively. The results are presented in Figure 4.

state support; 39; 1 50 the need for administrative support; 21;1 40 the need to improve the general knowledge additional on-site 30 components; 18; 1 training on universal design; 15; 1 20 additional advanced 10 training on the implementationof universal design; 7; 1 -10

Figure 4. Barriers that hinder the inclusion of students with disabilities in the education system.

Source: author's development; concluded on the basis of the answers of the respondents.

The next question was related to clarifying the categories on which teachers rely during the analysis of the implementation of universal design. Among such categories, teachers revealed as follows: details of information about participants (47 %), courses

and mode of conducting (33 %), independent and dependent variables (12 %), implementation strategies (5 %), implementation effectiveness (3 %). The results are presented in Figure 5.

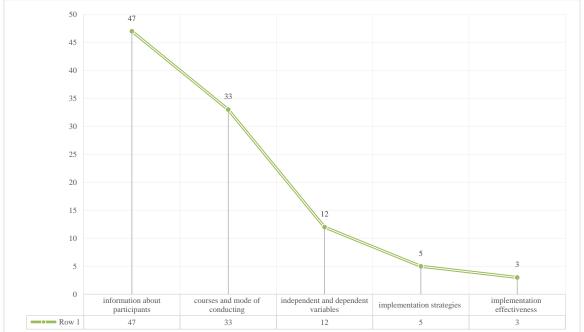


Figure 5. Categories on which teachers rely during the analysis of the implementation of universal design.

In this context, the sixth question was related to identifying the most common independent variables during the implementation of UD. According to the respondents' answers, the first place with a result of 56 % was occupied with the development and implementation of courses based on the principles of universal

design, practical measures. The rest of the criteria remained on the following indicators, namely: training of instructors – 27 %, training of teams under the guidance of colleagues – 10 %, joint model of professional development – 7 %. The results are presented in Figure 6.

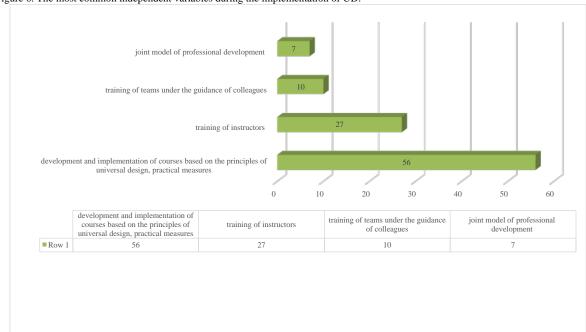


Figure 6. The most common independent variables during the implementation of UD.

Source: author's development; concluded on the basis of the answers of the respondents.

Independent variables in implementation covered the following criteria, namely: course evaluation -62%, learning outcomes (revision of lesson plans and application of technologies) -

19 %; level of trust (acquisition of knowledge about UD and disability) – 19 %. The results are presented in Figure 7.

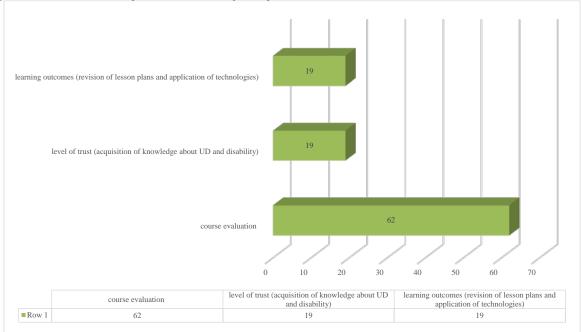


Figure 7. The most common independent variables during the implementation of UD.

Source: author's development; concluded on the basis of the answers of the respondents.

The eighth question was related to the ranking of the system of learning strategies. According to the respondents' answers, the first place with a result of 53 % was occupied with computer communication through the network (53 %); web-based

classroom management systems— $(31\ \%)$  were in second place; interactions with technology and other participants and the learning community— $(16\ \%)$  were in third place. The results are presented in Figure 8.

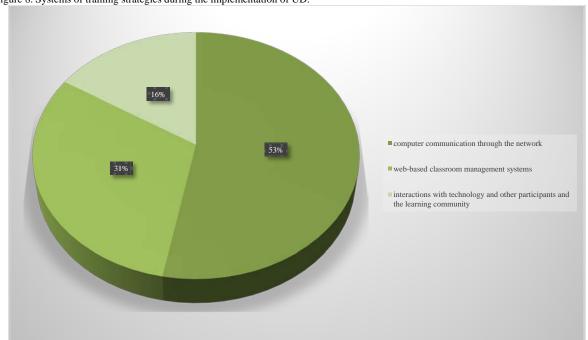


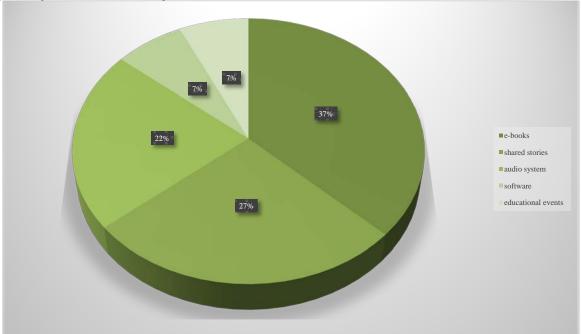
Figure 8. Systems of training strategies during the implementation of UD.

Source: author's development; concluded on the basis of the answers of the respondents.

The last question was aimed at clarifying the digital constructions of UD implementation, covering the activities of digital environments. Among the proposed options, respondents

gave the greatest number of marks to e-books (37 %), shared stories (27 %), audio system (22 %), software (7 %), and educational events (7 %). The results are presented in Figure 9.

Figure 9. Digital constructions of UD implementation.



#### 6 Discussion

On the basis of a significant number of investigations devoted to the issue under discussion, we single out the following provisions, namely:

- The basic differences between the theory and practice of implementation of inclusion and universal design are as follows:
- inclusion is more difficult to be applied in practice;
- design needs clarification of some practical concepts (Laurian, 2017);
- 2. The most common methods of involvement in the implementation of universal design are as follows:
- manifestation of enthusiasm;
- providing examples and feedback to students;
- representation through class discussion;
- laboratory experience and images;
- group discussions in class;
- projects, workshops and tests (Murphy, Panczykowski, Fleury, & Sudano, 2020.)
- Universal design (UD) can be used to create educational applications in order to adapt the learning space to the needs of the student (elements of physical spaces and instructions to make them more accessible, useful and comprehensive) (Burgstahler, 2020).
- Universal design should be manifested in the context of trends, namely:
- massification;
- digitization;
- transdisciplinarity;
- deformalization (Pavlovskaya, 2020).
- The inclusion of students with disabilities in SEIs often depends on the teacher's freedom to use inclusive learning strategies; however, there are some barriers (Scott, 2018) to implementing a system of universal design, as follows:
- support of teachers by the state;
- the need for administrative support;
- the need to improve the general knowledge components;
- additional on-site training on universal design;
- additional advanced training on the implementation of universal design.
- 6. Teachers analyze the system of universal design through the following categories:

- information about participants;
- courses and mode of conducting;
- independent and dependent variables;
- implementation strategies:
- implementation efficiency (Seok, DaCosta, & Hodges, 2018)
- 7. The most common independent variables were as follows:
- development and implementation of courses based on the principles of universal design;
- practical measures;
- training of instructors;
- team training under the guidance of colleagues;
- common model of professional development.
- Dependent variables included as follows: course assessment, learning outcomes (review of lesson plans and application of technologies, and the level of trust or knowledge about UD and disability) (Seok, DaCosta, & Hodges, 2018; Guffey, 2021)
- 9. It is recommended to use numerous learning strategies, namely:
- computer communication through the network;
- web class management systems;
- interaction with technology and other participants and the learning community (Seok, DaCosta, & Hodges, 2018).
- Universal design should comprise a variety of implementation constructions, covering the work of digital environments, namely;
- e-books;
- shared stories;
- audio systems;
- software;
- educational events (AlRawi, & AlKahtani, 2021).
- Open Discovery Space is a portal for viewing and creating educational content, lesson plans and scenarios based on the principles of UDL (Riviou, & Kouroupetroglou, 2014).

## 7 Conclusions

Therefore, on the basis of the researches conducted it is possible to conclude that in order to conduct successful training of teachers for implementation of universal design in the educational environment, it is necessary to adhere to the following recommendatory requirements concerning educational implementation of UD presented in Table 1.

Table 1. Recommended requirements for the educational implementation of UD

Trend	Learning strategies	Methods of involvement in the implementation of universal design	Categories	Independent variables	Dependent variables	Implementation constructions
Massification	Computer communication through the network	Manifestation of enthusiasm + providing examples and feedback to students	Information about participants	Development and implementation of courses based on the principles of universal design	Course evaluation	E-books, educational events
Digitization	Web class management systems	Representation through class discussion	Courses and mode of conducting	Practical measures	Learning outcomes	Shared stories
Transdisciplinarity	Interaction with technologies	Laboratory experience and images	Independent and dependent variables	Training of instructors	Level of trust	Audio systems
Deformalization	Interaction with other participants and the learning community	Group discussions in class + projects, workshops and tests	Implementation strategies + implementation efficiency	Team training under the guidance of colleagues + a common model of professional development	Acquiring knowledge about UD and disability	Software

Source: author's development; concluded on the basis of a consolidated analysis of respondents' answers.

Thus, the results of the research conducted indicate that the systematic implementation of UD in the educational environment is a complex process requiring unconditional teachers' training.

An important area of further research will be an attempt to present *systems for training teachers* in order to implement universal design in educational activities through the main semantic and structural elements of UD in the environment of secondary educational institutions.

The practical significance of the research was the presentation of the system of teachers' training for the implementation of universal design in educational activities through the main semantic and structural elements of UD in the environment of secondary educational institutions.

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# ORGANIZATIONAL AND PEDAGOGICAL CONDITIONS FOR ARTISTIC AND AESTHETIC COMPETENCE FORMATION IN CHILDREN OF SENIOR PRESCHOOL AGE

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Abstract: Art as a way of reflecting the world in the process of artistic cognition enriches the child's spiritual world, develops creative potential, expands the scope of his creative activity, and forms the basis of artistic and aesthetic competence, cultural creativity. The purpose of the academic paper lies in empirical verification of the results of forming organizational and pedagogical conditions in order to develop artistic and aesthetic competence among 5-6-year-old children. An experimental study of the organization of pedagogical conditions in the art workshop for the formation of artistic and aesthetic competence of 21 5-6-year-old children has been carried out. The major research methods are as follows: observation and content analysis of recordings made during the fine art activities of preschoolers. The pedagogical, practical and educational effectiveness of the following organizational and pedagogical conditions for the artistic activity of preschool children has been confirmed in the research, namely: the possibility of cooperation between children and a teacher, a professional artist; range of materials available; instructions and involvement of children in creative activities; discussions on works of art; conducting dialogue and attention to the children's interests; raising children's awareness through questions, suggestions, explanations and support in solving problems. The research has demonstrated that the creation of an artistic environment, the application of restrictions, taking into account the needs of children's artistic activities, can create effective organizational and pedagogical conditions, deep and exciting art education. Preschool children, having a favourable stimulating environment, high-quality art materials, time and support on the part of preschool teachers, and a professional artist, are able to create works of art of a high aesthetic and artistic level developing their thinking, learning, theorizing knowledge and self-expression. The practical significance of the resul

 $Keywords: Artistic \ and \ aesthetic \ competence, \ aesthetic \ competence, \ preschool \ children, pedagogical \ conditions, \ organization \ of \ artistic \ activity..$ 

## 1 Introduction

Each personality has numerous resources for the development of artistic and aesthetic competence; however, teachers do not always implement its value for the purpose of successful selffulfilment in the society. The organizational process of aesthetic education using the methods of fine art education at different educational levels aims to create conditions for determining the orientations of the personality, meaning and ways of life, creativity, competence formation, ensuring his self-actualization in the process of socialization. Attracting senior preschool children to artistic culture through creative activity is a recognized objective of preschool education, forasmuch as art itself is an area of "high culture" that is open, accessible to children for perception and mastering. Art, as a way of reflecting the world in the process of artistic cognition, an example of creative activity of the individual, his personalization and a way of self-expression, is a carrier of knowledge and skills. Mastering artistic knowledge enriches the spiritual world of the child, develops creative potential, and expands the scope of his creative activity; it is the basis of artistic and aesthetic competence, cultural creativity.

Competences of senior preschool children are classified into sensory-cognitive, artistic-productive, communicative, etc. Reconsideration of the essence of art education in the direction of emotional-sensory, aesthetic, sensory-perceptual mastering the reality of the world by children requires the implementation of organizational, pedagogical and methodological fundamentals of educational technologies within the framework of the competence-based approach. The priority goal of modern preschool education is the development of emotional intelligence of the child, his involvement in the world of art culture, identification of artistic abilities and mastering cultural forms of artistic and aesthetic self-expression. The implementation of the goals outlined requires scientific and practical reconsideration of methodological and methodic aspects of pedagogical support of the child's artistic and aesthetic development.

#### 2 Literature Review

Artistic activities reflect the ideas of humanistic pedagogy. The culturological approach, often used in pedagogy, is based on a person-centered picture of the world, containing the ideas of raising a child in the context of culture and student-centered education with an emphasis on the development of children's personal qualities (Deans & Brown 2008; Richards 2007). Within the framework of the culturological approach, the child-centered approach of early childhood education (ECE) is used (McClure 2011), which provides an understanding of the inner world of children during the period of accumulation of experience of the aesthetic attitude to the world. These approaches make it possible to study the children's mental development, to identify features of aesthetic perception in the exploration of reality (Eckhoff 2011).

Art activity is considered, modelled and functions as an environment for activating the artistic and creative potential of senior preschoolers (Dronova, 2021). Scientists argue that a child seeking to understand and feel the art offered to him, at the same time learns creativity (Nosiar & Yantsur, 2010; Semenova, N. I., & Klish, 2016). The result of artistic and aesthetic education should be the appropriate competence. Competence determines the ability to manage the artistic knowledge and skills acquired by the child, the willingness to use the experience gained in independent practical aesthetically creative activity in accordance with common human values and worldviews (Prymachenko, 2017).

In the literature, within the competence-based approach, the principal concepts are "competency", "competence", "key" and "subject" competencies. The essence of the competence-based approach in preschool education and primary school determines the focus of the educational process on the formation and development of key (basic) and subject competencies based on the child's mastery of competences in a particular area of knowledge and field of activity (Nikolaiesku & Dronova, 2019; Gudovsek & Koval, 2019; Mnyshenko, 2021).

In studies of the aesthetic competence of preschoolers, scholars recognize the complexity and versatility of this concept. It concentrates all the knowledge and skills of the child, acquired in the learning process and his awareness of fine art. Indicators of aesthetic competence and its level are determined by the age capabilities of the child (Kudriavtsev et al., 2016; Gavriliuk, 2018; Shulga, 2017).

Gorshkaliova (2015) identifies the objectives of aesthetic education of preschoolers as follows:

 formation of artistic and aesthetic needs. For this purpose, the aesthetic education of children should be organized in such a way that practical acquaintance with the beautiful concepts arouses the interest, concernment of children and

- causes internal contradictions between new aesthetic needs and the level of aesthetic development of the child;
- development of aesthetic perception. Aesthetic perception is a process of perception of beauty, as a result of which aesthetic feelings, emotions, experiences arise. The wealth of feelings is a necessary condition for the diverse development of personality. Aesthetic perception occurs through the senses;
- development of aesthetic ideas, concepts, evaluations, judgments and tastes. The main tool of developing the basic aesthetic consciousness of children is their aesthetic education.

Modern pedagogical technologies of artistic and aesthetic development of preschool children are characterized by the integration of arts, the creation of polyartistic developmental environment and active interaction of the teacher with the child in it, selection of basic knowledge of the theory of fine arts and providing the child with the opportunity to gain experience in using the acquired knowledge in artistic and aesthetic self-expression (Dronova, 2021; Mnyshenko, 2021). The theory of pedagogical support as a special activity of the teacher in the process of the child's creative self-expression is closely related to the processes of social self-determination, self-development, and self-fulfilment of the child (Gavriliuk, Zasypkina & Tverdokhlib, 2021; Gulpinar & Hernes, 2017; Nikolaiesku & Dronova, 2019; Mnyshenko, 2021).

In the process of determining the content of preschoolers' artistic and aesthetic competence, the works of psychologists are taken as the basis of the present research explaining the artistic creativity of the child as a process ranging from the emergence of artistic ideas and images inspired by beauty to intermediate and final phases, in which social-cultural experience, specific knowledge and erudition is actively used (Pons, Alvarez & Thompson, 2020; Kubala, 2021).

In the scientific literature, fine arts are considered as a tool for the development of aesthetic competence in preschool children (Ko & Chou, 2014). The artistic component fulfils a number of challenges as follows: forms the child's awareness of the "artistic picture of the world"; the idea of art (artistic image) as a form of interpretation of the world and beauty in it; awareness of a work of art as a result of creative efforts, skill and emotional uplift of a person; awareness of creativity as a way of selfexpression (Nikolaiesku & Dronova, 2019). The investigation conducted by Yazici (2017) revealed a positive effect of the "Program on Art Education" on the average scores of social skills of preschool children, which were higher in the experimental group compared to the control group, in which such a program was not included in educational activities. In the scientific work of Fan & Tan (2019) on the state of aesthetic education of preschool children using information technologies, preschool teachers have found a high level of aesthetic knowledge of children.

Ko & Chou (2014) argue that technological tools in the fine arts contribute to the quality and effectiveness of education of preschool children, increase their motivation in educational activities. Effective teaching tools in preschool education are audio-visual materials, including drawings, maps, charts, slides, filmstrips and videos; they enhance the positive effect of oral instructions, exercises and textbooks.

Bautista et al. (2018) have revealed that arts education plays an important role in pre-school education in Singapore, transferring Asian values to children through pedagogical practices that are reproductive and guided by teachers. Children are engaged in artistic activities in four different types of organizational and pedagogical conditions ("integrated activities, fillers, learning centres, art lessons"). However, the main disadvantage of children's artistic activities is that excessive focus on productoriented instructions and rough schedules limit children's free exploration of art, limited access to materials, and as a consequence of self-expression and the formation of a set of the child's competencies.

The role of the teacher lies in planning and organizing relevant learning experiences with the management of a variety of teaching and learning materials in order to create the most stimulating learning environment (Bae, 2004). In addition, the teacher is also responsible for the important task of delivering ideas to children as skilfully as possible (Wallerstedt and Pramling, 2012), using a variety of fine arts in different forms, forasmuch as the child has a short concentration and is easily bored with words, but enjoys looking at pictures very much. According to the results of investigations, about 80 % of learning occurs through the senses; consequently, the systematic use of visual arts helps improve learning in early childhood, and this becomes the basis of the principle of visual arts for education. Fine art ranges from traditional blackboard to modern technological tools, including, but not limited to, tape recorders, movie projectors, in addition to radio and television, which usually have a compelling force focusing a child's attention, evoking the imagination. However, the principal challenge in applying the latest technologies in preschool education is cost, forasmuch as the majority of them are very expensive, especially films, filmstrips, slides, in addition to the transparency that entails using expensive projection technologies such as cinema projectors, overhead projectors and projectors. Nevertheless, there is no doubt that the inclusion of technological tools in visual arts enhances the quality and effectiveness of educational motivation for children, forasmuch as they provide an opportunity for young children to experience learning through the senses, reinforcing oral teaching without exercises and textbooks.

The purpose of the academic paper lies in developing the organizational and pedagogical conditions for the formation of artistic and aesthetic competence in 5-6-year-old children.

## 3 Methodology

The research is based on the Reggio Emilia approach; this is an educational philosophy and pedagogical approach focused on preschool and primary education. The program of artistic activity for children is based on the principles of respect, responsibility and community through exploration, discovery and artistic playing. This philosophy is based on the assertion that the children's individuality is formed in the early years of development and that they are endowed with "hundreds of languages" through which they can express their ideas. The aim of Reggio's approach lies in teaching children to use these languages (for instance, painting, modelling, drama) in everyday life.

A child-centered approach to early childhood education (ECE) has been used in the research, the main advantages of which are the child's autonomy in artistic activity, independent discovery of art, self-expression (McClure 2011). The basic advantage of this approach is the natural development of artistic and aesthetic competence of the child without the intervention of the preschool teacher, but with active support through instructions, technological tools (Deans & Brown 2008). Along with this, the main drawback is the randomness of the results of artistic activity, which requires the intervention of the teacher for the joint creation of a drawing, picture and the formation of a conscious perception of creativity (Eckhoff 2011). Therefore, in the present research, the child-centered approach is supplemented by a collaborative approach, which consists in involving a teacher in the drawing process and a professional artist with specialized education and ten-year-experience.

In the course of the research, an experimental study has been conducted how organized pedagogical conditions in the art workshop contribute to the development of artistic and aesthetic competence in 5-6-year-old children. In order to implement the purpose outlined, for 21 5-6 year-old children of the Kholopychiv preschool educational institution (kindergarten, PEI, USREOU code: 35168352, address: Volyn region, Lokachyn district, Kholopychi village), five practical sessions were organized in an art studio in Lutsk, lasting 2,5 hours. The content analysis has been used in the research based on the

results of observing the process of artistic activity of 5-6-yearold children (Figure 1). The main method is social-cultural analysis (Cutcher & Cook, 2016) of video materials that have been collected in the process of children's artistic practice and recorded weekly. In the process of observing with the help of webcams, the reasoning, the interaction of children, the process of creating artifacts, communication has been documented

Figure 1: The process of artistic activity of 5-6-year-old children





The children visited the workshop every week for the period of five subsequent weeks, accompanied by a teacher who, together with the children, participated in artistic activities with the support of a professional artist. The combination of childcentered approach and collaborative approaches to children's creation of their own paintings provided as follows:

- offering children art materials, art works as samples, discussing the directions of creativity with children every week prior to working, which provided a reflection of educational activities;
- children were given the opportunity to draw together in groups or separately, with a teacher or a professional artist;
- the child could refuse to be involved into activity at the lesson of his own free will; not all children participated weekly or in a certain type of creative activity.

Each week, the children's art works were photographed, and the obtained material was analysed on the basis of social-cultural framework during the project in order to review the practice and determine the direction for subsequent creative activities.

## 4 Results

The principal organizational and pedagogical conditions of artistic activity are as follows:

 providing an opportunity for children to work on an organized large project using a canvas of 3,5 x 1,35 meters; (textually and visually). The collected visual / verbal data are significant research artifacts documenting and ensuring the process of visual analysis and theorizing. This is the most effective method of research, forasmuch as the paintings, taken separately, are an incomplete set of research documents (Knight 2013; Thompson 2015).





- the possibility of cooperation between children and the preschool teacher, as well as the artist on a new curriculum and artistic creativity in the preschool educational institution:
- a range of available materials and limited choice of colours every week;
- instructing and involving children in the use of materials as needed;
- discussions on works of art at different stages of creation;
- conducting dialogue and attention to the children's interests, their artistic decisions both in the process of artistic creativity and after it;
- documenting unfinished art works of children;
- periodic limitation of the number of groups;
- raising children's awareness through questions, suggestions, explanations and support in solving problems.

Within the framework of their own autonomy and practice, children have established conditions for artistic activity as follows:

- The theme of the paintings was determined by the children; the children chose the type of creation on individual basis or jointly, planned and long-term activity.
- The preschool teacher and the artist were observers of the children's works, in some cases providing support and discussing them.

- Children had an opportunity to experiment with materials and make mistakes in an environment where mistakes were accepted and really encouraged.
- Children chose colours, brushes and tools from a selection formed by the artist.
- The children chose by themselves whether to work on a large canvas or be engaged in alternative activities, as well as the duration of each type of creativity.
- The children expressed any objections that were accepted by the preschool teacher and the artist.
- Children's way of thinking was noticeable in their art works; the preschool teacher and artist responded to the manifestation of children's thinking and changed the direction of creativity if necessary.

The offered organizational and pedagogical conditions and the corresponding context of the workshop formed the basis for revealing the creative potential of children; they played a key role in gaining artistic experience. These conditions were a kind of external stimuli for children who, at the age of 5-6 years, do not possess a bottomless and independent imagination for creating drawings. Traditional material support during classes in a preschool institution is not enough for providing high-quality artistic experience. Therefore, the creation of special creative conditions and context contributes to the strengthening of artistic and aesthetic abilities, thereby developing the relevant competences. As a result of observation over children's creativity, the theoretical assumption about the necessity for structured and stimulating art education for preschool children has been confirmed. The combination of artistic activity with the opportunity for children to choose individual or group work with structured artistic activities in the workshop allowed children creating a holistic product.

The children responded positively to the stimulation of creative activity and appropriate quality art materials, interaction between the preschool teacher, professional artist and each other, focusing entirely on the collective, artistic project. Thus, the joint creation of organizational and pedagogical conditions for learning on the basis of art was generative. The major aspects of the present empirical research are as follows: pedagogy (specially organized processes of education of artistic and aesthetic competence), practice (children's artistic activity) and training (knowledge gained). Along with this, the theoretical aspects of structured art and children's freedom of expression from a social-cultural perspective have been combined in the research. In the course of the research it has been revealed that the use of Reggio Emilia's approach and elements of practice have ensured the balancing of competing philosophies of structured art and children's self-expression and obtaining positive results of children's learning in the workshop.

## 4.1 Pedagogy

In particular, in the process of artistic activity children were allowed to create a new artistic training program (curriculum) developed in the process of activity; the training was documented with the help of videos, photographs and reflective magazines, contributing to children's self-expression. Although children were offered a developed, clear and contextual art education, teachers were able to manage the learning process and make it child-centered. The research focuses on artistic experience as a process or, more precisely, in practice, as well as a way to create a finished work of art - completed individual, joint paintings. Over the course of several weeks, relationships with the children developed into productive partnerships that were essential to the success of the art process. Consequently, researchers and children became a community of practitioners, critical friends and fellow artists.

## 4.2 Practice (What were the children doing?)

In each particular situation, the children were consistently divided into three main groups, only occasionally moving between the groups. Firstly, these were the children who were fascinated by materials, especially paints. They were interested

in the perception of the material; they were fascinated by what paint can do, how it is perceived and how it can be used in the process of playing or studying colour mixing. Secondly, there were children who were interested in visual representations and sought to create an image that signified an idea, reproduction, or experience. These children were inspired by the stimulus and often spent a lot of time carefully creating the image. The overall quality of these drawings was sophisticated and intricate, and it took a long time for children who were proud of their work. A complex level of thinking is also noticeable in the details of these drawings. The third group of children was less developed, but more story-oriented. These children created simple drawings and paintings; however, at the same time, they were able to articulate meaning, intentions, interpretation and appreciation with confidence and detail. The quality of the signs is less sophisticated than in the second group, but the stories about the created picture were quite coherent and thorough. These children used visual modalities in order to present ideas and thinking, as well as to stimulate further ideas, thinking and verbal literacy. In general, their stories were generally detailed, specific, and wellfounded and told with confidence. All children have unquestioningly accepted the idea of cooperation, which is probably the most important conclusion. They were indifferent to working on common paintings as a group and drew with each other with different notions of ownership and territorial behaviour. The concept of an individual artist almost did not exist for them, and the social nature of their game was reflected in the processes of creating images. Using the social-cultural aspect, it became clear that the group dynamics changed slightly in each class, and there were differences between children in the level of development of artistic and aesthetic competence.

Despite the fact that the children enjoyed working together as individuals in different groups, and sometimes united to create common images, it was noticed that they differ in terms of the perception of images. In the first group, the children were more thoughtful, sensitive and attentive; they tried not to cover up the previous art works of others, carefully drawing around their marks in order to keep them. In the second group, the children were indifferent to each other's images and seemed to be more spontaneous; they were unaware of the nature of the surfaces they had been working with. There were also differences concerning quality of materials and creating the image, longterm involvement, aesthetic sensitivity and enthusiasm in different groups. In general, the children of the first group were less excited concerning the materials available and felt more comfortable, purposeful and confident in their practice, most likely due to the fact that they had extensive experience working with such materials. Children from the second and third groups were very stimulated by the opportunity to draw in the workshop; the joy of learning the material often brought sufficient pleasure. Thus, their practice has often been focused on experimentation, impulsiveness and sensuality.

## 4.3 Training (knowledge gained)

In the present research, art was linked to learning in a specific way, where children investigated the materials and built stories in order to explain the images created. They learned about the possibilities of materials and tools, painting techniques, colours, their combinations and the scale of creativity. They learned to use materials in the process of artistic practice willingly, with energy and with a high degree of involvement and enthusiasm, which was supported by the preschool teacher and a professional artist. Children also had the opportunity to share experiences with each other, learn from each other, learn from the artist's experience, repeatedly examining and testing their own theories, forming experience in the process of drawing. In the process of contemplating their work, the children demonstrated sophisticated metacognition and reflection, as well as abstract, complex, creative and critical thinking. They had been working as a community of pupils, giving feedback to each other, and sometimes adopting each other's ideas, learning from each other. The children studied socially, and their learning was discursive and dialogical, which was traced through the social-cultural structure. Children's learning was stimulated through a creative act. They were open to possibilities and ready to experiment, to explore these possibilities, such as the limits and potential of materials and their images. This balance and sense of confidence demonstrated the determination of the child – artist with authority and freedom of will. The children made purposeful choices and were focused, even when experimenting. Children enthusiastically responded to the opportunity to be engaged in artistic activity, to the opportunities inherent in artistic materials and tools, the opportunity to share experiences with each other within the framework of the existing environment fostering their creativity and providing constant opportunities for self-expression.

For productive, child-centered learning, the child's practical choice in the process of artistic activity is of particular importance. However, the choice does not have to be unlimited, and it is advisable to use the experience of a teacher or professional artist - to offer reasonable choices and offer previously determined ways to combine materials, guided by the interests of children. Successful art education in preschool educational institutions is a real collaboration between generations, where the child is the main participant. Empowering children by comprehensibly teaching them to use materials, colours, ways of applying tools and giving them the opportunity to expand their practice supports their involvement in creativity. Child-centered learning, where the interests of the child are taken into account and truly highlighted, provides discoveries in the learning process, authentically applied and supported by the preschool teacher. In the case of visual research, such intergenerational collaboration through in-depth listening, conversational pedagogy and effective interviewing provides an expansion of the child's practice, his experience and thinking.

#### 5 Discussion

A similar study was carried out by Cutcher & Boyd (2018), who conducted and described a small research project involving preschoolers creating large joint paintings with preschool teachers at two rural preschool educational centres in Australia. Observation over the artistic practice of preschool children took place in order to develop a curriculum and pedagogy to support children's artistic activities. According to the results obtained (Cutcher & Boyd, 2018), children's artistic activity together with preschool teachers form the potential for learning, develop aesthetic awareness, artistic skills, critical thinking, imagination, abstractness, creative thinking. The role of an active art teacher in the development of children is also significant.

Bautista et al. (2018), based on a dataset of observations of artistic practice in grades of kindergarten (4–5 year-old children), describe the organizational and pedagogical conditions of arts education in Singapore's preschool educational institutions. The authors have revealed the main shortcomings of education as follows: the instructions of preschool teachers were focused on the final product, rather than the child's competences and self-development, the development of individual creativity and self-expression of children. In addition, the authors have identified the limitations of artistic activities and children's access to materials due to the rough schedule. Reproductive and teacher-guided pedagogical practice requires the introduction of new approaches to the art education of children. For this purpose, it is advisable to ensure the professional development of preschool teachers in order to improve the level of training of teacher and ensure free exploration by children in the course of creative activity, to increase access to resources, materials, and ensure self-expression.

It should be borne in mind that not every child is ready to demonstrate his competence. Due to various reasons and circumstances, it is quite difficult for a preschooler to express his opinion, explain his actions, ask questions, be proactive in acquiring knowledge. In this context, individual, pair and group forms of organizing the creative activity of children in the process of creating drawings turned out to be the most effective ones. The preschool teacher has helped the children generate ideas; he has stimulated the discussion of artistic and creative

ideas, plans, in which the children have an opportunity to observe examples of benevolence, frankness, attention and respect towards each opinion expressed.

The atmosphere of trust created in the art workshop allowed the children discovering their inner world, learning to be a cultural subject of discussion, showing their competence. In contrast to the classical model of organizing classes, the model of "art studio", "creative workshop" has increased the degree of freedom of the child and the teacher in initiating the necessary creative and cognitive communications (Dronova, 2021), creating a dialogue creative search space, in which the mechanism of transfer of the art values perceived by the child into his own activity is "launched".

Teachers of preschool educational institutions are able to create various organizational and pedagogical conditions for children's creative activity (Todd, 2010). Conducting classes in art workshops most effectively contributes to the disclosure of children's creative potential, self-expression, involvement in art. However, in addition to organizing specialized events focusing exclusively on art-specific concepts or skills, training programs (curricula) for preschool children may include visual lessons involving a professional artist in the classroom as a separate course containing three to five lessons (classes). The pedagogical approach, focused on children and their self-development, involves educational activities focused on issues or problems of children's development, their aesthetic competences requiring knowledge of concepts and / or processes from different fields of knowledge (Goff & Ludwig, 2013). Only a professional artist is able to provide the transferring such conceptual knowledge and experience to children. According to the results of the present research, art education in the workshop has the most positive effect on children's competences, their awareness of the importance of creativity, forasmuch as preschool teachers are limited by knowledge due to limited professional training programs.

Preschool teachers can integrate fine arts lessons with artists into children's learning activities, in particular, through information technologies and communication. Integrated educational activities will allow children using the acquired knowledge in practical activities, establishing communication and cooperation with other children in the process of creating an art work (Bautista, Tan, Ponnusamy, & Yau, 2016). Such integrated learning activities related to the integration of art, or learning through art (Richard & Treichel, 2013), will ensure the use of art as a means of encouraging children to study other subjects, increasing the level of interest in learning. Thus, teachers of preschool children should include art in integrated training activities to stimulate learning, development of children's skills, including creative thinking skills, which are necessary to solve complex problems (Gadsden, 2008). Scientific literature for preschool children contains a sufficient number of studies on the integration of the arts, especially the evaluation of the effectiveness of specific curricula (Goff & Ludwig, 2013). For instance, Phillips et al. (2010) have assessed the impact of the program "Promoting and supporting early literacy through art". The investigation, conducted in the community-based preschool educational institution, has shown how visual and performing arts can be integrated into preschool curriculum. Along with this, the benefit of integrating the arts in order to improve literacy skills and school readiness for at-risk children has been also documented in the study. Gulpinar & Hernes (2017) have evaluated "Kaleidoscope", an art-integrated early childhood program (curriculum) for children of low-income families in Norway. The educational activities of children include visual arts, music, and dance and language art with other areas of study. It has been established that the "Kaleidoscope" has helped improve certain measurements of cognitive and language functioning of children in the experimental group over a twoyear period compared with children in the control group. Art should be used as a tool in preschool classes (Stan & Popa, 2014). Children should take classes, have access to materials and resources related to art, while working in small groups, both within educational activities and during free playing (King & Howard, 2016). In addition, preschool teachers around the world are encouraged to use a daily schedule that includes art (such as singing, music, and movement) as complementary components towards supporting and stimulating learning, ensuring the interest of children, increasing the level of concentration, imagination, and discipline (Sotiropoulou-Zormpala, 2012).

The practical value of the research results lies in supplementing the existing theoretical fundamentals with new empirical knowledge on the effectiveness of combining child-centered approach and collaborative approach to children's creation of their own paintings. These approaches form the most effective and favourable organizational and pedagogical conditions for artistic activity for the self-growth and development of children.

## 6 Conclusion

The research results demonstrate that the creation of an artistic environment, the application of restrictions, along with taking into account the needs in the artistic activity of children provides an opportunity for developing effective organizational and pedagogical conditions, deep and exciting art education. Highquality art education is vital in any environment if children want to develop their own aesthetic awareness, artistic abilities, as well as critical, abstract, imaginative, collaborative and creative thinking. Preschool children, having a favourable and stimulating environment, quality art materials, time and support on the part of preschool teachers, a professional artist - in other words, enriched and effective art education - can create works of art of high aesthetic and artistic level developing their thinking, learning, theorizing knowledge and self-expression. Cooperation is a powerful way towards achieving the effectiveness of education through the fine art classes in early childhood. Therefore, the environment creates a community of practice and explorations, where active cooperation promotes the development of knowledge, improved relationships, thinking and reasoning. The role of an active art teacher in children's development is crucial, which has consequences for the teacher's training and advanced in-service training. In order to support artistic development and learning, the teacher should be confident in the results, motivated, with a high level of desire to organize such artistic practice. Thus, pedagogical educational institutions should conduct training of teachers of general profile as artists with an understanding of both practice and the possibilities of forms.

The possibility of practical use of the research results lies in applying a child-centered approach and a collaborative approach by the teachers towards creating drawings by children on their own.

The directions for further scientific investigations should be aimed at assessing the quantitative effects of the child-centered approach and the collaborative approach by the teachers towards creating drawings by children on their own.

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**Primary Paper Section:** A

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# FUTURE PROSPECTS FOR THE DEVELOPMENT OF PRO-ENVIRONMENTAL HIGHER EDUCATION

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Abstract: Based on an in-depth analysis of global environmental problems, the world's leading ecologists argue that no scientific and technological innovations or ecological and social reforms can ensure sustainable, environmentally balanced development of humanity. The successful solution of complex environmental problems requires a transition to a new ideology of life, ecologization of the economy and production, and the creation of a pro-environmental civilization. A vital role in this process is the formation of high ecological culture and the expansion of environmental education in the context of sustainable development. Furthermore, the thinking of specialists in different professions should become more ecological, so today, the environmental imperative and paradigm should become the guiding principle in training specialists in all spheres of activity. This article aims to analyze the possible prospects for further development of pro-environmental higher education. While writing this article, analytical methods were used to study scientific literature on the development of pro-environmental higher education. In addition, an online survey of the academic staff of higher education institutions was applied to find out practical aspects of the problem ecologization of higher education. The results of the study identified the problems and further promising directions for higher education's ecologization.

Keywords: pro-environmental higher education, ecological education, integration of education, environmental education centers, ecologization of the educational process.

## 1 Introduction

The current environmental situation facilitates a rapid change in human thinking in general and each person in particular, the formation of environmental awareness and culture. As a result, environmental education is becoming a new priority of the educational process worldwide. The experience of EU countries shows that it is possible to improve the environment by forming the principles of the country's environmental policy, high ecological culture, and active human position in ecological protection. At the same time, a high level of ecological culture is impossible without environmental education, which should be built on the complexity and continuity of the educational process' ecologization.

Participation in environmental activities contributes to the formation of ecological awareness of the younger generation, fostering in them a caring attitude towards the environment and solving the problem of waste management. Furthermore, participation in environmental activities contributes to the deepening of environmental consciousness, the desire for direct involvement in solving environmental issues of the region and the country, and raising awareness of different population groups.

The role of pro-environmental higher education in overcoming the environmental crisis and development of society is very high because only it can create conditions for the formation of a top elite, which will be able to realize the powerful internal opportunities for the benefit of its people, the European and world community.

## 2 Literature review

The UNECE Strategy on Education for Sustainable Development notes that the critical element of its implementation should be national action plans, taking into account the current environmental situation in the country and provisions of UN documents on the performance of educational programs for sustainable development.

The basis for efficient implementation of environmental education strategy is the institutional development of a three-stage environmental education sector: preschool (nursery) and junior school = high school – higher education.

The qualitatively new training of teachers, based on knowledge, acquired skills, and abilities, can reconstruct the educational process toward its ecologization is especially relevant. It is intended for reformatting the learning process from knowledge transfer to problem analysis in the development of possible solutions.

Ecological education is characterized by the formation of young people's organizational abilities. For example, when carrying out environmental activities, aspiration for the independent solution of concrete ecological problems with the practical result. Therefore, it is necessary to involve students in environmental education. For this age group, it is essential to carry out informational and educational activities. In the form of conversations with the help of presentations and films made by young people, students make visible environmental problems and the need to protect the environment. In the form of education, students try to justify ways to solve a particular environmental issue. The ecological education process can consist of emotional, cognitive, and behavioral elements with different levels of perception of the material for each age group and their harmonious combination (Mandryk, Malovanyi & Orfanova, 2019).

According to R. Locatelli, the ecologization of education should meet the ecological requirements of curricula in all subject areas. It should become a critical factor in creating a new paradigm for radical reform of the education system. It is the only way to educate a unique, environmentally and economically minded person who can ensure the sustainable development of society in harmony with nature (Locatelli, 2018).

Environmental education and upbringing aim to develop a personality with an ecocentric mindset and morality and a high level of ecological culture. Therefore, the importance of environmental education and training is of a personal nature, focused on the value of nature, the formation of knowledge of essential ecological regulations, understanding of the basics of ecology as a science, its structure, significance, and connections with other sciences, the peculiarities of human technological impact on the biosphere (Dlouhá, Henderson, Kapitulčinová & Mader, 2017).

Nowadays, all world countries should pay great attention to the development of pro-environmental higher education, which will bring up a new generation of specialists with modern skills in ecological thinking. And this, in turn, will give a powerful impetus to the economic, technical, national, spiritual, and, consequently, an environmental revival of the countries of the world (Aleixo & Leal, 2018).

Raising an experienced, creative person cannot do without philosophical knowledge, the formation of a scientific worldview, spirituality, ecological culture, and orientation to

nature's sense of life values. Therefore, in addition to specialized knowledge, every specialist must also have a philosophical mindset. "It is important for progressive education that it needs a philosophical approach to constructing the educational process based on the experience of effective treatment of nature" (McCowan, 2019).

Only under such conditions education will be balanced, humanistic, and ecological because the philosophy of schooling systematically affects the personality, forming its life and value orientations, forming the image of the modern person.

In modern education, ecological knowledge is an essential aspect of forming life and value orientations, and, as M. Versteijlen, P. Salgado, J. Groesbeek, and A. Counotte, ecological competence emerges in a deformed environment. Therefore, the environmental education and upbringing system must effectively educate the ecological consciousness of our contemporaries (Versteijlen, Salgado, Groesbeek & Counotte, 2017). At the same time, we can emphasize that environmental education is not just a part of the general educational process but an integral and one of its most essential parts.

Ecological education in higher educational institutions aims to teach young specialists to solve complex environmental problems independently and creatively within their industrial activity to avoid damaging the environment and form an active life position, which encourages the specialist to ecovitalistic approach.

The process of an ecological education is naturally closely intertwined with the process of cognition, so we can talk about their structural similarity. As a result, environmental knowledge acquired through education is transformed into ecological beliefs. Consequently, the understanding that the student receives during the study of ecological disciplines forms his worldview, which becomes the basis for the formation of

Figure 1: The main tasks of environmental education, %

environmental culture and determines the behavior of the specialist in the future (Rivera-Torres & Garcés-Ayerbe, 2018).

It is important to note that ecologization of education includes the awareness of civil liberties as protection against environmental risks, the right to a clean and safe environment, participation in decision-making processes, mandatory compliance with environmental legislation and norms of behavior in everyday life, the formation of skills to protect their environmental rights and so on (Francisco, Jorge, Oswaldo, Buitrago, Javier, & Escobar, 2021).

#### 3 Aims

According to higher education scientists and teachers, this research aims to determine the tasks of environmental education, problems, and promising directions of its development.

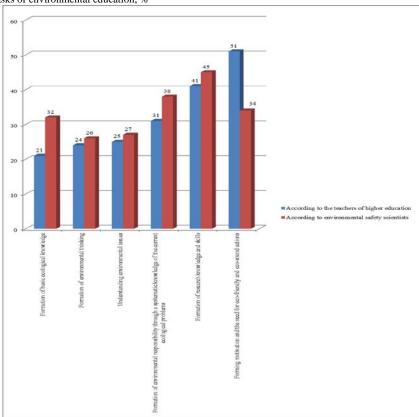
#### 4 Materials and methods

The online survey of 46 teachers and 37 scientists engaged in teaching and research activities in higher education institutions of Ukraine, namely the State Ecological Academy of Postgraduate Education and Management, Odesa State Ecological University, National University of Kyiv-Mohyla Academy, National Academy of Public Administration was conducted to find out the opinion of scientists-practitioners on promising directions of the higher education's ecologization process in 2021.

While summarizing the survey results, we calculated the average value of each answer option weighting.

#### 5 Results

It is crucial to clarify the goals of the ecologization process of higher education to understand the possible directions of further development of pro-environmental higher education (Figure 1).

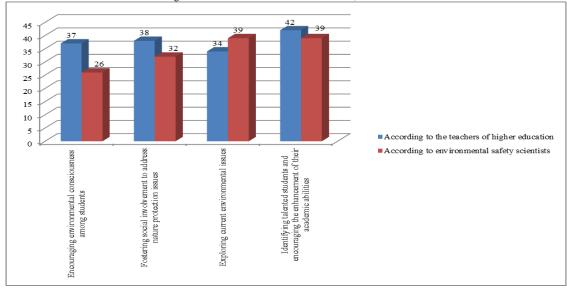


Source: authors' elaboration.

According to Figure 1, the main goals of environmental education are:

- formation of basic ecological knowledge of education applicants;
- development of environmental thinking;
- understanding of ecological problems on different levels (global, national, regional, branch);
- formation of environmental responsibility based on systematic knowledge of modern environmental problems
- and ways of implementing sustainable development concepts, modern civilization, and the environment
- formation of knowledge and skills of research character, providing a creative approach to solving environmental problems:
- formation of motivation and need in environmentally friendly and sound actions, the building of awareness of the necessity to make decisions on environmental issues, and the ability to give complex (legal, economic, moral, etc.) assessments of ecological situations.

Figure 2: The most active directions of ecological and educational work of state bodies, %



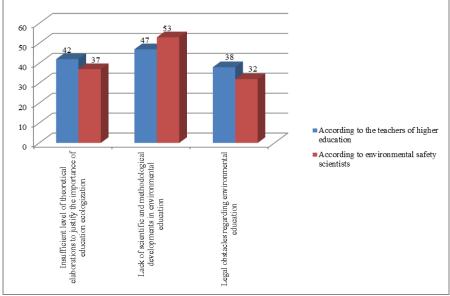
Source: authors' elaboration.

According to the respondents, the most active directions of environmental education work of the state bodies over the last 5 years are (Figure 2):

promoting students' environmental thinking;

- fostering social activity to solve the nature preservation problems;
- studying of actual ecological problems by education seekers;
- identifying talented students and encouraging the development of their academic abilities.

Figure 3: The problems of applying in practice a system of ecological education measures, %



Source: authors' elaboration.

According to the survey participants, there are some methodological issues in the practical application of the measures on education's ecologization (Figure 3).

As noted by the survey participants, the most significant problems of higher education's ecologization at the moment is the insufficient level of theoretical developments to justify the importance of education's ecologization, the lack of scientific

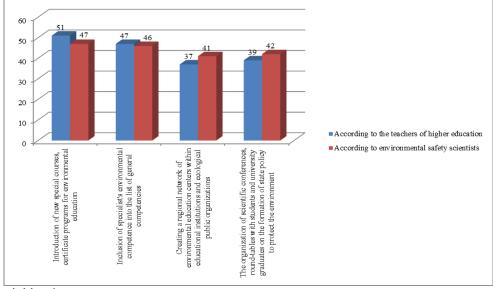
and methodological developments for ecologization o education, and legal obstacles in its implementation.

Taking into account the existing experience and the results of the theoretical work of the study participants, in their opinion, the promising directions of development of pro-environmental higher education are (Figure 4):

 introduction of new pedagogical special courses, certificates, and research programs for bachelors and masters:

- inclusion of environmental competence of a specialist into the list of general competencies when developing methodological recommendations of higher education standards;
- establishing a network of regional environmental education centers based on educational institutions and ecological public organizations;
- organizing scientific conferences, round-tables with students, graduates, and university entrants on alternative energy sources, domestic waste management, ensuring the formation of state policy in the sphere of environmental protection, etc.

Figure 4: The future directions of pro-environmental higher education development, %



Source: authors' elaboration.

## 6 Discussion

The performed analysis of scientific literature and practical results of the conducted research proved that public awareness of the need for sustainable environmental development of the economy remains low for various reasons, including the fact that the introduction of ecologization in the modern education system, including in higher education institutions, remains limited. Only some successful educational projects of public organizations that have no systematic and large-scale character are an exception. It is evident that the development of education for sustainable development requires the development of new pedagogical models, new pedagogical culture, new pedagogical content of ecologization (Godemann, Bebbington, Herzig & Moon, 2021).

Environmental education's main task should be to form ecological culture through formal and informal education of all population strata, particularly managers of different ranks and businessmen. The governments should give environmental education status of a strategic, large-scale, priority sphere with expanded and updated content, forms, and learning methods in the information society. At the present stage of educational reform, it is necessary to adopt a new position on environmental education as a tool of personality socialization, its adaptation to life in conditions of civil information society development (Valero-Gilab, Leyva-de laHizc, Rivera-Torresd & Garcés-Ayerbe, 2021).

Modern realities are characterized by a crisis of global environmental culture caused by the low level of ecological education and awareness of most people. In such conditions, it is necessary to look for ways to solve environmental problems of society through environmental education. First, however, it is required to consider that the educational process forms philosophical aspects of ecological knowledge, as education

largely determines the future of society and its development and gives the ability needed to understand and solve urgent global problems (Aguilera, Aragón-Correa, Marano & Tashman, 2021).

It should be noted that environmental education is at the center of discussions today, so there are many approaches to building development concepts, which can be divided into the following directions:

- environmental education as part of the overall educational process, with the development of the educational concept related to the environment throughout the educational sector and based on the development of a new philosophy of education:
- eco-pedagogics as an independent field of education formed based on a specially developed methodological platform allowing to formulate aims and tasks of this field, develop conceptual and categorical apparatus, methodical and didactic tools, determine target groups, etc. This approach implies spreading the principles of environmental education to other spheres of education to make them more environmentally friendly;
- building a set of relatively autonomous educational paradigms based on different philosophical, cultural, and pedagogical traditions, focused on specific target groups or on solving particular problems of nature preservation and environmental improvement (Francis, Jorge, Oswaldo, Buitrago, Javier, & Escobar, 2021) (Sachs, Schmidt-Traub, Mazzucato, Messner, Nakicenovic & Rockström, 2019).

In addition to these approaches to the environmental education concept, it is necessary to refer to the ecovitalistic method. Its essence is to see the absolute value of life as an essential factor of human action in extreme situations. In this connection, the ecological imperative requires a careful attitude to nature. It is also transformed into new scientific-theoretical knowledge, the

essence of which is to preserve the principles of human life activity and its responsibility to realize meaningful moral attitudes of human existence in the world. The ecovitalistic approach is based on the principles of the absolute value of life and focuses on discovering significant moral precepts concerning nature (Hess and Maki, 2019).

In general, the ecologization of education is a continuous, sequential, step-by-step design process involving all those engaged in the educational process.

The task of ecologizing learning activities is defined by educators' and co-educators' understanding of humans and nature's organic unity and interdependence. In addition, the ultimate job of higher education's ecologization should be the transformation of social consciousness and economic structure by integrating ecological thought in different fields of knowledge, building new models of production and consumption, and forming a new management system. Achieving this goal will be environmentally constructive for the current economy, that is, its real reform per the goals of sustainable development (Aldieri, Carlucci, Vinci & Yigitcanlar, 2019).

The conducted study of normative and scientific literature on the research topic proved that the ecologization of higher education could be carried out by implementing a set of pedagogical, scientific, organizational, legal, and other activities at the national and local levels (Lynch-Alexander, 2017).

The study of the current state of higher education's ecologization and scientists' opinions on the issues of universities' ecological direction allowed us to identify the most rational perspective directions of pro-environmental education development in higher school:

- introduction of new pedagogical special courses, certificates, and doctoral programs in the sphere of proenvironmental education:
- inclusion of ecological competence of specialists in the list of general competencies when developing methods and methodological recommendations for setting standards of higher education;
- transfer to a new level the development and publication of pedagogical and methodological literature on environmental law for improving ecological education of the population, public organizations, legal workers, as well as students and post-graduates;
- organization of new or ongoing training courses for specialists in public administration, scientific-pedagogical staff of universities;
- the teaching of natural sciences and environmental law depending on the profile of training;
- creation of a network of regional environmental education centers based on educational institutions and ecological public organizations;
- continuous monitoring of domestic and foreign literature on ecologization of schooling and its scientific analysis;
- intensifying holding of scientific conferences, round tables with students and applicants of higher educational institutions on the use of alternative energy sources, handling domestic waste, ensuring the formation of state policy in environmental protection, etc. (Skrypnyk, Shevchenko & Zamoroka, 2021), (Budihardjo, Bimastyaji, Soraya, Indah & Fadel, 2021), (Chankseliani & McCowan, 2021).

The implementation of these promising directions in the higher education development should provide the formation of holistic ecological knowledge and thinking, which is necessary for making critical pro-environmental decisions at the corporate, industry, regional, and state levels (Findler, Schönherr, Lozano, Reider & Martinuzzi, 2019).

It should be noted that, according to scientists, the ecologization of higher education should be based on such principles as comprehensiveness, continuity of the educational process, an extension of ecological education, and training to all strata of the population taking into account individual interests, incentives, and professional categories, comprehensiveness of environmental education and training, continuity of ecological education in educational institutions system of all levels, including staff preparation and retraining (Unterhalter, Allais, Howell, McCowan, Morley, Ibrahim & Oketch, 2018).

## 7 Conclusions

As a result, the study proved that, at the moment, there are problems of insufficient theoretical and methodological support and practical developments in the process of ecologization of the educational sphere. The development of pro-environmental higher education is a necessary process that promotes awareness of environmental protection and the formation of the ecological position of the population. However, analysis of the current state of formal ecological education shows an insufficient realization of its structure and content. Moreover, it is necessary to increase the environmental education level of higher education institutions' graduates to form an active civil position in solving environmental protection problems and sustainable economic development.

Ecological education should be a long-term interdisciplinary process that considers significant environmental problems, allows young people to apply their knowledge, and helps education aspirants study the nature of environment functioning in general. In this regard, special attention should be paid to the issue of training professionals receiving higher education to help them acquire an environmental worldview and an awareness of their professional decision-making responsibilities in their future professional endeavors.

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# THE DEVELOPMENT OF INTERNATIONAL LAW AND PUBLIC INSTITUTIONS IN THE CONTEXT OF CYBERSECURITY

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Abstract: This study aims to substantiate the theoretical and applied principles of the current international law features' research and assessment of its impact on cyberspace. Regarding the study results we found that the EU countries are divided into three groups: highly developed, providing high rates of international law implementation to counter cyberthreats and ensure state stability; mid-developed countries with adequate capacity and capability to ensure high rates of international law implementation to counter cyberthreats and ensure state stability, but their institutional and legal mechanism is imperfect; developing countries and those completing the process of harmonizing national legislation with international law, which slows down countering cyberthreats and does not contribute to greater state stability.

Keywords: Globalization, International Law, Cyberspace, Legal Obligations, Law Principles, Cyber-Attacks.

### 1 Introduction

International instability of socio-economic and socio-political origins aggravates the processes of new challenges, threats, and dangers to global and national security. Globalization and geopolitical transformations violate certain countries' interests and lobby them concerning others. As a result, interestate relations are shaped by the constant committing of malicious cyber operations. It is obvious that cyber threats increase pressure on security issues, and studying international legal globalization requires increased attention to harmonizing national law with international norms. It happens because, at the present stage, ensuring human rights and resolving interstate conflicts are beyond the individual capabilities of the state and act as strategic priorities of each country, the decline of which stability is fraught with state sovereignty and territorial integrity.

Furthermore, internationalization has led to the emergence of intergovernmental organizations and transnational corporations, which produce norms of law at the international and regional levels. International law is the primary regulator of international relations and is characterized as a particular legal system. It includes social and political principles and legal norms that define relations between actors and international organizations, including cyberspace. Considering the outlined tendencies, the research problem of current international law specifics and its influence on cyberspace acquires particular importance.

## 2 Literature review

The new world order is being formed in the unstable conditions of international legal relations globalization. Intensification of digital technology development has created an interactive information environment (virtual space), carrying out its functions with the help of computer systems, enabling the implementation of social relations and communications using global data networks. Al-Mahrouqi et al. (2015) call such an interactive information environment cyberspace and consider it as a network of interconnected electronic communication channels, functioning through the transnational organization of cyberspace networks based on privacy and data security.

The acceleration of cyber capabilities development and the increasing illegal activities in the virtual environment make it necessary to regulate the legal relations of states in cyberspace through international law. In addition, Valori (2022) believes that the intensification of cyberspace development poses significant threats to state institutions, businesses, and the population, which are manifested in the protection of personal data and, at the same time, stimulates the intensification of innovation in software development, which requires adequate legal defense at the international level. In this context, Vihul (2018) argues that cyberspace is subject to the principles of sovereignty, jurisdiction, and the prohibition against interfering in other countries affairs, including using force. The scientist suggests compliance with international laws, norms, and treaties to resolve such problematic issues and allows countries to apply countermeasures against malicious cyberactivity to deescalate unauthorized situations legally. A similar position is held by Moulin (2020), who challenges the use of such international law norms as sovereignty and prohibition on the use of force and partially levels them to the extent that they apply to cyberspace. At the same time, it increases the relevance of the noninterference principle, which indirectly regulates cyber threats and provides a distinction between the concepts of territoriality and cyberspace militarization.

According to Bargiacchi (2020), legislative resolution of these problems can be achieved through an effective mechanism of international law, whose academic works raise the problematic aspects of the rules and principles of international law application to the states' cyber behavior in the context of ensuring global security. Meanwhile, the scientist notes the urgent need to define a common legal framework for the international law application in cyberspace. Eggett (2019) convinces that the systemic coherence of the international legal system elements with the system of general principles and norms becomes essential.

Adams & Reiss (2018), while surveying the specifics of harmonization of international and domestic law in cyberspace, found that unresolved and unsettled are the following issues: the problematic issues of social media exploitation in the gray zone; countering information war in cyberspace; timely detection of threats and risks. In addition, the authors argue that current international law applies to cyberspace but needs to be improved in terms of preventing cyber-attacks.

Kulesza & Weber (2021) and Nazarchuk (2019) convince that virtual space has a significant impact on the formation of international law, as many transactions of financial, economic, legal, and socio-political origin are carried out using it. Therefore, it is evident that international law is formed under the influence of cyberspace tendencies. At the same time, Fischerkeller (2021) categorically denies the application of international law to cyberspace. In particular, he means the UN Charter and customary international law justifying it by contradictions regarding terminological statements specified in such acts, while the strategic cyber environment is interpreted as the use of special codes by states to unilaterally inflict cyber vulnerabilities on other states, threatening their stability and strategic development. It is also proved by Maurer (2016), who argues that individual states use means to project power through cyberspace, thereby causing significant harm to other states. States, as cyberspace norms develop, will initiate the interpretation of current international law through the prism of promoting their national interests, deterring the unlawful behavior of other regional associations in shaping the international law system (Schmitt, 2020), which also is proved in the works by Alshdaifat (2017).

Undoubtedly, the problems of the international law impacts on cyberspace are under active consideration, as evidenced by the scientific heritage of Shelke & Gurpur (2021), who established a

close relationship between international law and national law regarding the regulation of legal relations arising in cyberspace. Likewise, Ülgül et al. (2020) associate the achievement of highlevel global security and the formation of effective state and international organizations' security policy with the effectiveness of international law and its ability to prevent and timely counteract threats to cyberspace, which are recognized as one of the most critical problems of modern international relations. At the same time, Nirmal & Singh (2019) emphasize the changeability of current international law, which is easily influenced by destabilizing factors, challenges, and problems. Moreover, Odermatt (2021) proves the strong influence of the European Union law on it.

Adonis (2020), in complete agreement with previous researchers, has analyzed the current challenges of international law in the context of cyberspace governance and established the impact of digital sovereignty on it. The research results show that the effectiveness of the international law system in cyberspace functioning is ineffective in the countries affected by the global challenges of social and legal nature. At the same time, the lack of unification of international norms and their harmonization with the norms of national legislation is due to the diversity of scientific views on the jurisdiction, arbitration, and legal instruments to ensure the principles and characteristics of international law.

This study aims to substantiate the theoretical and applied research principles of current international law features and assess its impact on cyberspace.

#### 3 Materials and methods

The study uses general scientific and special methods of economic analysis, namely: analysis and synthesis to determine the essence of current international law; analogy and comparison to carrying out analytical assessments of the current state and trends in the implementation of norms, principles, and organizational and legal foundations of current international law, as well as its impact on cyberspace; generalization and systematization in the formation of hypotheses, conclusions, and research results; grouping and cluster analysis based on the k-means method for grouping the European Union countries according to the Fragile States Index and the Global Cybersecurity Index (GSI); graphic and tabular ways to visualize the study results.

We chose the European Union countries for the study.

The information database of the study is based on reports from 2017 to 2021: List of Countries by Fragile States Index and Global Cybersecurity Index.

#### 4 Results

Current international law functions as a separate organizational and legal system, combining a set of diverse elements that determine the international legal relations within the global community. The globalization and integration processes into regional associations, for example, the European Union, have entailed significant disruptive changes. The progressive influence on the national legal systems is assumed in this context. According to common development priorities, the countries' association reflects a higher level of consolidation of democracy, sovereignty, territorial integrity, and inviolability. The evidence of the countries' ability to ensure the outlined priorities is the calculation of the Fragile States Index. Its value has an inverse correlation with the stable functioning of the state. For example, when the Fragile States Index increases, the processes of socio-political and socio-economic instability are intensified. Figure 1 shows the tendencies of the Fragile States Index in the European Union in 2017-2021.

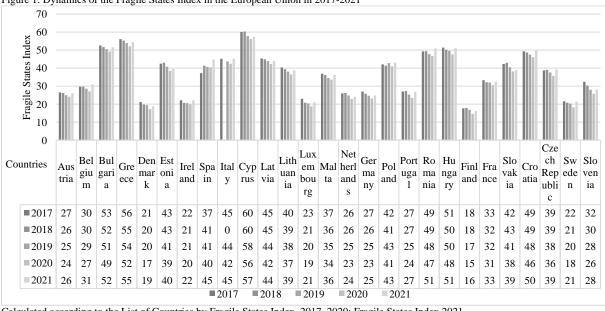


Figure 1: Dynamics of the Fragile States Index in the European Union in 2017-2021

 $Calculated\ according\ to\ the\ List\ of\ Countries\ by\ Fragile\ States\ Index,\ 2017-2020;\ Fragile\ States\ Index\ 2021-2020;\ Fragil$ 

According to the calculations, Cyprus (FSI: 56-60), Greece (FSI: 52-56), and Bulgaria (FSI: 49-53) have the highest level of state fragility. On the other hand, Finland (FSI: 15-18), Denmark (FSI: 17-21), Sweden (FSI: 18-22), and Luxembourg (FSI: 19-23) are considered the most stable countries by the Fragility Index. One of the most important criteria for assessing the Fragile State Index is the effectiveness of a country's legal and regulatory framework and its implementation of the international legal norms. In this context, it is necessary to focus on Cyprus, which is one of the largest European offshore zones with the most significant number of registered offshore jurisdictions. Its

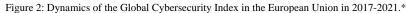
legal framework is characterized by loyalty compared to international law norms, simplified tax legislation, attractive monetary and fiscal regime, simplified business registration procedure, high level of transactions secrecy, and enhanced protection of the banking sector.

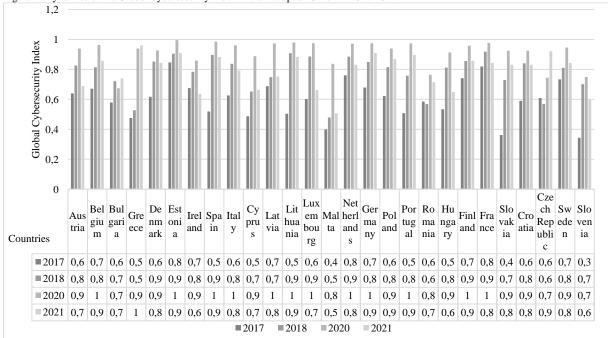
Nevertheless, today's realities indicate specific problems related to the legal protection of transactions in the virtual space. As a result, most European Union countries experience unauthorized interference and unlawful actions carried out through cyberspace. Such a situation leads to the need to develop a set of

measures to prevent and counteract risks and threats to cybersecurity. It, in turn, requires empirical assessments of the security level in this area. It has been proved that under globalization, it is hard to effectively counteract and prevent the challenges, dangers, and threats that arise in cyberspace and harm world countries' socio-economic and socio-political processes. Internationally, to measure the readiness of countries to prevent cyber threats and risks, it was formulated and proposed to calculate the Global Cybersecurity Index according to such essential criteria as:

- ability to identify threats;
- 2) establishment of a security system;
- 3) development of cybersecurity education.

The current state and tendencies of the Global Cybersecurity Index in the European Union during 2017-2021 are shown in Figure 2.





\*for 2019, there is no data on the Global Cybersecurity Index, as its value has not been calculated. Calculated according to the Global Cybersecurity Index (GSI), 2017–2021

The research results of the Global Cybersecurity Index in the European Union in 2017-2021 allow us to state that there is no stable tendency for this indicator among the analyzed countries. The highest scores are recorded in such countries as France (GCI: 0,82-0,98), the Netherlands (GCI: 0,76-0,97), Finland (GCI: 0,74-0,96), and Sweden (GCI: 0,73-0,95), which indicates the effectiveness of the national system to counter the challenges, threats, and dangers in cyberspace. At the same time, the lowest scores are in Slovenia (GCI: 0,34-0,75), Slovakia (GCI: 0,36-0,92), Malta (GCI: 0,40-0,84), and Cyprus (GCI: 0,49-0,89), confirming the weakness and imperfection of the organizational and legal mechanism for countering cyber threats and risks

To deepen empirical research, we consider it appropriate to group the European Union countries according to the Fragile States Index and the Global Cybersecurity Index within the analyzed timeframe to determine the standard and distinctive features of dealing with cybercrime, for which we use cluster analysis technology based on the k-means method (Table 1).

The results of the European Union countries clustering according to the Fragile States Index and the Global Cybersecurity Index in 2017-2021 allow us to identify three groups of countries characterized by standard features of state stability and risk resilience. The first group includes Austria, Belgium, Denmark, Finland, Ireland, Luxembourg, the Netherlands, Germany, Portugal, and Sweden. These countries are highly developed and have an adequate level of international law enforcement, effective response to cyber threats and risks, and close cooperation with other European Union countries in providing legal assistance to less developed countries. Therefore, ensuring

national security in all its components and state stability is of great importance in such countries.

The second cluster includes Estonia, Spain, Lithuania, Malta, Poland, France, Slovakia, the Czech Republic, and Slovenia. They are characterized as countries with a medium level of development, but the legal framework is unstable, imperfect, and requires revision. In addition, some countries of this group went through a transformational stage of post-socialist reorganization (perestroika). It significantly impacted the formation of the legal framework and the harmonization of national legislation with the international law norms. In addition, Spain provides for simultaneous harmonization of national legislation with European and international ones through establishing supranational control over compliance with international normative and legal acts.

The third group includes Bulgaria, Greece, Italy, Cyprus, Latvia, Romania, Hungary, and Croatia, characterized as countries that have not completed the transformation processes, and ensuring state stability and cybersecurity is subject to the constant influence of destabilizing factors. Therefore, their counteraction depends significantly on the legal framework of international law and effective interaction with international organizations.

According to the studies conducted, it can be argued that there is no stable tendency for effective implementation of the principles and norms of current international law among the European Union countries. At the same time, we can state that globalization, mega-regionalization, and geopolitization create additional opportunities for developing the international law system, the particular actualization of which is observed in cyberspace.

#### 5 Discussion

The research results on the features of current international law and the assessment of its impact on cyberspace allow us to identify three groups of European Union countries with typical features of ensuring the norms and principles of international law.

Group 1. Highly developed countries at a high level ensure the implementation of international law principles, compliance with its norms, and security guarantees in cyberspace. Also, they provide international legal assistance to developing countries (Austria, Belgium, Denmark, Finland, Ireland, Luxembourg, Netherlands, Germany, Portugal, and Sweden).

Table 1: Classification of European Union countries according to Fragile States Index and Global Cybersecurity Index in 2017-2021\*

2017		2018		2020		2021	
Country	Cluster number	Country	Cluster number	Country	Cluster number	Country	Cluster number
Austria		Italy	1	Austria	1	Austria	1
Belgium		Austria	2	Belgium		Denmark	
Denmark		Belgium		Denmark		Ireland	
Ireland		Denmark		Ireland		Luxembourg	
Luxembourg	1	Ireland		Luxembourg		Netherlands	
Netherlands	1	Luxembourg		Netherlands		Germany	
Germany		Netherlands		Germany		Portugal	
Portugal		Germany		Portugal		Finland	
Finland		Portugal		Finland		Sweden	
Sweden		Finland		Sweden		Slovenia	
Estonia		France		Slovenia		Belgium	2
Spain		Sweden		Estonia	2	Estonia	
Lithuania		Slovenia		Spain		Latvia	
Malta		Bulgaria	3	Italy		Lithuania	
Poland	2	Greece		Latvia		Malta	
France		Estonia		Lithuania		Poland	
Slovakia		Spain		Malta		France	
Czech Republic		Cyprus		Poland		Slovakia	
Slovenia		Latvia		France		Czech Republic	
Bulgaria	3	Lithuania		Slovakia		Bulgaria	3
Greece		Malta		Czech Republic		Greece	
Italy		Poland		Bulgaria	3	Spain	
Cyprus		Romania		Greece		Italy	
Latvia		Hungary		Cyprus		Cyprus	
Romania		Slovakia		Romania		Romania	
Hungary		Croatia		Hungary		Hungary	
Croatia		Czech Republic		Croatia		Croatia	

\*for 2019, there is no data on the Global Cybersecurity Index, as its value has not been calculated.

Calculated according to the List of Countries by Fragile States Index, 2017–2020; Fragile States Index 2021; Global Cybersecurity Index (GSI), 2017–2021

Group 2. Mid-developed countries ensure a sufficiently high level of introduction and implementation of international law. Still, some of them have not completed the process of implementation and unification of national legislation with international law, and the organizational mechanism of supranational control is unstable with elements typical for transition-type countries (Estonia, Spain, Lithuania, Malta, Poland, France, Slovakia, Czech Republic, and Slovenia).

Group 3. Developing countries are close to transition-type ones in terms of their development. Some of them have not yet completed structural reorganization. They need support and assistance in overcoming challenges, dangers, and threats from highly developed countries, while the normative and legal support of the international law implementation is not fully formed and requires revision (Bulgaria, Greece, Italy, Cyprus, Latvia, Romania, Hungary, and Croatia).

We should note that ensuring the norms of current international law cannot be limited to the European Union's borders but must consider the security standards of other countries within the framework of the transatlantic partnership since the functioning of cyberspace is transnational by its nature.

## 6 Conclusion

Thus, the conducted studies of the features of current international law and the assessment of its impact on cyberspace give reasons to conclude that it is a special legal system and the primary regulator of international relations. It ensures organizational and legal interaction mechanisms between

countries and international organizations, particularly in cyberspace. We found that the intensification of virtual cyberspace development increases the risks of emergence and aggravation of the cyber threats' impact on national legal systems. That requires the implementation of national legislation with the norms of international law.

The most significant cyber threats at the present stage are recognized information warfare in cyberspace and exploitation of social media in the gray zone. Furthermore, it is proved that the decline of cyber security in the European Union entails an increase in state instability, most noticeable in Cyprus (FSI: 56-60; GCI: 0,49-0,89), which is one of the largest offshore zones with loyal fiscal legislation and low level of national legislation harmonization with international law norms.

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Primary Paper Section: A

**Secondary Paper Section: AG** 

## REGIONAL AND GLOBAL PERSPECTIVES OF THE SUSTAINABLE ENTREPRENEURSHIP

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Abstract: Increased attention to sustainable development necessitates balancing the economic, environmental, and social activities of economic entities and replacing traditional forms of entrepreneurship with economically and socially oriented ones. Sustainable entrepreneurship provides sustainable development of subjects in economic, social, and environmental areas based on economic incentives, social responsibility, and environmental protection. This study aims to substantiate the theoretical and applied foundations for the study of sustainable entrepreneurship and assessment of its trends at the regional and global perspectives. The study uses general scientific and special methods of economic analysis, in particular, analysis and synthesis; comparison and analogy; generalization and systematization; grouping and cluster analysis based on the use of the k-means method; graphic method. As for the research results on sustainable entrepreneurship and assessment of its trends from regional to global perspectives, we found that the countries belonging to the two regional associations – the European Union and the Eastern Partnership, according to the indicators of sustainable entrepreneurship, are divided into four groups and have common and distinctive features: – highly developed countries with high sustainable entrepreneurship indicators, a favorable business environment and a good level of innovations (Netherlands (GEI: 68–82; DBI: 76; GII: 59–63), Denmark (GEI: 71–77); DBI: 84–85; GII: 57–58), Sweden (GEI: 70–77; DBI: 81–82; GII: 62–64), and Finland (GEI: 68–70; DBI: 80; GII: 57–60); – countries with fairly high levels of sustainable entrepreneurship and innovation and favorable business environments (Czech Republic (GEI: 43–49; DBI: 76; GII: 48–49), Spain (GEI: 44–46; DBI: 72–73; GII: 46–48), Lithuania (GEI: 45–51; DBI: 80–82; GII: 39–41), Slovenia (GEI: 45–57; DBI: 75–77; GII: 43–40; DBI: 71–74; GII: 37–41), Latvia (GEI: 39–37; DBI: 68; GII: 36–39), Croatia (GEI: 34–36; DBI: 71–74; GII: 37–34; DBI: 37–34; D

Keywords: Entrepreneurship, sustainable development, entrepreneurship stakeholders, innovations, Global Entrepreneurship Index, Ease of Doing Business Index, Global Innovation Index.

## 1 Introduction

The role of entrepreneurship in the country's sustainable development is increasing under the influence of globalization, geopolitization, and European integration processes because entrepreneurship is actively involved in creating jobs, introducing labor standards, and contributing to social security. Entrepreneurship encompasses a wide range of economic actors, from small businesses to large transnational corporations, and is characterized by sustainability if specific requirements are met, in particular:

- 1) good governance and effective social dialogue;
- 2) effective civic and political institutions and processes;
- macroeconomic stability and reliable management of economic processes;
- 4) public perception of entrepreneurship;
- 5) patche perception of endeprendustrip;5) coherence of information and communication technologies;
- quality education aimed at training a highly-skilled workforce;

- 7) favorable conditions for economic and social integration;
- 8) conducting business activities without harming the environment.

The efficiency of entrepreneurship's functioning in the country under the influence of the modern globalization system is an indicator of economic growth and a factor of competitiveness. With the increasing influence of external and internal destabilizing factors, the problem of ensuring the development of sustainable entrepreneurship, which at a high level would help protect the interests of the country and economic entities in the economic, social, and environmental sphere, becomes more relevant.

#### 2 Literature review

Increased attention to globalization and regionalization is caused by the convergence of the boundaries of national financial and economic markets and the development of a global system of management. Under uncertainty, instability, and constant structural changes, the risks of entrepreneurial activity increase, and entrepreneurship requires a comprehensive approach to the definition of modern vectors of development and improvement of the conceptual framework. In this context, the scientific method based on the principles of consideration of entrepreneurship to ensure the quality of economic activity, taking into account the needs of society, environmental protection, and innovation, is justified. In scientific opinion, these trends correspond to the paradigm of sustainable entrepreneurship, which, according to Kaya (2020), contributes to the growth of financial performance and the strengthening of human potential. At the same time, the scholar argues that sustainable entrepreneurship is not only profit-oriented but also takes into account other significant social and environmental goals for external stakeholders.

Lüdeke-Freund (2020) understands the essence of sustainable entrepreneurship in the formation of values aimed at stakeholders and the achievement of social and environmental effects using innovation.

A similar view is held by Urbanies (2018) and Rodriguez-Garcia et al. (2019), who consider the innovative development of entrepreneurship as fundamental to the concept of sustainable entrepreneurship. At the same time, they emphasize the need for innovation as a factor in counteracting social and environmental challenges.

Without denying the scientific heritage of previous scholars, Umadia & Kasztelnic (2020) assure that financial innovation stimulates the development of small and medium entrepreneurship and, at the same time, is considered an indispensable potential for economic growth at the global perspective.

At the same time, Davydovska (2021) associates sustainable entrepreneurship with the provision of innovation activities and the possession of intellectual potential, at the same time giving grave importance to state support for entrepreneurial structures because business entities that recognize, create, and implement sustainable support opportunities in the implementation of innovation, proving in their studies Evans et al. (2017) and Kanda et al. (2014).

Konys (2019) assumes that the implementation of innovation has a favorable impact on the development of sustainable entrepreneurship, increases the sustainability and competitiveness of business entities, and strengthens their ability to provide a competitive advantage at the regional and global perspectives.

Meanwhile, Fichter & Tiemann (2020) propose dividing the factors for determining the effectiveness of sustainable

entrepreneurship into social, environmental, and economic, including innovative components and paying great attention to sustainable development at the initial stages of the functioning of the subject of entrepreneurship.

Binder & Belz (2015) and Muñoz & Cohen (2018) consider sustainable entrepreneurship as a new direction and additional opportunities to create innovative products that can meet the standards of sustainable development as defined by the Sustainable Development Goals (Unites Nations General Assembly, 2015) and solve social problems, without harming the environment and without changing the climate.

Abu-Saifan (2012) notes the social responsibility of business entities, which is realized by conducting sustainable and financially successful activities. At the same time, Saleem et al. (2018) argue that ensuring the social responsibility of business is not enough and gives weight to the environmentalism of entrepreneurship, which does not contradict the concept of sustainable entrepreneurship and points to its formation in the context of national economic development.

Greco & Jong (2017) identify the primary purpose of sustainable entrepreneurship as creating a positive impact on society and the environment, and it is the creation of values for society recognizing the priority importance of the functioning of sustainable entrepreneurship.

Lykholat et al. (2021) argue that under globalization, increasing economic destabilization, and limited financial resources, entrepreneurship can solve the problems of a crisis economy and ensure sustainable economic development.

It becomes evident that sustainable entrepreneurship is one of the main directions of ensuring sustainable development and contributes to the implementation of economic activities, taking into account the socio-economic, socio-political, and environmental characteristics of the country's development.

## 3 Research tasks

This research aims to substantiate the theoretical and applied framework for the study of sustainable entrepreneurship and assessment of its trends from regional to global perspectives.

# 4 Materials and methods

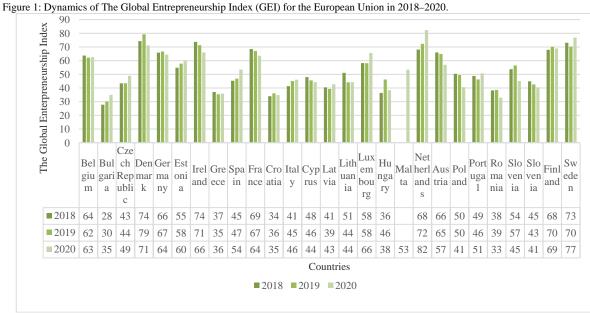
The study uses general scientific and unique methods of economic analysis, in particular, analysis and synthesis to define the essence of sustainable entrepreneurship; comparison and analogy for analytical assessments of the state and trends of sustainable entrepreneurship in the European Union and Eastern Partnership countries; generalization and systematization for formulating hypotheses and drawing conclusions and research results; grouping and cluster analysis based on the k-average method to determine the nature of sustainable entrepreneurship.

We chose the European Union and Eastern Partnership countries (Armenia, Azerbaijan, Belarus, Georgia, Moldova, and Ukraine) to conduct the research.

The research information database is grounded on the reports for 2018–2021: Doing Business Report according to The Ease of Doing Business Index; The Global Entrepreneurship Index Rankings according to The Global Entrepreneurship Index; The Global Innovation Report according to The Global Innovation Index.

## 5 Results

The emergence of such adverse social effects as income differentiation of the population, enrichment of a small part of society and impoverishment of the majority, increasing social inequality, financial and economic instability, and depletion of natural resources, combined with environmental pollution, entail the need for qualitative changes in the sphere of economic activity and public administration. Moreover, ensuring sustainable development in the context of globalization requires a rethinking of all the state's processes and mechanisms. Under such conditions, great attention is paid to balancing the economic, social, and environmental factors of influence on the country, society, and citizens. A practical tool to ensure sustainable development at the present stage is the functioning of sustainable entrepreneurship. Since economic, environmental, and social entrepreneurship combines the term sustainable entrepreneurship, the calculation of such indicators as living standards, protection of social needs, energy conservation, investment planning, sale of goods for profit, implementation of suffrage, the effectiveness of the fight against corruption in a correlation analysis show the most significant impact on sustainable entrepreneurship, so the study of the state and trends of sustainable entrepreneurship.



Calculated according to: The Global Entrepreneurship Index Rankings, 2018–2020.

Let us note that a weighty scientific heritage in this field has already been formed; the essence of sustainable entrepreneurship has been defined, and methodological tools for empirical evaluation have been developed. Moreover, the ways out of crises have been proposed. Therefore, it is expedient to calculate global indices, compare indicators at the global and regional perspectives, generalize similar trends, and analyze differences. In particular, it is essential to calculate the Global Entrepreneurship Index (GEI) - the so-called index of economic activity of enterprises, which is calculated by the American Institute for Global Entrepreneurship and Development based on estimates of the world countries on the indicator of financing and promoting entrepreneurship. An analysis of The Global Entrepreneurship Index (GEI) tendencies in the EU countries from 2018 to 2020 (Figure 1) suggests that its rate is unstable either regionally or in a particular country. For example, relatively high rates were observed in the Netherlands (GEI: 68-82), Denmark (GEI: 71-79), Sweden (GEI: 70-77), and Ireland (GEI: 66-74), while the lowest were in Bulgaria (GEI: 28-35), Croatia (GEI: 34-36), Greece (GEI: 35-37) and Romania (GEI: 33-39).

The countries of this region are highly developed and realize their opportunities and advantages with the most significant

economic, social and environmental effects. In addition, their belonging to a regional association that is powerful by all parameters helps solve existing problems more quickly and counter external challenges and threats. Thanks to mutual assistance and support, the European Union countries adapted rather promptly to the globalization requirements and directed development of their business structures towards sustainability and resilience, attaching importance to the stimulation of innovative growth.

We obtained more pessimistic results of the Global Entrepreneurship Index assessments among the Eastern Partnership countries, where transformation processes have not vet been completed, and well-established socio-economic and socio-political standards have not been formed. The highest rates of the Global Entrepreneurship Index in this group of countries are identical to the lowest rates of the European Union -Azerbaijan (GEI: 30,5–32,9). Other countries demonstrate even lower positions: Ukraine (GEI: 25,2-29,3), Georgia (GEI: 25,8-26,5), Armenia (GEI: 22,8-25), Moldova (GEI: 20,2-24,4), and Belarus (GEI: 21,4). The last one, by the way, started calculating the Global Entrepreneurship Index only in

30 25 20

Figure 2: Dynamics of the Global Entrepreneurship Index (GEI) for Eastern Partnership countries in 2018–2020.

The Global Enterpreneurship Index 15 10 0 Armenia Azerbaijan Belarus Georgia Moldova Ukraine **2**018 22.8 30.5 25.8 21.2 26.8 **2**019 24.3 32.1 26.2 20.2 25.2 **2020** 25 32,9 21,4 24,4 29,3 26,5 Countries ■2018 ■2019 ■2020

Calculated according to: The Global Entrepreneurship Index Rankings, 2018–2020.

The majority of the EaP countries have problems ensuring the effective development and functioning of sustainable entrepreneurship, and the solution is mainly connected with the stimulation of entrepreneurial activity through the introduction of innovations. Nevertheless, excessive pressure from the state on small and medium businesses, insufficiently attractive investment environment of such countries and unfavorable investment climate, the increasing tax burden on business entities, difficulties in starting their economic activities, as well as the presence of the shadow sector of economy and corruption create significant obstacles to innovation and increase the cost of innovative activity. Consequently, the risks of global depression increase, accompanied by economic shocks and structural changes and can be overcome by increased innovation activity of business entities

We consider it advisable to deepen our research and to group the countries of the European Union and the Eastern Partnership countries with the help of cluster analysis techniques using the method of k-means in the analyzed period and identify standard features of economic activity by business entities in 2018-2020 (Table 1).

Table 1: Classification of European Union and Eastern Partnership countries by the Global Entrepreneurship Index (GEI) in 2018–2020.

The Global Entrepreneurship Index (GEI)										
20	018	201	9	202	20					
Country	Cluster number	Country	Cluster number	Country	Cluster number					
Belgium		Belgium		Belgium						
Denmark		Denmark		Denmark						
Germany		Germany		Germany						
Ireland		Estonia		Estonia						
France	1	Ireland	1	Ireland	1					
Netherlands		France		France						
Austria		Luxembourg		Luxembourg						
Finland		Netherlands		Netherlands						
Sweden		Austria		Finland						

Estonia		Slovenia		Sweden	
Cyprus		Finland		Czech Republic	
Lithuania		Sweden		Spain	
Luxembourg	2	Czech Republic		Italy	
Poland		Spain		Cyprus	
Portugal		Italy		Lithuania	2
Slovenia		Cyprus		Austria	
Czech Republic		Lithuania	2	Portugal	
Greece		Hungary		Slovenia	
Spain		Poland		Malta	
Croatia		Portugal		Bulgaria	
Italy	3	Slovakia		Greece	
Latvia		Greece		Croatia	
Hungary		Croatia		Latvia	
Romania		Latvia	3	Hungary	3
Slovakia		Romania		Poland	
Bulgaria		Azerbaijan		Romania	
Armenia		Bulgaria		Slovakia	
Azerbaijan		Armenia		Azerbaijan	
Georgia	4	Georgia		Armenia	
Moldova	4	Moldova	4	Georgia	
Ukraine		Ukraine		Moldova	4
				Ukraine	
				Belarus	

Calculated according to: The Global Entrepreneurship Index Rankings, 2018–2020.

As the result of clustering the European Union and the Eastern Partnership countries on the indicator Global Entrepreneurship Index in 2018–2020, four clusters were formed in the countries under consideration. The first cluster includes a group of countries that show high rates of development of entrepreneurship based on environmental and social responsibility, introducing nanotechnology, robotics, and other types of innovation (Belgium, Denmark, Germany, Estonia, Ireland, France, Luxembourg, the Netherlands, Austria, Finland, and Sweden).

The second cluster includes a group of countries characterized by a relatively high level of socio-economic development and a sufficient level of sustainability of entrepreneurship. In particular, significant attention is paid to developing innovation, strengthening the social responsibility of business structures, and environmental protection (Czech Republic, Spain, Italy, Cyprus, Lithuania, Slovenia, Poland, and Portugal). However, there are insignificant problems in ensuring the sustainability of entrepreneurship, which can be solved due to the support of the state and other member countries of the European Union. At the same time, most of the countries in this group experience the problem of labor migration from Eastern Europe, in particular from the Eastern Partnership countries, so the implementation of the principles of sustainable entrepreneurship is complicated by the attitude of illegally employed immigrants to the tasks set and the quality of the work performed.

The third cluster included a group of countries that have passed the stage of transformation of national economies and reformatted from the socialist-communist system to a market economy, trying to ensure standards of environmental production and social responsibility of business. Still, significant deformations of institutional, legal, financial, and economic mechanisms do not contribute to a rapid transition to sustainable entrepreneurship development (Greece, Croatia, Latvia, Romania, Hungary, and Azerbaijan). Let us note that among the countries of this group in 2019–2020, where Azerbaijan is not a member of the European Union, however, demonstrates the indicators of entrepreneurship development at a sufficient level.

The fourth cluster includes a group of Eastern Partnership countries where the principles of sustainable entrepreneurship are not fully formed, and the transition process to the principles of environmental and socialization is incomplete (Armenia, Georgia, Moldova, Ukraine, and Belarus). In addition, this group includes Bulgaria, which is part of the European Union but

cannot support the concept of sustainable entrepreneurship to ensure its effective development.

Based on the analysis, we can argue that the regional characteristics of the sustainable entrepreneurship development allow us to identify trends in the division of countries into regions and to identify that highly developed countries at a high level conduct the entrepreneurial activity and form their regional group and support countries with lower levels of development. At the same time, the transition-type countries have also united into a regional union. They are establishing bilateral relations both within the group and with the European Union, striving to complete the process of European integration and position themselves as members of the European Union. However, geopolitization is significantly influenced by the globalization processes, which makes its adjustments and creates specific conditions for the functioning and development of sustainable entrepreneurship, the implementation of which by the Eastern Partnership countries, at the present stage, is an impossible and unrealizable task. If we talk about the global perspective, the developing countries, including the countries of the Eastern Partnership, are seen as raw materials appendages and cannot provide high-quality products because of significant problems in the development of the entrepreneurial activity.

The Ease of Doing Business Index in the selected countries, which is calculated to determine the ease of doing business in countries and is considered a composite indicator that characterizes the ease of doing business based on the study of annual indicators of countries formed on several criteria, namely:

- 1) the ease of starting a new business
- 2) registration of property
- 3) getting a loan
- 4) payment of taxes

Due to numerous irregularities in calculating the Ease of Doing Business Index for 2018 and 2020, the World Bank stopped its count in 2021. However, using the research results of previous years, we will assess the dynamics of the Ease of Doing Business Index in the European Union and the Eastern Partnership countries.

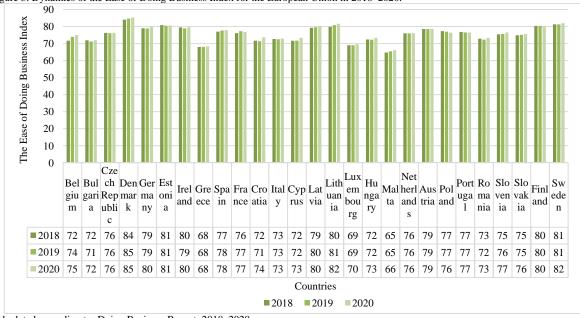
The assessment results on the dynamics of the Ease of Doing Business Index in the European Union countries in 2018–2020 (Figure 3) suggest that the most favorable conditions for doing business are in Denmark (DBI: 84–85), Sweden (DBI: 81–82), Estonia (DBI: 81), Lithuania (DBI: 80–82) and Finland (DBI:

80), while the least favorable are in Malta (DBI: 65–66), Greece (DBI: 68) and Luxemburg (DBI: 69–70).

The EaP countries demonstrated sufficiently high positions concerning the ease of doing business, some of which, in

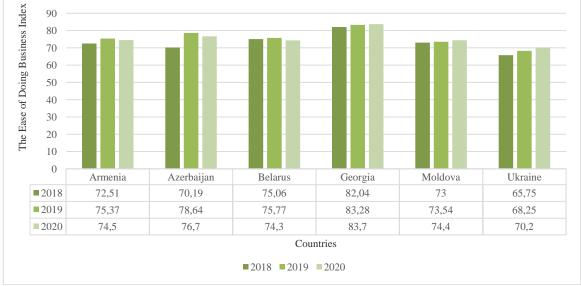
particular, Georgia (DBI: 82,04–83,70), reflects the rate of the indicator under consideration much higher than the highly developed countries and is second only to Denmark (Figure 4).

Figure 3: Dynamics of the Ease of Doing Business Index for the European Union in 2018–2020.



Calculated according to: Doing Business Report, 2018–2020.

Figure 4: Dynamics of the Ease of Doing Business Index for Eastern Partnership countries in 2018–2020.



Calculated according to: Doing Business Report, 2018–2020.

In order to identify regional and global features of the ease of doing business, we grouped European Union and Eastern

Partnership countries according to the Ease of Doing Business Index 2018–2020, using a cluster analysis (Table 2).

Table 2: Classification of European Union and Eastern Partnership countries by The Ease of Doing Business Index in 2018–2020

The Ease of Doing Business Index										
2	018	20	19	2020						
Country	Cluster number	Country	Cluster number	Country	Cluster number					
Denmark		Denmark	1	Denmark						
Germany		Georgia	1	Germany						
Estonia		Germany		Estonia						
Ireland	1	Estonia		Ireland	1					
Latvia		Ireland	2	Latvia						
Lithuania		Latvia		Lithuania						
Austria		Lithuania		Finland						

Finland		Austria		Sweden	
Sweden		Finland		Georgia	
Georgia		Sweden		Czech Republic	
Czech Republic		Azerbaijan		Spain	
Spain		Belgium		France	
France		Czech Republic		Netherlands	
Netherlands		Spain		Austria	2
Poland	2	France		Poland	2
Portugal		Netherlands		Portugal	
Slovenia		Poland 3		Slovenia	
Slovakia		Portugal	3	Slovakia	
Belarus		Slovenia		Azerbaijan	
Belgium		Slovakia		Belgium	3
Bulgaria		Armenia		Bulgaria	
Croatia		Belarus		Croatia	
Italy		Moldova		Italy	
Cyprus	3	Bulgaria		Cyprus	
Hungary	3	Greece		Hungary	3
Romania		Croatia		Romania	
Armenia		Italy		Armenia	
Azerbaijan		Cyprus	4	Belarus	
Moldova		Luxembourg	4	Moldova	
Greece		Hungary		Greece	4
Luxembourg	4	Malta		Luxembourg	
Malta	4	Romania		Malta	
Ukraine		Ukraine		Ukraine	

Calculated according to: Doing Business Report, 2018–2020.

The research results suggest four groups of countries: countries with favorable conditions and ease of doing business (Denmark, Germany, Estonia, Ireland, Latvia, Lithuania, Austria, Finland, Sweden, and Georgia); countries with a reasonably high level of ease of doing business (Czech Republic, Spain, France, Netherlands, Poland, Portugal, Slovenia, Slovakia, and Azerbaijan); countries with medium levels of doing business (Belgium, Bulgaria, Croatia, Italy, Cyprus, Hungary, Romania, Armenia, Azerbaijan, and Moldova) and countries with a low

level of doing business. Too weak positions on the ease of doing business are recorded during 2018-2020 concerning such countries as Greece, Malta, Luxembourg, and Ukraine. In particular, we should note that the rates of business registration and taxation are relatively low in these countries. In addition, no less important problem is the perception of entrepreneurs to conduct business activities, taking into account environmental factors and innovation.

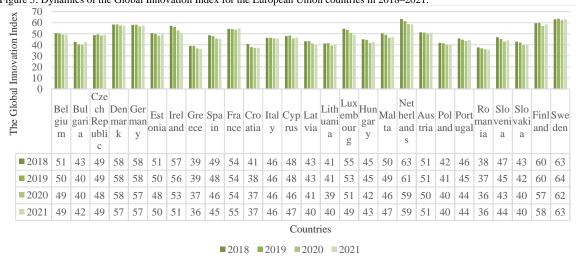


Figure 5: Dynamics of the Global Innovation Index for the European Union countries in 2018–2021.

Calculated according to: The Global Innovation Report, 2018–2021.

Ensuring the functioning and development of sustainable entrepreneurship implies the effectiveness of innovative activities, and the creative type of development, in turn, requires the involvement of innovation and rational use of innovation potential. Intensification of innovation activities of sustainable business entities reflects the level of balance between the real needs of the economy with the possibilities of scientific and technological progress and their practical implementation, most fully reflected in the Global Innovation Index (The Global Innovation Index), which the World Intellectual Property Organization calculates, Cornell University International

Business School INSEAD. Studies of the Global Innovation Index dynamics in the European Union and Eastern Partnership countries in 2018-2021 allow us to argue that this group of countries concerning the analyzed index shows precisely the same trends as the previous two. In particular, the assessment of the Global Innovation Index in the European Union countries (Figure 5) showed the highest positions of such countries as Sweden (GII: 62-64), the Netherlands (GII: 59-63), Finland (GII: 57-60) and Denmark (GII: 57-58), and the lowest -Greece (GII: 36-39), Croatia (GII: 37-41) and Romania (GII: 36-38).

45 The Global Innovation Index 40 35 30 25 20 15 10 5 0 Azerbaijan Moldova Ukraine Armenia Belarus Georgia **2**018 32,81 30,2 29,35 35,05 37,63 38,52 **2**019 33,98 30,21 32,07 36,98 35,52 37,4 **2020** 32,64 27,23 31,27 31,78 32,98 36,32 **2021** 31,4 28,4 32,6 32,4 32,3 35,6 Countries **2**018 **2**019 **2**020 **2**021

Figure 6. Dynamics of the Global Innovation Index for Eastern Partnership countries in 2018–2021.

Calculated according to: The Global Innovation Report, 2018–2021.

Assessing the state of innovation activities' development in the EaP countries (Figure 6), it is found that the highest positions in this regional group are in Ukraine (GII: 35,6–38,52) and the lowest – in Belarus (GII: 29,35–32,60) and Azerbaijan (GII:

27,23–30,21). At the same time, we should note that the countries of the Eastern Partnership have been characterized as countries with a high level of technological backwardness and a low level of innovation implementation.

Table 3: Classification of European Union and Eastern Partnership countries according to the Global Innovation Index in 2018–2021

			The Global	Innovation Index			
201	8	2019		2020		2021	
Country	Cluster number	Country	Cluster number	Country	Cluster number	Country	Cluster number
Denmark		Denmark		Denmark		Denmark	
Germany		Germany		Germany		Germany	
Ireland		Ireland		Ireland		France	1
France	1	France	1	France	1	Netherlands	1
Luxembourg	1	Luxembourg	1	Netherlands		Finland	
Netherlands		Netherlands		Finland		Sweden	
Finland		Finland		Sweden		Belgium	
Sweden		Sweden		Belgium		Czech Republic	
Belgium		Belgium		Czech Republic		Estonia	
Czech		Czech Republic		Estonia		Ireland	
Republic		_					
Estonia		Estonia		Spain		Spain	
Spain		Spain		Italy	2	Italy	2
Italy	_	Italy	1 ,	Cyprus		Cyprus	
Cyprus	2	Cyprus	2	Luxembourg		Luxembourg	
Hungary		Hungary		Malta		Malta	1
Malta		Malta		Austria		Austria	
Austria		Austria		Portugal		Portugal	
Portugal		Portugal		Bulgaria		Slovenia	
Slovenia		Slovenia		Greece		Bulgaria	
Bulgaria		Bulgaria		Croatia		Greece	
Greece		Greece		Latvia		Croatia	
Croatia		Croatia		Lithuania		Latvia	
Latvia		Latvia		Hungary	3	Lithuania	3
Lithuania	3	Lithuania	3	Poland		Hungary	3
Poland	3	Poland	3	Romania		Poland	
Romania		Romania		Slovenia		Romania	
Slovakia		Slovakia		Slovakia		Slovakia	
Moldova		Georgia		Ukraine		Ukraine	
Ukraine		Ukraine		Armenia		Armenia	
Armenia		Armenia		Azerbaijan		Azerbaijan	
Azerbaijan	4	Azerbaijan	4	Belarus	4	Belarus	4
Belarus	4	Belarus	] 4	Georgia		Georgia	
Georgia		Moldova		Moldova		Moldova	

Calculated according to: The Global Innovation Report, 2018–2021.

The results of clustering the EU and EaP countries by the Global Innovation Index indicator using the cluster analysis (Table 3) also confirm the significant influence of innovations on the sustainable development of entrepreneurship. In particular, the countries that fall into the fourth cluster are characterized by a low level of innovation activity, have an outdated technological

base, have too little funding for scientific and research institutions, and specialize in high-tech imports and export of raw materials.

Meanwhile, the countries in the first and second clusters are characterized by a high level of innovative development. As the research results show, the most innovative countries in the considered regional group include Sweden, the Netherlands, Finland, Denmark, Germany, and France. In particular, it is worth noting the experience of Finland, which has reoriented to the resource economy and innovation economy, which stimulates a high level of entrepreneurial activity.

Characterizing the European Union and the Eastern Partnership countries by sustainable entrepreneurship indicators, we can confidently assert that there have been formed sustainable groups of countries that have taken the leading positions and are considered to be outsiders at the regional and global perspectives.

### 6 Discussion

The research results for regional and global perspectives of sustainable entrepreneurship in the European Union and the EaP countries allow us to identify four groups of countries in terms of the ease and simplicity of doing business, the effectiveness of innovation, and the achievement of high standards of environmental production and social responsibility of business entities.

Group 1. Highly developed countries in which sustainable entrepreneurship is formed based on the economic feasibility of social responsibility, environmental friendliness, innovations, intensified development of nanotechnology and robotics, effective taxation systems, and transparency of state regulation of business (the Netherlands, Denmark, Sweden, and Finland).

Group 2. In countries with a relatively high level of socioeconomic development and a sufficient level of sustainable entrepreneurship, in which economic activity is intensively developed with the involvement of innovation, entrepreneurship is focused on the protection of public and environmental interests of the state and tangible support of the member states of the European Union (Czech Republic, Spain, Italy, Cyprus, Lithuania, Slovenia, Poland and Portugal).

Group 3. Countries with a medium level of socio-economic development and sustainable entrepreneurship, where significant institutional, legal, financial, and economic deformations are tangible due to the transformation of national economies into the basis of modernization, environmental protection, and consideration of public values (Greece, Croatia, Latvia, Romania, and Hungary).

Group 4. Countries with a low level of socio-economic development and the presence of significant problems of sustainable entrepreneurship, in which the concept of sustainable business is not fully implemented, have not yet completed the transition to green production and little consideration of the interests of society (Azerbaijan, Ukraine, Georgia, Armenia, Moldova, and Belarus).

It allows us to assert that the global perspective has a precise distribution of the European Union and the Eastern Partnership countries, taking into account the state and trends of their development. At the same time, regional associations are formed which differ sharply in their parameters. Namely, European Union countries are positioned as highly developed, and Eastern Partnership countries are as countries of transitive type. Consequently, in the countries of the European Union, there is an intensification of innovative development, strengthening the positions of sustainable entrepreneurship, while developing countries are not able to properly realize their entrepreneurial potential.

### 7 Conclusions

Thus, the studies of sustainable entrepreneurship from the regional and global perspectives suggest that in the context of globalization, the functioning of regional associations, which favorably influence the formation of the basic principles of development of countries and effectively use their existing potential, becomes essential. Identifying strategic vectors of the development of regional associations essentially depends on the stability of the development of countries and the efficiency of entrepreneurial activity. Ensuring sustainable entrepreneurship in globalization and regionalization is regarded as a tool to ensure sustainable economic growth, considering the environment and social protection. It is established that sustainable entrepreneurship development significantly depends on the implementation of innovation and innovative activities. Given the research results, We can argue that the highly developed countries, which belong to the European Union at the regional promote more effectively perspective. entrepreneurship. However, in developing countries, several hinder the sustainable problems development entrepreneurship.

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**Primary Paper Section:** A

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# TARGETED GUIDELINES OF PERSONAL AND PROFESSIONAL SELF-DEVELOPMENT OF TEACHERS: IMPLEMENTATION OF THE EXPERIMENTAL PROGRAM

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Abstract: The publication explores the features of the self-development process, which is presented as a person's desire to identify, realize and improve their personal qualities. This process is considered as formation and integration in the pedagogical activity of personal, professional qualities and abilities, methodological, methodical, research knowledge and skills; as an active qualitative transformation of the teacher of his inner world. It is proved that postgraduate pedagogical education can effectively solve the problem of stimulating and forming teachers' positive motivation for continuous professional self-improvement, especially under the condition of building a postgraduate pedagogical process based on spiritual interaction and intellectual co-creation.

Keywords: Personal and Professional Self-Development, Teachers, Experimental Program, Stimulation, Motivation.

### 1 Introduction

Professional self-development of a modern teacher appears as a process of active creation of a developing personality, life relations, and determination with their help of their "professional living space", creation of conditions and prospects for its further improvement. A teacher who is constantly self-developing, consciously forms a promising strategy of his professional life, where the decisive is the change in the motivational sphere of the individual, in which the universal human values begin to be reflected more than before; increasing the ability at the level of intelligence to plan. Such a pedagogue constantly reflexes, selectively relates to professional values and their systems, to their behaviour and actions that determine its maturity and individual self-improvement.

We came to this conclusion by studying the creative heritage of the classics of psychological and pedagogical science, as well as the work of the most famous modern scientists. Researchers of the problems of professionalism of the teacher are more likely to associate a new vision of such a pedagogical phenomenon as professional self-improvement with professional self-development. The problem of self-development of the individual found was covered in the works of domestic (Bekh, 1999; Kremen', 2013; Podofiei, 2017; Tsvetkova, G. 2018; Sushchenko, Gladysh, et al, 2020) and foreign (Rogers, Lyon, Tausch, 2013) researchers.

In the history of philosophy, the principle of self-motion was first discovered by the ancient Greek philosophers Heraclitus, Aristotle. Later, G. Leibniz revealed in the corporal substance an action-oriented basis. Further, the doctrine of self-motion developed Holbach, Helvetius, G. Hegel, Diderot and others. G. Hegel developed a detailed concept of self-motion and its modus (Hegel, 1999). Philosophers interpret self-development as a development, the cause of which is contained in the very thing or the developing system. This concept is also equated with the concept of self-motion, since they equally reflect the general causes of development and change in the processes of nature, society and thinking. It is also indicated the difference between the concepts of "self-development" and "self-growth" it is the same as between the concepts of motion and development.

On the ways of their development man thought since ancient times. The problems of cognition, self-realization and self-improvement of personality on the basis of self-knowledge and self-determination interested many philosophers of antiquity: Aristotle, Hermogene, Democrite, Epicurus, Cratil, Pythagorus, Socrates, etc. The age of antiquity gave us a philosophical understanding of cognitive processes, emphasizing human

activity in knowing the truth, indicated ways of development of the human personality, in particular: self-improvement of the individual through self-knowledge, a dialogue method of cognition and especially self-knowledge, orientated to creativity as an organic need of man, showed ways to overcome contradictions through dialogue culture.

Important components of professional self-development of the individual are the skills of self-education, reflexive thinking, and participation in the dialogue of cultures, possession of a microdialogue or internal dialogue, the pursuit to their own life. Thus, by systematizing structural and functional components, it is possible to determine the professional self-development of the individual as a motivated conscious individual, reflected on the basis of self-knowledge, self-determination, self-control, self-education, constant strenuous human activity, aimed at self-improvement of their natural and spiritual qualities, development of creative personal potential, dialogue-divergent thinking, modelling of one's own life in the context of culture and social development, self-realization of creative abilities in the process of life creating (Bekh, 1999).

Achieving professional and personal excellence continues throughout the pedagogical career, and sometimes the whole life of the teacher. And it is clear that under such conditions this process cannot be fully ensured only, so to speak, by official institutional means of education, to which the system of postgraduate education belongs. Only conscious self-educational activity of a specialist, internal factors of personality development are able to realize not only the continuity of education of the teacher, but also its infinity, in a certain sense. This applies not only to the volume of what is being studied. Educational interests, needs, requests of teachers are so individual, and therefore diverse, that it is fully impossible to satisfy them through the efforts of one or more postgraduate educational institutions, even with a large number of programs offered for the choice of curricula (Tsvetkova, 2018). Selfeducation makes education limitless in the full sense - in terms of its duration, and in terms of its volume, and in terms of its depth.

So, according to the theory of a group of researchers (Zhilgildinova, M., Abibulayeva, A., Aituarova, A. (2019)), competence of self-development is the awareness of the value and meaning in the manifestations of purposeful independent activity aimed at the acquisition of individual inherent professional qualities in the process of certain activities. According to the authors, the presence of these types of competency of self-development is mandatory for any teacher, however, the degree of their development depends largely on the awareness of the importance of their presence in the individual, i.e. as we said earlier, the process of self-development depends on the awareness of the individual values and the meaning of active independent search. Competencies of self-development is an awareness of value and meaning in the expressing of purposeful self-directed activity, aimed at the acquisition of individually inherent professional qualities by an individual, in the course of a certain activity.

Professional and personal self-development of the future specialist must be activated and corrected in the educational process. There are the following factors for activating the professional and personal self-development of the future specialist: the student's conviction in importance of professional and personal self-development; his ability for creative perception, understanding and transformation of the reality and himself in it; orientation of the educational process of the university toward the professional and personal self-development of the student (Soleimani et al, 2014).

Then, integral to identity construction at the nexus of individual and social, self-development occurs when TEs, cognizant of the

available resources and potential challenges, make choices to lead their own professional learning and practices and implement innovative activities that substantiate their aspired identities (Martel, 2018).

Self-study also affords TEs the discursive space to engage in disciplined and inquiry-based reflection on their identities and practices (Izadinia, 2014) and, thereby, model engagement with reflective teaching and practitioner research for their TCs (Peercy & Sharkey, 2018).

Thus, Gurevych, R., Frytsiuk, V., Dmytrenko, N. (2019) believe that the prospective teachers' readiness for continuous professional self-development is considered to be a student's ability to carry out purposeful reflection related to the design and implementation of qualitative changes of his/her identity and using personal subjective experience in the field of professional self-determination and self-realization based on perceived self-regulation of educational and professional activities.

So, we are talking about the focus on "lifelong education", on professional and personal self-development, where the teacher is able to be the subject of organizing their own fulfilling life.

### 2 Methodology

It should be noted that stimulating ways in the conditions of course training contributed to professional self-growth and created a positive motivational basis, thanks to which the teacher could improve the content of his own professional orientation and professionalism under the guidance of teachers. This was facilitated by the guarantee of freedom of creativity in the process of organization of training, scientific professional discussions, exchange of views, information support of research and pedagogical activities, pedagogical support for professional growth, etc.

But in the future, the productivity and continuity of professional self-improvement, which took place during the course preparation, depends on whether teachers who have begun active work on professional self-improvement in advanced training courses, will receive pedagogical support at school directly in the work place.

Based on the principle of continuity and consistency, which was laid down by our research program, the purpose of working out the technology of effective influence of the school to stimulate professional self-improvement of teachers who, according to our model, passed course training, was organized purposeful work, which was to continue this process, but already in the work place of the teacher.

The content of this work included:

- the use of internal and external incentives in the recognition of professional self-improvement of teachers;
- reorientation of the methodical work of the school to stimulate the professional self-development of teachers;
- providing practical assistance to teachers in implementing creative and innovative approaches to the organization of the pedagogical process;
- introduction of problematic laboratories and club activities in order to involve teachers in research work at the school.

We proceeded from the assumption that the process of stimulating the professional self-development of teachers in the school was solved in pedagogy in different ways, but mainly scientists who recognized the internal potential of the individual as a very important and priority role, did not ignore the stimuli of the external environment, which were based on the interaction of the individual with the outside world and the proper use of external incentives.

According to the hypothesis, promoting the improvement of pedagogical skills, awakening the need for self-actualization, self-affirmation and life creating, the desire to create one's personality is possible if positive motivation is maintained and the purposeful stimulation of professional self-improvement directly in the workplace is possible – in the school itself.

Stimulation of professional self-improvement of pedagogical staff traditionally has two directions: professional development and scientific and methodological work. Such concepts as "course retraining" (period of course training) and "inter-course period" (5-year prolonged retraining of teachers) are quite common. There is a noticeable disparity which is easy to see: courses last several weeks, and the inter-course period – five years. It is clear that the time of reforms requires not only more intensive use of opportunities for advanced training courses, but also purposeful activation and stimulation of professional self-development of the teacher during the 5-year prolonged retraining.

There are a number of factors which normally arise and that could not be ignored. The self-development of teachers is an organic component of continuous pedagogical education, although rather specific. Professional self-improvement is a continuous process that develops dialectically, then its purpose and ideas about the ideal are also constantly changing, and the requirements for it are constantly growing. In practice, this can be traced in the fact that the purpose of self-development, in fact, is unattainable, it is constantly changing. Consequently, the boundaries of personality development do not exist.

In our opinion, the positive stimulation of professional selfimprovement of teachers in the postgraduate period should also change, which requires the development and implementation of innovative effective forms and methods to stimulate the professional growth of teachers in the inter-course period.

Traditionally, the central link of professional improvement of teachers in the postgraduate period was and remains methodical work in the school. That is what was supposed in this regard to make a holistic system of actions and measures aimed at improving the skills and professional skills of each pedagogical worker, to develop the creative potential of pedagogical teams of educational institutions, to become a leading condition for achieving positive results of the school educational process.

Recently, we have been engaged in the study of the organization of methodological work with teachers (Sushchenko, Gladysh, et al, 2020). All of them put a personal-oriented approach to increasing the competence of teachers by involving them in innovative activities as the basis for the organization of methodological work, the formation of an informed understanding of the need to increase the professional level by each teacher separately.

As noted in the recommendations of researchers, the main task of methodological work is to create organizational conditions for continuous improvement of professional education and qualifications of pedagogical workers.

The analysis of the functioning of the management of the system of scientific and methodological work of pedagogical staff in all aspects makes it possible to distinguish the following main functions traditionally inherent in it such as: planning, organization, diagnostic, prognostic, modelling, compensatory, restorative, corrective, coordinating, propaganda and control-informational. It should be noted that these basic functions of the system complement each other. The existence of close interdependences between them is manifested in the fact that the quality of the execution of one function affects the success of the implementation of others.

Thus, it is advisable to direct scientific and methodological work to the formation of the main and subject competencies of the teacher and to increase the general competence, which is a set of key competences, an integrated characteristic of a person. The technology of organizing scientific and methodological work, from the point of view of a competent approach, involves not the regulation of the teacher's activities, not strict care and dictates,

but stimulation to professional self-improvement, the formation of the need for it, the mastery of means of interaction and comprehensive stimulation of activity and independence. The result of this approach to the organization of scientific and methodological work in the school is that the main thing for the teacher is his individually unique creative potential, his individually philosophical doctrine, his unlimited aspiration to the implementation of his own pedagogical worldview.

Stating the objective need for all the above-named forms of work to stimulate the professional self-development of the teacher, it should be emphasized that the self-educational activity of the teacher requires global transformations. A master teacher – integral personality, which is in harmony with spiritual culture, has a powerful theoretical basis for the implementation of pedagogical activities in school. Such a teacher knows and realizes his/her own capabilities, implements them for the benefit of himself and society, strives for self-development, self-improvement, understands the meaning of life, happiness, beauty, love, humanely treats his relatives, friends, people around him.

So, in accordance with the above-mentioned information, the modern school is designed to create such a professional and educational environment in which it would be profitable and psychologically comfortable for the teacher to optimally disclose and use their creative capabilities and projects, without waiting for them to be approved somewhere, planned, corrected, allowed, etc.

Therefore, in order to support and gain teachers' experience of innovative pedagogical activity in a reflexive environment, a problematic laboratory of pedagogical skills was introduced in our experiment, which began its work in 2018 on the basis of the educational complex "Mriya" (Zaporizhzhia, Ukraine), headed by the staff of the Department of Social Pedagogy of Zaporizhzhia National University (Zaporizhzhia, Ukraine). Its purpose: the implementation of a new educational paradigm is the continuous development and self-development of professional skills of teachers in individual programs, taking into account the specific society, the nature of the interaction of the subjects of the pedagogical process, the peculiarities of the dynamics of this development, the nature of the teacher, his creative capabilities.

For the practical implementation of this scientific idea, the "School of Pedagogical Skills" was opened on the basis of the laboratory, which was to unite the efforts of the staff of the Department of Pedagogical Skills and teachers of four more experimental schools in solving the problems of scientific and methodological support of innovative activities of pedagogical workers in the subjective-subjective reflexive environment.

The program "School of Pedagogical Skills" in each particular institution had a peculiar content, but its mandatory components were: the search for optimal forms of transformation of scientific ideas and promising pedagogical experience in the practice of the school; external and internal stimulation of professional self-improvement of teachers.

At "School of Pedagogical Skills" lecturers and teachers determined the criteria for evaluating of promising innovative experience, the non-standard and creativity of teachers, their ability to build up their potential, discussed the results of applicants' speeches at school, district, city and regional competitions "Teacher of the Year". It was implemented the technology of creative reports of teachers, a model for the protection of pedagogical ideas; conducted a business game "Protection of author's innovations"; implemented acmeological cards of development and self-development of professional skills of teachers.

On the basis of the established experimental laboratory with the aim of orientating teachers towards "lifelong education" and for professional and personal self-development, the following classes of "School of Pedagogical Skills" were organized at the

educational complex "Mriya": weekly consultations (on request of teachers); seminars for teachers of new type schools; a workshop "Improving the professional skills of teachers"; a master class for foreign language teachers; a workshop "Scientific and methodological service of modern school"; a seminar "Traditional and non-traditional forms of work with parents"; a workshop for teachers "Promoting adaptation of sixyear-old first-graders"; a workshop "Psycho-preservation of teachers and students in the modern educational process".

On the results of these classes, meaningful changes were made to the psychological and pedagogical support of the innovative activities of the educational institution. There have been introduced: a model of professional competence of a humanist teacher; a system of ascertained and project diagnostics of the child's personality for differentiation and individualization of educational process; a model of educational environment outside of regulated training sessions.

Thus, an extensive system has been created for the most active professional and creative self-expressing of teachers, where a high level of social and psychological competence and professionalism is required, which includes a humanistic orientation, impeccable professionally necessary knowledge, pedagogical abilities, a high level of responsibility for personal and professional excellence.

In an attempt to keep teachers' interest in professional selfdevelopment at a high level, we deliberately used a number of measures for nine months.

For example, at the stage of formation of the "School of Pedagogical Skills" to create a climate of spiritual interaction in the team and stimulate the creation of special attractive teacher's behaviour, the People's Artist of Ukraine O. Gapon was invited to classes. This artist made an invaluable contribution to the spiritual treasury of each teacher. Communicating with O. Gapon, teachers were fond of the atmosphere of creative relaxedness and psychological comfort, they changed their style of communication in the lesson. In general, the possibilities of theatrical pedagogy still require additional research, especially in the field of practical interaction of institutions, art with educational institutions, the expediency of which are supposedly not denied in any educational system, but in real life are limited by traditional approaches.

Therefore, our approach to stimulating professional self-improvement in the conditions of intra-school communication was permeated by the idea that all pedagogical activities are a constant experiment. Despite the possibility of a technological approach to their profession, according to which it is considered possible to achieve predictable success, the work and life of the teacher is a long-term search for their own technologies and, above all, work above itself, in which it little can be fixed. This vision of teacher's work additionally prompted teachers to reflect and determine confidence in their abilities. Teachers were taught to believe and hope for themselves, overcoming social adversity and genetic predeterminations, because success in many cases where the human factor operates depends on unwavering self-

According to our opinion, in the near future permanence in the knowledge acquisition and its synthesis with pedagogical activity – these two processes will merge into one, since it will become impossible to keep the level of professional skills without constant information and sense filling. The short-term internship of teachers outside the school disappears and is losing ground to the combination of postgraduate education in educational institutions, to the education obtained in our case at the "School of Pedagogical Skills".

The prospects for continuous professional improvement of teachers in the performance of their professional duties, in our opinion, have increased significantly, and this is confirmed by the results of our experiment.

We offered teachers to keep a diary of professional and personal achievements in order to eliminate negative traits and shortcomings in working on themselves. Attention was paid to the fact that the diary has a certain structure: the results of self-diagnostics, professional ideal, own image, development ideas, prospects, issues, self-development program, ways of its implementation, sources used. Teachers had the opportunity to change this structure, provided that they explained and substantiated their choice of sections.

Here are some statements from the diaries of teachers of the experimental group: "At the School of Pedagogical Skills, I want to master the art of being a true master of my craft"; "... I want to learn to perceive myself and others as we are"; "... to learn my capabilities and to reveal my potential"; "... I want to be able to manage my negative emotions"; "... I want to become an example for someone"; "... I want to be able to realize my personal and professional opportunities for the benefit of the child".

According to our recommendations, teachers in diaries not only outlined in detail the problem and ways to solve it, but also described their own feelings, reasoning, thoughts. For some teachers, this was the first real acquaintance with themselves. Teachers were asked to highlight the results of the system of collective mini-research, which aimed to identify the most positive features of a fellow teacher, to share impressions of interesting events in their own life. At the end of experimental training, we offered teachers to reread their diaries, to rethink their own experiences and provide reasonable proposals for enriching the course with concepts, topics of consultations. Summing up, it should be noted that keeping a diary of professional and personal achievements contributed to the development of teachers' ability to self-justify, self-observation, self-knowledge and self-report.

According to the hypothesis, one of the conditions for successful professional self-improvement is the development and defense of an individual teacher's program for professional self-improvement, designed for five years, that is, for the period of 5 years of prolonged inter-course training, based on recommendations developed by the authors of the study. We believe that effective professional self-improvement of teachers is possible if they are ready to work on themselves while working at school and identify their creativity in development of their own self-development programs.

We give the content and structure of the program of self-improvement of the teacher.

- The first part of the program indicates the results of selfdiagnostics and specific development goals (for each academic year). Teachers developed and filled out: "Teacher's personality card", "Teacher's work plan", "Special tasks and exercises". The choice of tasks, the preparation of the content of an individual selfdevelopment program by each teacher is carried out under the guidance of the administration. When approving the program during the course preparation period, the curator evaluated the program in view of a holistic approach: whether all parts, elements of professional development are provided, whether the tasks for the development of psychological, professional and personal properties, etc. are set. The system of tasks is compiled by each department participating in the program. The tasks focus on the formation (development) of professional skills, professionally significant properties and qualities of the teacher. Each teacher, according to the results of selfdiagnostics, his/her own inclinations and interests, has his/her own set of tasks, for which at the end of each stage of self-improvement will report on pedagogical councils, at "School of Pedagogical Skills", at meetings of the Young Teacher Club, mentoring school, etc.
- The program provides for scientific support (consultations with scientists, problematic seminars, trainings, press conferences of scientists, master classes), necessary to

assist in the activation of theoretical foundations and the implementation of tasks. Consultations with teachers should be aimed not only at helping to develop tasks and solve them correctly, but also to stimulate the teacher to improve their professional level in the system. This stimulation should be manifested in the participation of teachers in scientific and practical conferences, generalization of their own experience, weekly visits to libraries, participation in prestigious competitions, admission to postgraduate studies, writing scientific articles in professional publications, etc.

- The results of the teacher's self-development are evaluated according to the above indicators. For self-esteem of the level of self-development, professional and personal qualities, skills of the administration, it is advisable to offer appropriate tests.
- 4. At the end of each stage of self-improvement, it is necessary to provide for self-diagnostics of professional and personal development and determination of positive changes self-assessment by the teacher and assessment by the administration of the results of the implementation of the individual program. Each teacher develops and fills in the section of the individual program "Final results according to the indicators", which were collectively and individually accepted by the individual.

So, professional self-improvement requires teachers, first of all, to clearly plan their own work on themselves, in particular, the ability to plan their own actions, predict the correctness of their results, clearly regulate the implementation of tasks, apply knowledge and skills in a new situation, discuss problems, choose the most irrational way to master the necessary knowledge, critically analyze their own knowledge and abilities. But this painstaking work of a teacher to improve his personality requires motivation and encouragement. Therefore, we tried to consider and summarize external and internal stimuli (Table 1).

Thus, we saw the essence of the approach to the implementation of the proposed model in purposeful stimulation of professional self-growth of teachers, focusing on such means of stimulation as recognition of the teacher's success in self-improvement and awareness of professional self-development as a conscious targeted process. To this end, based on the concept of research, we used the award as one of the ways to recognize their skills and encourage further self-improvement. There is no doubt about the importance of extending the recognition and rewarding of the best teachers. In our opinion, all this should be reflected in government documents, which state that it is necessary to hold discussions and consultations with funding bodies and employers at the national and local levels on the recognition and awarding of the best specialists in the field of education in the cities.

The process of recognition and awarding should cover those categories of teachers who: consistently and continuously improve the content and means of their professional activities; gravitate towards independent work on themselves; work in self-learning domination mode; direct themselves to the result and its achievements; are responsible for the level of their own competence; choose the best educational technologies; develop individual programs of professional self-improvement; are engaged in research work; publish articles in professional journals; participate in seminars, scientific and practical conferences; is a model of high spiritual and pedagogical culture.

The master teacher is an integral, harmoniously developed personality, which has a powerful theoretical basis for the implementation of pedagogical activities in the school. He has an innate ability and the need for self-study throughout his life, using the most of all his reserves, feelings and creative potential for the sake of creating a social good and a worthy future of his own.

Table 1: External and internal stimulation of professional and personal growth of teachers

Period	Stimulus	
Perioa	External	Internal
C O U R S E	<ul> <li>letters of gratitude, telegrams to the address of educational institutions with a request to note and financially encourage teachers for the successful completion of advanced training courses;</li> <li>proposals for additional vacation during the holiday period;</li> <li>proposals to lead a creative group, a school of young teacher or advanced pedagogical experience;</li> <li>to appoint a consultant during the course preparation on the issues outlined;</li> <li>invitation to participate in conferences, discussions, pedagogical readings;</li> <li>providing recommendations for master's degree, postgraduate study</li> </ul>	<ul> <li>professional interests, aspirations, guidelines, beliefs, means of promotion of service stages, worldview of the teacher, his idea of himself, attitude to the profession, society, the world around him;</li> <li>satisfaction of individual needs, life ideals and samples;</li> <li>creative motives: focus on finding new, previously unseen ways of transformation, improving the surrounding reality, acquiring</li> </ul>
I N T E R C O U R S E	<ul> <li>the financial situation of the educational institution as a whole (creation of proper working conditions: up-to-date equipped classrooms, teacher's access to the sources of the necessary information - computer, copying equipment, the Internet, a library, which is provided with scientific and methodological literature, professional periodicals, scientific collections);</li> <li>provision of benefits for education workers (allowances, surcharges, scholarships, nominal bonuses, additional vacations, funds for rehabilitation and excursion support, solving housing problems);</li> <li>material incentives of the teacher (decent wages, bonuses, material payments to those teachers who are engaged in self-development, make individual programs of self-improvement and work for them);</li> <li>participation in pedagogical competitions "Teacher of the Year", "Young Teacher", "Teacher-Organizer of the Year", "Head of School Club of the Year", "Personal oriented lesson". etc.</li> </ul>	personal and professional excellence  incentives of self-education activity - gnostic needs (knowledge) and positive social needs (the desire to benefit society, the desire for socially valuable achievements);  personal incentives (values) - cognitive and motives of self-improvement, related to obligations to themselves - self-education, self-affirmation, self-expression, self-recovery, self-development;  competitive motive - the desire of the teacher to hold authority in the collective

Therefore, it was necessary to develop a number of recommendations for the recognition and awarding of teachers, in particular, the following:

- it is necessary to develop a scientific approach to the recognition of the professional skills of the teacher;
- significance of the teacher's activities should increase due to professional self-development;
- recognition and awarding of teachers should be based on equal access and opportunities for all teachers;
- it is necessary to develop a national scheme for the recognition and awarding of teachers, clearly defining the main parameters;
- any monetary reward should not exclude existing allowances;
- the process of determining the winners should be transparent; it makes sense to involve teachers themselves;
- when recognizing and evaluating the activities of teachers should use such a criterion as mutual evaluation;
- any recognition and awarding should contribute to both individual and group (team) activities;
- the very concept of "professional self-improvement" should be the basis of the schemes of recognition of the best teachers.

Summing up all of the above, it can be stated that in this case the prompting effect of recognizing mastery is real. The teacher, who was "noticed", changes the mood, rhythm and style of life, relations with the world around him, there is a revision of values, there is pleasure from work, and most importantly - the desire to increase their success. Such forms of external stimulation (recognition of the mastery of the teacher) give the teacher self-confidence, a sense of benefit (usefulness) from successful professional self-improvement, affects some vital activity.

The development of a pedagogical system that provides support for personal and professional self-realization of the teacher requires taking into account subjective and objective conditions, which are simultaneously relatively independent elements of the process of self-improvement that interact.

A review of case files, related to the awarding and recognition of the success of teachers, showed that by joint efforts of committees and councils of territorial organizations, the industry trade union together with offices, departments of education, and heads of educational institutions recently managed to achieve some in the allocation of funds for material incentives of teachers. An effective form of encouraging teachers working in an innovative mode is the All-Ukrainian Competition "Teacher of the Year".

The annual Teacher of the Year competition is always the rise of new pedagogical thinking, an indicator of the growth of pedagogical skills, a vivid demonstration of the teacher's capabilities, the rise of the teacher's role in society and the increase in the prestige of this profession; attracting the attention of the public, authorities to the problems of education; promoting creative pedagogical search, improving the professional skills of the teacher; dissemination of advanced pedagogical experience; ensuring independent expert evaluation of pedagogical activity.

The winners and laureates of the All-Ukrainian competition should be awarded such an honorary title as "Honoured Teacher of Ukraine", awarded with diplomas of the Verkhovna Rada of Ukraine (the Supreme Council of Ukraine) and the Cabinet of Ministers of Ukraine, signs "Excellent in Education of Ukraine", Diplomas of the Ministry of Education and Science of Ukraine. Some laureates of the "Teacher of the Year" competition are awarded the title of "teacher-methodist" with the simultaneous release of them from the next certification. In our opinion, such incentives for teachers to professional self-development should be approved by education departments at the level of the city authorities.

To expand the categories of participants in professional competitions and stimulate further self-improvement, we propose to launch competitions "Paragon of modern pedagogy", "Teacher of the Year", "Class Teacher of the Year", "Deputy Director of the Year", "Teacher-Organizer of the Year", "Head of the School Club of the Year". Competitions will contribute to achieving a similar goal, attracting novelty and the most diverse variety of activities: "Fair of professional expectations", "Festival of pedagogical ideas", "Olympiad of innovations", "Extravaganza of professional skills", etc. Such events will serve as an incentive and give the teacher the ability to organize his life as a space of continuous professional, intellectual and general self-improvement, the construction of the pedagogical process and self-education activities as an exciting search for the truth.

We believe that the incentive for high-quality, effective work of teachers will be the annual competition "The best pedagogical worker of the city", which will be accompanied by a monthly allowance of 50% of the official salary rate during the year. It is advisable to introduce an incentive award – breastplate "Excellent in Zaporizhzhia Education". A pedagogue, who is awarded by this badge, should be paid a monetary award in the amount of two official salaries, attracting the attention of television and the press. This type of stimulation will encourage even the most passive teacher, give impetus to the use of reserve personal opportunities, change his rhythm and lifestyle radically, and add confidence in his/her own strength.

Such competitions as "Pedagogical Excellence", "Pedagogical Skills", "Gold Fund of Pedagogy", "Creative Search", "Implementer of Pedagogical Innovations", "Pedagogical Luminary", "Generator of Educational Ideas" give a perspective in stimulating professional self-development. Also, these competitions guarantee teachers not only recognition of their skills, but also material one-time payments.

Our observations have shown that such professional competitions not only stimulate and cause interest among teachers, they help teachers to discover potential creative opportunities on the basis of introspection, self-knowledge, taking into account the strengths and weaknesses of their own activities, to organize their own knowledge, develop the ability to develop and implement individual programs of professional self-improvement in pedagogical activities, to represent, justify, protect and improve the results obtained in the process of self-education.

Significant additional material support for educators was provided in local budgets funds for rehabilitation and excursion support for the employees themselves and their children, as well as reducing the cost of their sanatorium-and-spa treatment. Thus, in Zhytomyr city, conditions were created for free use of sports simulators and computers of the Internet Club on the basis of the centre of creativity of children and youth. The analysis of materials and documents shows that, despite the lack of funds, educators are nevertheless provided with certain benefits and material incentives that play a significant role in the process of stimulating the professional self-improvement of the teacher.

We believe that such types of material incentives can be especially influential impetus, which involve the development, justification and implementation of individual professional self-improvement programs in the period of 5 years of prolonged training. Such teachers will receive additional payments of 15 to 30 percent of the salary rate every month and will be given the opportunity to participate in an unscheduled certification. In our opinion, such effective types and ways of stimulating teachers are a starting mechanism for the transition of the teacher to a new stage of his own professional and personal development.

Determination of the effectiveness of experimental work on the formation of positive motivation for continuous professional self-improvement of teachers was carried out on the basis of the results obtained after re-diagnosis of professional and personal growth of teachers. The purpose of the control cut was to identify qualitative changes in the level differentiation of professional growth of teachers due to positive changes in accordance with the criteria and indicators of professional self-improvement.

The objectivity of the data of the forming experiment was ensured by the optimal ratio of the number of participants in experimental training, the criteria for the effectiveness of the experiment and mathematical statistics for quantitative and qualitative analysis of the obtained data.

Indicators of the effectiveness of the experimental factor were the criteria for the effectiveness of the process of stimulating professional self-improvement of teachers:

- motivational (a place of value of professional selfimprovement in the general hierarchy of values, the desire to engage in self-improvement, enjoyment of this process, awareness of the great distance between "I-real" and "Iideal", interest in the pedagogical profession, desire to engage in solving pedagogical problems, solving problematic situations, the desire to become a master teacher, the harmony of external and internal motivation of professional self-improvement: "I must" and "I want" to improve my own personality, duration and independence from obstacles to the manifestation of the motives of professional self-improvement);
- cognitively-active (the availability of knowledge about the essence, content, signs, components, mechanisms, stages of professional self-improvement, independent search for information on ways of self-improvement of the teacher, awareness in a wide range of psychological issues that reveal the essence and patterns of mental development of the individual, its leading factors, conditions and mechanisms, manifestation of non-stimulated activity in the process of professional self-improvement, regularity of activity in the process of professional and personal growth, internal independence from external management, the need only for advisory assistance in the matter of self-improvement);
- reflexively-evaluative (the ability to successfully implement all the necessary actions in the field of self-improvement at the highest level of expediency and productivity, which determine the functional maturity of the process of self-improvement, the presence of various abilities and skills related to all leading forms, methods and techniques of the teacher's work on himself and ensure the operational multiplicity of the process of self-improvement, achieving the desired professional and personal changes and acquiring a new quality of life).

It should be noted that throughout the experiment, the experimental group membership was fully preserved, which made it possible to obtain reliable data at all stages of our study on the effectiveness of ensuring the stimulation model that was substantiated in our research work.

To express the qualitative indicators of work on the formation of positive motivation to the continuous professional self-improvement of teachers, we applied a qualimetric approach.

Determination of the significance of each criterion was carried out by the method of expert evaluations. 24 qualified experts were involved in the group expert evaluation, for which conditions for individual work were created. According to each criterion, experts gave a score, after which statistical processing of the results was carried out. The cycle ended with the representation of questionnaires to experts for final approval of the results of processing. The cycle of expertise was repeated three times (the selection of experts was held in accordance with certain criteria: teachers who work creatively have work experience of at least 10 years and the qualification category is not lower than the first, as well as awards, nominal awards, scholarships, diplomas).

As you can see from Table 2, according to the first criterion, 9 experts put up 1 score, 10 experts -2 scores, 5 experts -3 scores. We calculate the total number of scores for the first criterion:

# $1\times9+2\times10+3\times5=44$ scores.

Similarly, we calculate the number of scores according to other criteria, and after that the total number of scores (139 scores). Determine the significance (V) of each criterion. To do this, the number of scores for each criterion will be divided by the total number of scores:

$$V_1 = \frac{44}{139} = 0.32$$
;  $V_2 = \frac{55}{139} = 0.39$ ;  $V_3 = \frac{40}{139} = 0.29$ .

Table 2: Determination of the criterion significance (V)

Criteria	1 score	2 scores	3 scores	Σ	V
Motivational	9	10	5	44	0,32
Cognitively- active	3	11	10	55	0,39
Reflexively- evaluative	12	8	4	40	0,29

In the process of stimulating professional self-improvement, we will especially emphasize the importance of an active subjective position, achieving success, meeting the needs for which the teacher accepts the intention to achieve, especially one that during self-improvement has become, albeit a dynamic, but sustainable personal formation.

In the process of the forming stage of the experiment, teachers chose such self-educational activities and so quickly and actively included in it, which caused them self-esteem for themselves during their success. Their expectations were complicated all the time and gained new momentum. The opposite was observed too. In cases of failure, having not done anything yet, teachers thought how to avoid solving a difficult situation. As Table 2 shows, the significance of each of the three defined criteria, according to experts, is approximately the same, with a slight advantage of the cognitively-active component (0.7 more compared to motivational, and 0.1 – compared to the reflexively-evaluative component). As for the significance of the indicators, the experts determined them equally valuable.

We found out the level indicators of positive motivation to the continuous professional self-improvement of teachers of control and experimental groups at the beginning and end of experimental work. In Table 3 summary indicators by components are presented.

Table 3: Combined level indicators of motivational, cognitively-active and reflexively-evaluative criteria

	•	Level						
Criteria	dno	high		n average		ge lo		
Criteria	u9	at the beginning	at the end	at the beginning	at the end	at the beginning	at the end	
and the state of t	EG	12,6	38,7	29,8	45,3	57,6	16,0	
Motivational	CG	9,04	9,87	29,12	30,08	61,84	60,05	
Comitivaly active	EG	13,4	30,1	39,1	56,8	47,5	13,1	
Cognitively-active	CG	16,24	18,01	30,03	32,12	53,73	49,87	
Reflexively-evaluative	EG	9,1	29,4	29,4	48,4	61,5	22,2	
	CG	15,9	16,6	27,49	31,02	56,61	52,38	

Using the significance coefficient of each criterion (motivational -0.32; cognitively-active -0.39; reflexively-evaluative -0.29), as well as the totality of the manifestation of each criterion of the phenomenon under the study, we calculate the level of distribution of the positive motivation to continuous professional self-improvement of teachers.

To find out the percentages, the level indicator of each criterion separately for the experimental and control groups is multiplied by the significance coefficient of this criterion. The obtained data on the levels of positive motivation for continuous professional self-improvement of teachers (number as a percentage) of teachers of the experimental group at the beginning and end of experimental research activities are summarized in Table 4.

Table 4: Level characteristics of formation of positive motivation to continuous professional self-improvement of teachers of the experimental group (based on the forming experiment), %

	Level								
Criteria	high		average		low				
Criteria	at the beginning	at the end	at the beginning	at the end	at the beginning	at the end			
Motivational	4,03	12,38	9,54	14,5	18,43	5,12			
Cognitively-active	5,23	11,74	15,25	22,15	18,53	5,07			
Reflexively-evaluative	2,64	8,53	8,53	14,04	17,84	6,44			
Total	12	32,65	33,32	50,69	54,8	16,63			

According to the results of quantitative data, we obtain that in mass pedagogical practice only a small part of teachers (12%) achieves a high level of positive motivation for continuous professional self-improvement.

As we can see from the above data, in the experimental group, where targeted work was carried out to form a positive motivation for continuous professional self-improvement of teachers, the indicators increased significantly – by 20.65% (high level) and 17.37% (average level), 16.63% of teachers remained at the low level (against 61.5% at the beginning of the forming stage of the study).

We believe that such an increase in the indicators of positive motivation formation to continuous professional self-improvement of the teacher testifies to the effectiveness of the organizational and pedagogical conditions we have determined to stimulate the professional self-improvement of teachers in the system of postgraduate education.

The teachers of the control group also demonstrated a certain increase in the high and average level of positive motivation

formation for continuous professional self-improvement, but it turned out to be insignificant compared to the achievements of teachers of the experimental group: according to the motivational criterion – by 0.83% (high level), 0.96% (average level); by cognitively-active criterion – by 1.77% (high level), 2.09% (average level); by reflexively-evaluative criterion – by 0.7% (high level), 3.53% (average level). Such an increase is because of self-education activities, the desire for self-development of creative teachers, which, of course, were in the control group too.

Experimental data on the levels of positive motivation formation to continuous professional self-improvement (number as a percentage) of control group teachers (at the beginning and end) of the forming experiment are summarized in Table 5.

The low level of readiness of the specified category of teachers to form a positive motivation to continuous professional self-improvement is characterized by the lowest indicators of motivational and reflexively-evaluative criteria with a sufficiently high indicator of cognitively-active criterion.

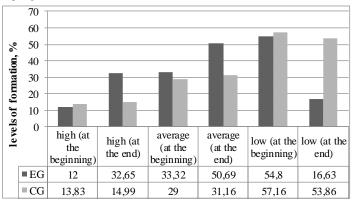
Table 5: Level characteristics of the formation of positive motivation to continuous professional self-improvement of control group teachers

(based on the forming experiment), %

	Level								
Criteria	high		average		low				
	at the beginning	at the end	at the beginning	at the end	at the beginning	at the end			
Motivational	2,89	3,16	9,32	9,63	19,79	19,22			
Cognitively-active	6,33	7,02	11,71	12,53	20,95	19,45			
Reflexively-evaluative	4,61	4,81	7,97	9,0	16,42	15,19			
Total	13,83	14,99	29,0	31,16	57,16	53,86			

The results of the positive motivation formation for continuous professional self-improvement according to each of the defined criteria are clearly demonstrated by the diagram (Figure 1).

Figure 1: Dynamics of positive motivation formation to continuous professional self-improvement of teachers (averaged data at the stage of forming experiment) in the system of postgraduate education



The results of the forming experiment give reason to draw such conclusions. Firstly, it was determined that the most effective in stimulating professional self-improvement of teachers were: introduction into the educational process in the conditions of course preparation of theoretical and practical material with the use of personalized forms of teaching theoretical material (lectures, press conferences, discussions, lectures and dialogues, problematic lectures); innovative methods of learning (synectics method, specific situation, brainstorming, etc.); use of psychological and pedagogical trainings; involvement of teachers in the work of the "School of Pedagogical Skills"; conducting scientific-practical and theoretical conferences with the participation of prominent scientists, innovator teachers; development, substantiation and protection of vocational growth programs by teachers. Secondly, it has been substantiated and experimentally proved that the necessary organizational and pedagogical conditions for stimulating professional selfimprovement of teachers are: program-targeted promoting of positive motivation; creation of a reflexive environment; gaining experience in innovative pedagogical activity; mastering the knowledge and skills of professional self-improvement; ensuring the continuity of professional self-improvement of the teacher in the intercourse period.

To verify the reliability of the results obtained during the forming experiment, and the hypotheses of the study, we conducted a statistical analysis, considering it appropriate to use one of the methods of checking statistical hypotheses – Student's t-test, which helped to find out whether the significant presence of the difference in the results of the experimental and control group is a direct consequence of the action of the experimental research system, and not the influence of random factors. Student's t-test was determined by the formula:

$$t = \frac{M_1 - M_2}{S_{M_1 - M_2}} \,, \tag{1}$$

where: M1 – arithmetic average of the results of the experimental group; M2 – arithmetic average of control group results; SM1-M2 – standard arithmetic average difference error.

To simplify the calculations, we introduce a score assessment of the levels of formation of positive motivation to continuous professional self-improvement: high level -5 scores, average -4 scores, low -3 scores. Statistical indicators on the results of the forming experiment are presented in Table 6. In each group at the beginning and end of experimental work there were 64 attendees, that is,  $N\!=\!N1\!=\!N2\!=\!64$  people.

Table 6: Expert assessments

		nental group attendees	Control group $N$ =64 attendees		
Levels	number of persons	assessment	number of persons	assessment	
High	26	5 sc.×26=130	11	5 sc.×11=55	
Average	32	4 sc.×32=128	24	4 sc.×24=96	
Low	6	3 sc.×6=18	29	3 sc.×29=87	
Group assessment $(\Sigma)$	2	76 sc.	238 sc.		
Average score (M)		4,31	3,72		

To calculate Student's t-test, the initial data are summarized and entered in Table 7.

Table 7: Initial data for calculating Student's t-test

Parameter	Experimental group	Control group	Auxiliary calculations	
	$X_1$	$X_2$	$X^2$	$X^2_2$
Σ	276	238	76176	56644
M	4,31	3,72		
$\Sigma X_i^2$	1216	920		

The calculation of the arithmetic average is calculated by the formula:

$$M = \frac{\sum X_i}{N},\tag{2}$$

where: Xi – the total result of the group; N – number of respondents.

 $\sum X_i^2$  we count as follows:

for the experimental group:  $52\times26+42\times32+32\times6=1216$ ;

for the control group: 52×11+42×24+32×29=920.

The initial data were indicators at the end of the research work in experimental and control groups.

To determine the results of the experiment, we calculate the indicator of variation by the formula:

$$SS_X = \sum (X_i - M)^2 = \sum X^2 - \frac{(\sum X)^2}{N},$$
 (3)

where: Xi – results of respondents; N – number of respondents.

First, we calculate the sum of squares of deviations from the arithmetic average by the formula: (X-M)2. This expression can be shown as SSX characters. The sum of the squares of deviation

 $SS_1 = 1216 - \frac{(276)^2}{64} = 25,75$ :  $SS_2 = 740 - \frac{(238)^2}{64} = 34,94$ 

Then we find the variance (a measure of variation of assessments) for each group by the formula:

$$S^2 = \frac{SS}{N-1},\tag{4}$$

We have got:

is as follows:

$$S_1^2 = \frac{25,75}{64-1} = 0,41$$
  $S_2^2 = \frac{34,94}{64-1} = 0,55$ 

Next, we find the standard deviation S, respectively, in each group by the formula:

$$S = \sqrt{\frac{SS}{N-1}},\tag{5}$$

We have got:

$$S_1 = \sqrt{\frac{25,75}{64-1}} = 0,2$$
;  $S_2 = \sqrt{\frac{34,94}{64-1}} = 0,28$ 

Now we calculate the statistical deviation of SM for each group by the formula:

$$S_M = \sqrt{\frac{SS}{N(N-1)}},\tag{6}$$

We have got:

$$S_{M_1} = \sqrt{\frac{25,75}{64(64-1)}} = 0,003$$
  $S_{M_2} = \sqrt{\frac{34,94}{64(64-1)}} = 0,004$ 

We find standard errors of difference of arithmetic average SM1-M2 by formula:

$$S_{M_1 - M_X} = \sqrt{\frac{SS_1 + SS_2}{N_1 + N_2 - 2} \times (\frac{1}{N_1} + \frac{1}{N_2})},$$
(7)

(2) We have got:

$$S_{M_1-M_2} = \sqrt{\frac{25,75+34,94}{64+64-2} \times (\frac{1}{64} + \frac{1}{64})} = 0,123$$

We calculate Student's t-test by formula 1:

$$t = \frac{4,31-3,72}{0.123} = 4,79$$

The obtained coefficient t=4.79 is compared with the theoretical (table) value of Student's t-test.

Taking into account the degree of freedom, which is calculated according to the formula df=N1+N2-2=126 при p=5% (the level of significance  $\alpha$ =0.05, which corresponds to 95% of reliability), the theoretical value of the Student's t-distribution is t=1.97.

The obtained coefficient t=4.79 significantly exceeds the tabular value, that is, the proposed organizational and pedagogical conditions are effective.

### 3 Results and Discussion

Thus, a significant difference in the results of experimental and control groups shows that the proposed organizational and pedagogical conditions for stimulating the professional self-improvement of teachers in the system of postgraduate education to form a positive motivation for continuous professional self-improvement of teachers are expedient and effective.

The results of the study indicate an increase of research and methodical activities of teachers of experimental training. For example, only in the 2019-20 academic years, the "Fair of Pedagogical Ideas" submitted works:

- Saturday Academy. Collection of materials on preparing children for school.
- Book for reading on economics to the course "Beginnings of economics".
- Author's program "Informatics in elementary school, 2-4 grades"
- Alternative method of sound analysis using a polysensory approach.
- Analysis of the results of experimental work: criteria for evaluating creative literary works of students.
- 6. Collection of exercises in phonetics and grammar.
- 7. Collection of materials "Introduction of parents into school life"
- Analysis of the results of the study: influence of computer didactic games on the formation of cognitive processes in junior school age.
- From the experience of the master-class "Program of individual support of underachievers".
- Experimental research on the topic: "Studying the motivation of learning by a projective method".

Special attention should be paid to the development of the course "Intellectual", which involves developmental games, trainings and exercises aimed at developing the ability to analyze, reflect, compare, distinguish patterns, and establish logical connections.

The increase in the activity of teachers in the organization of research activities is confirmed by the writing of scientific articles in leading professional publications on the following topics: "Basic approaches to the classification of types of giftedness", "Self-educational competence of students as a pedagogical problem", "Creativity as a quality of pedagogical thinking", "Stimulation of educational and cognitive activity of students as a scientific and pedagogical problem", "Pedagogical views of M.F. Bunakov on the formation of cognitive interest of prime school pupils".

#### 4 Conclusions

The results of experimental work give reason to conclude about the effectiveness of the models we have implemented and ways to stimulate professional self-improvement in the formation of positive motivation for continuous professional self-improvement of teachers. The data of the analysis of the results of the forming experiment made it possible to state a significant increase in the general level of positive motivation for continuous professional self-improvement of the teachers of the experimental group compared to the teachers of the control group.

Thus, the analysis of the results of experimental work indicates that the pedagogical experiment confirmed the hypothesis of the study on the dependence of the success of professional self-improvement of the teacher on the development and implementation of a certain model of stimulation of professional self-development of a specialist.

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**Primary Paper Section:** A

Secondary Paper Section: AM

# PROFESSIONAL TRAINING OF FUTURE SOCIAL WORKERS: IMPLEMENTING FOREIGN EXPERIENCE INTO THE NATIONAL HEIS PRACTICE

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Abstract: Ukraine is undergoing reform of higher education and the transition of a professional training system for social workers to implement a competency-based approach. In particular, the reform involves the introduction of HEIs standards of higher education in the "social work" discipline. This article aims to form recommendations to improve the professional training of social workers based on foreign experience in implementing leading educational practices. The research methodology is based on the comparative analysis and evaluation of HEIs educational programs of the first, second, and third levels of social workers' training. The HEIs system in Ukraine does not have clear-cut requirements for the training program of future social workers. Each HEI develops it according to the established and approved template in this particular institution taking into account available human, material, and technical resources and needs of the society; it is licensed and accredited. Educational training programs for social workers are developed according to higher education standards. HEIs also create educational programs for social workers in Ukraine, taking into account the requirements of the National Qualifications Framework based on European and national standards and the principles of quality assurance in education. The HEI analysis of educational programs' profiles of social work training shows the introduction of a competency-based approach to the training of future professionals. It is reasonable to include such descriptors as the application of knowledge and understanding, formation of judgments, and ability for further learning and development.

Keywords: Social work, educational training programs, social workers, social specialist training.

## 1 Introduction

The social workers' professional training system in Ukraine is transitioning to the introduction of a competency-based approach to their work. Social workers dealing with different population categories should have a set of integral, general, professional competencies defined at the national level within the higher education standards in 2019–2021 (Ministry of Education and Science of Ukraine, 2022). This practice corresponds to the foreign experience of training social workers, where a competency-based approach is combined with practical specialists' training based on evidence-based healthcare (Parker, 2007; Damron-Rodriguez, 2008).

Competency in different disciplines means demonstrating that acquired knowledge, values, and skills can be integrated into practice (Carraccio et al., 2002). For example, in the United States, the Council for Higher Education Accreditation adopted a competency model for social workers in 2000 (Damron-Rodriguez, 2008). Education and assessment based on the competency model have two components: defining the specific skills needed for the profession in clear, measurable terms with performance level indicators; and assessing skill acquisition using measurable criteria (Hackett, 2001).

Competency-based and evidence-based education of social workers in Ukrainian health care is a relatively new area of training in higher education institutions. Moreover, the practice of social workers in Ukrainian health care is not yet a typical phenomenon today (Slozanska, 2019; Klos, 2021). Therefore, high-quality training of future and already practicing social workers for health activities is based on progressive foreign practices.

This article aims to form recommendations for improving social workers' professional training based on foreign experience while implementing the leading educational practices.

#### 2 Literature review

Many academic papers are devoted to the problems of social workers' professional training for working with different categories of the population in other countries (USA, UK, and Australia).

The professional training of future social workers is understood as a process that provides mastering of theoretical, practical, and scientific-methodological foundations of professional activity, development of special practical skills and abilities, formation of value orientations, personal qualities, and professional culture important for social work, orientation to prolonged professional personal growth and improvement (Slozanska, 2019). The training of future specialists involves the formation of the professional and necessary competencies, professional and personal qualities, moral and ethical culture, and values while studying in HEIs, which contains subsystems (cognitive, practical, motivational, and values), through involvement in various types of classroom and extracurricular work (academic, functional, research, project, volunteer, individual, educational, permissions) to form readiness (theoretical, practical, and psychological) to various types of professional activities (Slozanska, 2019).

Stone (2016), based on a study of the competencies of 17 practicing social workers in England, identified differences between competencies in teaching practice and competencies in social work practice. The basic knowledge, skills, and values acquired during training are insufficient for effective social work practice. The professional needs characteristics such as resilience, emotional intelligence, and an individualized approach to teaching. Teater & Chonody (2018), based on a study of the educational role in the evidence-based practice of social workers, identified an average level of specialists' preparation for "evidence-based practice" (EBP). With the increasing role of EBP, education does not provide future professionals with sufficient competence in this area, which means the need to implement EBP in educational training programs. Rollins (2020), while examining the relationship practices of 16 social workers and clients in Australia, found the importance of social work practice, which must also be integrated into educational programs to ensure the social workers' effectiveness. Battaglia & Flynn (2020), based on a review of 53 articles from Europe on the students' transition to social work practice, identified its difficulties due to a lack of knowledge regarding the change from educational to work practice. The importance of practice in educating future social workers is addressed by Csoba & Diebel (2020), where the authors noted the limitation in students' practical skills due to reduced contact with social services and target groups during the pandemic. Fisher-Borne, Cain & Martin (2015) argue for the need to integrate the cultural competency model into educational practice. Gould & Taylor (2017) explore the theory and practice of reflective learning for social workers. The importance of reflective practice in teaching social workers is noted by Hermsen & Embregts (2015). Bogo (2015) explores the importance of "field education" as the most significant component of educational programs to train social workers and develop their competence, which substantially impacts social services' quality. At the same time, teachers note the problem of finding effective pedagogical practices and integrating them into the educational process.

Thus, scientific studies of social workers' training point out the vital role of the following components:

- 1) competencies' development during the training;
- the importance of evidence-based practice (EBP) during students' training;
- the importance of ensuring an effective transition from learning to practice;

- 4) the importance of social workers' cultural competence;
- 5) the importance of "field education".

The mentioned components basically reflect the importance of the competency-based approach to the professional training of social workers through the different pedagogical practices.

# 3 Methodology

The study conducted an analysis of educational programs for training future social workers in Ukraine, elaborated in such higher education institutions as:

- National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" (2022);
- 2) National University "Kyiv-Mohyla Academy" (2022);
- 3) Borys Grinchenko Kyiv University (2022).

The choice of HEIs was based on the "Top 200 Ukraine 2022" ranking developed by the Center for International Projects "Euroeducation" in partnership with the international experts' group IREG Observatory on Academic Ranking and Excellence (Education, 2022).

In this article, we also analyzed the higher education standards for specialties 231 "Social Work" approved by the Ministry of Education and Science of Ukraine:

- The standard of higher education: the first (bachelor) level of higher education: Decree of 24.04.2019 No. 557 2019/2020.
- Standard of higher education: the second (master's) level of higher education: Decree of 24.04.2019 No. 556 2019/2020.
- The standard of higher education of the third (academic and scientific) level of higher education, the Ph. D. title: Decree of 30.12.2021, No. 1495 2022/2023 (Ministry of Education and Science of Ukraine, 2022).

These standards are the foundation for developing educational and professional training programs for social workers in Ukraine. They describe learning objects and goals, theoretical meaning, methods, techniques and technologies of training, tools, and equipment, and the specialists' competencies (integral, general, special (professional and specialized) competencies).

# 4 Results

# 4.1 The model of future social workers' professional training in Ukraine

According to the Law of Ukraine "On Higher Education" (2014), as of July 1, 2014, Ukraine has introduced a multi-level (initial level (short cycle), first (bachelor) level, second (master) level, third (academic and scientific) level of higher education) and various grades (junior bachelor, bachelor, master, Ph. D. / Doctor of Arts and Doctor of Sciences) system of social workers' training. The training is carried out on educational and scientific programs under the state academic standards developed for each level of higher education (HE) within the specialty. If the programs are successfully completed, the individual is awarded the appropriate HE grade and is granted an undergraduate, bachelor's, master's, or doctoral degree in social work.

Future social workers at HEIs are taught full-time, part-time, and distance learning. The primary normative documents which regulate and determine the content of the educational process at Ukrainian HEIs are educational, educational-professional, and educational-scientific programs, training programs curricula, individual students' curricula, and disciplines' educational and working programs. The applicants' admission for specialty 231 "Social Work" in Ukrainian HEIs is on a competitive basis upon provision of the state sample document on the previously obtained educational (educational qualification) level and copies of its supplement; copy of the certificate (s) of external

independent evaluation (for applicants with complete general secondary education) or examination sheet unified professional entrance test (in cases determined by these Rules).

Professional training of future social workers in Ukrainian HEIs is carried out on the optimal combination of theoretical and practical training components using a credit-based modular learning system. The latter is defined as a model of the educational process based on various modular learning technologies and academic credit units (credit points). The system's structural elements are credit, pass-fail credit, content module, and module.

In the Ukrainian HEIs system, there are no sufficiently clear requirements for the training program of future social workers. Each HEI develops it per the established and approved in this particular institution sample, taking into account available human, financial and technical resources the society needs. Each HEI licenses and accredits them. The authority that carries out the educational program licensing is the Ministry of Education and Science of Ukraine. The Ministry issues licenses for educational activity based on a favorable opinion of the National Agency for Quality Assurance of Higher Education and re-issues and revokes them. At the end of the license validity term, the accreditation procedure determines the specialists' training level compliance with the licensed specialties. The authority responsible for accreditation is the National Agency for Quality Assurance in Higher Education (Verkhovna Rada of Ukraine, 2017).

Educational and professional training programs for social workers are developed based on the standards of higher education in specialties 231 "Social work", approved by the Ministry of Education and Science of Ukraine (Standard of higher education: first (bachelor) level of higher education: Decree of 24.04.2019 No. 557 2019/2020; Standard of higher education: second (master) level of higher education: Decree of 24.04.2019 No. 556 2019/2020; Standard of higher education third (educational and scientific) level, Ph. D. degree: Decree of 30.12.2021 No. 1495 2022/2023 (Ministry of Education and Science of Ukraine, 2022).

The higher education standards are state regulatory documents for determining a set of requirements for the content and results of educational activities at higher education levels of the specialty "231 Social Work" in the discipline of "23 Social Work". At least 35 % of the educational program should ensure general and special (professional) competencies in the specialty '231 Social Work in the discipline of 23 Social Work", defined by the higher education standards. The higher education institution determines the remaining 65 % of the general and special (professional) competencies. For HEIs in Ukraine, the selection of specific (professional, disciplinary) competencies from the TUNING project lists (which are not exhaustive) is recommended. In addition, learning outcomes should be correlated with competencies. Therefore, each HEI develops a matrix of correspondence of specific competence standards to the descriptors of the National Qualifications Framework - NQF skill, communication, (knowledge, autonomy, responsibility), and a correspondence matrix of particular learning outcomes and competencies defined by the standard.

Social work specialists' training programs in Ukraine are developed by HEIs, taking into account the requirements of the National Qualifications Framework, based on European and national standards and principles of quality assurance in education. In addition, they take into account labor market requirements for workers' competencies. The National Qualifications Framework describes 8 specialists' qualification levels according to the development of knowledge, abilities / skills, communication, responsibility, and autonomy (Supreme Council of Ukraine, 2022).

In Ukraine, 72 HEIs provide professional training for social workers, the largest number of which are concentrated in the Kyiv, Zaporizhzhia, Odesa, and Lviv regions. The profile

analysis of HEIs' educational programs for training social work specialists shows that there is a learning structure and main sections (Table 1):

- general information;
- 2) purpose of the educational program;
- characteristics: objects and goals, orientation, focus, program features;
- graduates' suitability for employment and further education;
- 5) teaching and assessment;
- 6) program competencies;
- 7) program learning outcomes;
- resource provision for program implementation (human, financial and technical, informational, educational and methodological);
- academic mobility (national, international, teaching foreign seekers for higher education).

Table 1: Educational programs profile for specialty 231 "Social work": key components of the program

Key	onal programs prome for specialty 231. Social work , key components of the program
components	Component description
Program Features	Use of interactive methods, professional and situational modeling, and principles of Liberal Art Education in the educational process. Realization of the student's personal potential with high human values, development of creative (creative) abilities, and humanism. Training competent specialists capable of meeting the needs of the individual in the complex circumstances of life and, in general, ensuring the competitiveness of NauKMA graduates in the national and international labor markets. Compliance of the educational program with the Global Standards for Social Work Education and Training. A particular emphasis in the undergraduate program is placed on the academic virtue of applicants for education at NaUKMA. The teaching of some disciplines (by students' choice) in English. The content of the key disciplines of the curriculum is adapted to the programs of relevant disciplines in foreign partner universities, taking into account the requirements of major employers.
Teaching and learning	Problem-based learning. Lecture classes are interactive scientific, and cognitive in nature. In practical courses are standard case methods and preparation of presentations on the use of modern professional software. The emphasis is made on personal development, group work, ability to present the results of the work, which contributes to the formation of understanding of the need and readiness to continue self-education during the whole period of professional activity. Prevailing teaching methods and techniques: active (problem-oriented, interactive, project, research, information), etc. Organizational forms: classroom-based, distance, mixed, independent, individual, and integrative learning.
Integral	The ability to solve complex, specialized, practical problems in the field of professional activity or the learning process
competence	involves applying specific theories and methods of social work and is characterized by complexity and uncertainty of conditions.
General	GC1. Ability to think abstractly, analyze and synthesize. GC2. Ability to plan and manage time. GC3. Ability to learn
competencies	and master modern knowledge. GC4. Ability to use knowledge in practical situations. GC5. Ability to conduct research at an appropriate level, the ability to search for, process, and analyze information from a variety of sources. GC6. Ability to communicate in the national and foreign languages, both orally and writing. GC7. Ability to work in an international context. GC8. Skills in the use of information and communication technology. GC9. Ability to be critical and self-critical. GC10. Ability to take the initiative, adapt and act in a new situation. GC11. Ability to work both in teams and alone. GC12. Ability to communicate with representatives of other professional groups at different levels (with experts from other disciplines/social activities).
Specialty competencies	SC1. Ability to analyze the existing regulatory and legal framework regarding social work and social welfare. SC2. Ability to analyze mental properties, states, and processes, formation, development, and socialization of personality, development of social group and society. SC3. Ability to work on preventing social risks, difficult life circumstances, and prevention and resolution of social conflicts. SC4. Ability to understand the organization and functioning of the social protection system and social services. SC5. Ability to study a social problem through research methods in a specific situation. SC6. Ability to assess clients' difficulties, needs, unique characteristics, and resources. SC7. Ability to develop ways to overcome problems and find effective methods of problem-solving. SC8. Ability to provide assistance and support to clients, taking into account their individual needs, age differences, gender, ethnicity, and other characteristics. SC9. Ability to interact with clients, members of different professional groups, and communities. SC10. Ability to adhere to ethical principles and standards of social work. SC11. Ability to perform supervisory functions in social policy and social service delivery. SC12. Ability to shape and implement social work communications. SC13. Ability to justify, make professional decisions concerning social work clients, and take responsibility for their consequences. SC14. Ability to maintain the level of knowledge and continually improve their professional training in the field of social work. SC15. Ability to prepare documents for evaluation and monitoring, to interpret and use analytical information.

Source: National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" (2022); National University "Kyiv-Mohyla Academy" (2022); Boris Grinchenko Kyiv University (2022).

At the heart of the educational program, design is the competency-based approach using ECTS, where achieving the planned results of training in an educational program provides for a particular time spent by the student. In other words, the student's necessary and sufficient amount of academic load, expressed in the ECTS credits (1 credit ECTS is 30 hours), 1 semester – 30 credits ECTS, academic year – 60 credits ECTS. The educational program provides for the allocation of disciplines of two types: compulsory ones and disciplines at the student's free choice following the educational program's profile. The block of general studies includes academic disciplines aimed at forming general competencies in higher education, particularly emotional intelligence, outlook. organizational, and communication skills. The block of professional training includes academic disciplines aimed at creating unique professional competencies in the discipline of the applicant for higher education, particularly for all specialties

of a particular branch of knowledge and supporting character. The block of professional training includes academic disciplines aimed at forming unique professional competencies in the applicant's specialty for higher education, in particular, the subject area and professional direction. Students' academic load includes all types of work (independent, classroom, lab, research, etc.) per the curriculum.

# 4.2 Statistics on the social workers' training in Ukraine

At the beginning of the 2021/22 academic year in the discipline of "Social work" in Ukraine, 2 728 people were enrolled for the first time for HEIs specialists training. The total number of students was 9 295, of which 7 179 were women. The total number of graduates was 2 725 (2 177 women) (Table 2). Compared to the 2020–2021 academic year, the number of

trained/graduates in HEIs was 1 639 fewer compared to the

number of first-time enrollees, which was 173 more.

Table 2: Specialists' training at HEIs at the beginning of 2020/21 and the beginning of the 2021/22 academic year in Ukraine, particularly in

the "Social Work" discipline

	Number of newly enrolled applicants to HEIs	Number of students	Female students	Number of HEIs graduates	Female graduates
Total specialists educated at HEIs, academic year 2020/2021	277 057	1 131 213	599 852	358 808	189 493
Specialists in the Social Work field	2 555	9 980	7 732	4 359	3 458
Proportion of specialists in social work, %	0,92	0,88	1,29	1,21	1,82
Total specialists educated at HEIs, academic year 2021/2022	239 218	1 045 251	562 210	253 825	138 070
Specialists in the Social Work field	2 728	9 295	7 179	2 725	2 177
Share of Social Work specialists, %	1,14	0,89	1,28	1,07	1,58

Source: Ukrainian National Statistics Committee (2022 a; 2022 b).

The number of students in Ukrainian HEIs at the beginning of the 2021/22 academic year with an academic degree in the discipline of "Social Work" was 104 junior specialists,

517 professional junior bachelors, 27 junior bachelors, 7 222 bachelors, and 1 425 masters. The vast majority of students are full-time students.

Table 3: The number of HEIs students at the beginning of the 2021/22 academic year by academic degrees (educational and qualification levels, educational and professional degrees) in the "Social Work" discipline

Indicator	Total		Including by education forms				
Indicator	Persons	%	Full-time	Evening	Correspondence	Distance	
Total	1 045 251	100,00	763 842	1 585	278 539	1 285	
Junior specialist – total	33 310	3,19	30 088	117	3 105	_	
Social Work	104	0,01	97	-	7	_	
Professional junior bachelor – total	56 588	5,41	48 785	175	7 588	40	
Social Work	517	0,05	385	ı	132	_	
Junior bachelor – total	3 171	0,30	2 764	ı	407	_	
Social Work	27	0,00	16	ı	11	-	
Bachelor's degree – total	686 508	65,68	522 611	759	162 306	832	
Social Work	7 222	0,69	5 305	_	1917	_	
Master's degree – total	265 115	25,36	159 071	534	105 097	413	
Social Work	1 425	0,14	862	_	563	_	

Source: Ukrainian National Statistics Committee (2022 a; 2022 b).

# 5 Discussion

HEIs educational programs in Ukraine aim to meet the current legislation concerning the academic development in Ukraine, the HEIs vision, mission, and development strategies for 2020–2025. The educational programs are aimed at training intellectual, mobile, highly qualified, cultural, and competitive specialists in social work who can integrate into the world's academic and scientific space, solve complex and complex problems of scientific-pedagogical and research-innovative nature, conduct their scientific research, create and implement modern scientific knowledge in professional activities.

The National Qualifications Framework for training social workers is based on European and national standards and principles of education quality assurance. It takes into account labor market requirements for workers' competencies. It is introduced to harmonize legislative norms in education and social and labor relations, promote national and international recognition of qualifications obtained in Ukraine, and establish effective interaction between the sphere of education and the labor market. To ensure comprehensibility, comparison, and mutual harmonization, educational and professional qualifications of social workers are described by learning outcomes formulated following the descriptors of the National Framework: knowledge, abilities/skills, communication, responsibility, and autonomy.

At the international level, comparisons and recognition of social workers' qualifications are made through comparisons of the levels and descriptors of the National Qualifications Framework with the European Qualifications Framework for Lifelong Learning. Within the Bologna Process, the European Higher Education Area Qualifications Framework provides the comparison and recognition of educational qualifications, whose levels and descriptors are aligned with the corresponding levels of the European Qualifications Framework (National

Qualifications Agency, 2022). In addition, the European Higher Education Area Qualifications Framework (EHEA QF) introduces an outcome-based (competent) approach to higher education qualifications. An analysis of Ukrainian HEIs educational programs also demonstrates the implementation of this approach to the social workers' training. The comprehensive framework (scale) of qualifications developed for higher education institutions in Europe describes three consecutive cycles of higher education: the first, including a short one (bachelor's), the second (master's), and the third (doctorate). Dublin descriptors are used to describe the qualification framework levels, consisting of five competencies (learning outcomes):

- knowledge and understanding;
- application of knowledge and understanding;
- judgment formation;
- communication;
- capacity for further learning, development, and a credit dimension for the first and second cycles (National Qualifications Agency, 2022 b).

Qualifications for social workers are described by learning outcomes (competencies) according to these descriptors of the National Qualifications Framework: knowledge, skills / competencies, communication, responsibility, and autonomy. Therefore, it is appropriate to include descriptors such as the use of knowledge and understanding, judgment formation, the capacity for further learning, and development in social work training programs.

# 6 Conclusion

The system of HEIs in Ukraine does not have sufficiently clear requirements for training programs for future social workers. Each HEI develops it according to the established and approved template in that particular institution, taking into account

available human, material, and technical resources and the needs of society; it is licensed and accredited. Educational training programs for social workers are developed according to higher education standards. HEIs create educational programs for training social workers in Ukraine, taking into account the requirements of the National Qualifications Framework based on European and national standards and the academic quality assurance principles. The profile analysis of HEIs educational programs for social workers' training demonstrates the introduction of a competency-based approach to the future professionals' education. Therefore, it is reasonable to include such descriptors as the application of knowledge and understanding, formation of judgments, and ability for further learning and development in social work training educational programs.

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Primary Paper Section: A

Secondary Paper Section: AM

# TRANSFORMATION OF CONSUMER MOTIVATIONS IN THE UKRAINIAN MARKET OF HIGH TECHNOLOGY PRODUCTS

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Abstract: The study addresses the problem of the formation of consumer motivation in the Ukrainian market of high-tech products. The specific features of consumer motivation forming are analysed on the basis of a number of market researches undertaken by the author at different stages of socio-economic development of the Ukrainian society. The factors of actualisation and influence on the consumer motivation development were determined. The features of the formation of customer needs of high-tech products under the influence of its internal stimuli and environmental factors were defined. It has been compiled the classification of consumer motivations and hierarchy of the needs of Ukrainian consumers in the article. The basic directions of consumer behaviour transformation in the Ukrainian market of high-tech products were determined.

Keywords: High-tech products market; consumer motivation; buying behaviour; consumer needs.

### 1 Introduction

Ukraine's integration into the global scientific and technological expanse and its active involvement into the social intellectualization process are taking place under the conditions of economic entities' market activization. These processes are also influenced by intensifying competition, rapid changes in technology and life cycles of high technology (high-tech) products. The latest improving of Ukrainian consumers' technology proficiency, high dynamic change in their preferences, and structural change of qualitative component of demand are leading to significant market transformation of consumers' behavior and changes in their motivations. All these factors contribute to the need to look for the mechanisms to influence the development of high-tech products markets. This also actualizes for the manufacturers the issue of the development of innovative products and effective management of consumer behavior in the indicated markets. Fight for purchasing preference among the rapidly changing technologies, fierce competition and the inability of a consumer to immediately understand all the technological intricacies of a product appear to be extremely difficult. It subsequently requires balanced strategic decision-making involvement in the process. The investigation of the structure and dynamics of the motivational process of a consumer market behavior makes it possible to identify the causes of such behavior, to establish the reasons that crucially affect the consumer choice and form the basis for determining the direction of market behavior of a

# 2 Literature Review

A great number of scholars devoted their scientific researches to the problems of consumer motivation and the development of motivational sphere structure in the process of a human's market behavior. Among them it is necessary to distinguish Foxall, Goldsmith, Brown (2001), Blackwell et al. (2006), Schiffman, Kanuk (2006), Statt (1997), who explored practical approaches to consumer behavior using the basic principles of business and marketing. Researchers have focused on consumer decisionmaking, their behavior, motivation, factors that attract the attention of consumers and maintain their loyalty, turning ordinary customers into supporters of the product or company (Komal, 2021; Decker and Stummer, 2017). The scientists in the area of psychology, whose achievements have formed the theoretical basis for the study of human behavior as a consumer, should either be noted. Thus, a significant contribution to the development of motivational theories was made by Maslow (1987), Ilyin (2004), Floyd et al. (2022), and others.

Kolb (2020) examines how the use of social media affects consumer segmentation and also the factors that influence the purchasing decision-making process. The study proves the existence of unique situations in the process of deciding to buy a business, as well as the use of geographical, demographic and psychographic segmentation, which affects the positioning of competitors. Breitsohl, Jimenez & Roschk (2022) offer the results of a study on the reasons that motivate consumers to use the strategy of intimidation of other consumers about brands on social networks. Researchers are proposing the term "Consumer Brand-Cyberbullying" (CBC), which is becoming increasingly popular on social media, and argue that such consumer actions can lead to cyberbullying related to the brand. Waehning and Filieri (2022) suggest using an ethnocentric scale of consumers to study consumer motives to buy national and regional products, as well as a mixed approach to a deep understanding of consumer motivation. A study of German consumers identified three main factors in consumer decision-making: environmental friendliness, higher quality and territorial identity.

Some scientific works are dedicated to the functioning of high-tech products markets and to the research of market activity features of business entities in these markets. Moore (2014), Mohr, Sengupta, Slater (2010), Moriarty, Kosnik (1989) and others describe the basis of the methodology of bringing high-tech products to market and form an idea of the practical aspects of high-tech marketing. Researchers argue that in the life cycle of technology, which begins with innovation and ends with the transition of the product to the consumer, there is a huge gap between the early adopters and the early majority. Therefore, the challenge for marketers is to narrow this gap and ultimately accelerate implementation in each segment (Moore, 2014).

Sahadev (2019) in his study focuses on the behavioral aspects of consumers and the management of marketing channels for hightech products. In unison, the following characteristics are decisive for high-tech products: the frequency of technological innovations, shorter product life cycle, high level of uncertainty of consumer behavior and interests, and so on. With regard to marketing strategies, the strategy of protectionism is traditionally used in technology-deficient industries. At the same time, McCrohan (2015) and Gronhaug, Möller (2007) believe that protectionism is effective in high-tech markets.

According to Truong et al. (2017), the choice of the appropriate branding strategy is a decisive factor in the success of a new product among consumers and will affect their behavior. The previous strategy for fast-growing products stipulates that new products must quickly attract the attention of consumers. However, for high-tech products, such a strategy does not always work, as such products often pose a much greater risk to consumer behavior. Accurate positioning of a high-tech product on the market ensures the goal of differentiated marketing. Dai and Li (2022) argue that the analysis of big data on consumer behavior can purposefully help to find customers and refine the highlights of the promotion of high-tech products on the market. Authors suggest paying attention to the defining characteristics of high-tech products, which allows to understand the features and directions of differentiated marketing, highlight differences between different groups of high-tech products, summarize the characteristics of certain consumer groups and identify marketing areas to track customer needs and weaknesses (Dai and Li, 2022).

Quite new is the approach proposed by the Horodnic et al. (2020) on the peculiarities of shopping in the informal economy, and the study of factors affecting consumers. At the same time, consumers are explained as rational subjects of the economy, because they are looking for a more convenient agreement that provides a lower price or better value for money, while consumers are seen as social entities seeking to help society.

However, despite the existence of a profound scientific interest in the issues mentioned, the features of the development of consumers' motivation when buying innovative products, as well as the structure and dynamics of the motivational process in the high-tech market are not fully disclosed.

The purpose of the article is to reveal the structure and peculiarities of the process of Ukraine's high-tech products consumer motivation development, to investigate the factors of actualization and influence on the consumer motivation development, to identify the areas of Ukrainian consumers' market behavior transformation in the target market.

### 3 Methodical basis of the research

Studying the market behavior of Ukrainian consumers, the author applied qualitative and quantitative methods of collecting primary data, namely, expert interviews, focus-group interviews of target customers, and selective observation. In our opinion, it is essential to use expert interviews and professional assessments to achieve the aim of the study and to implement the objectives. But these methods do not guarantee the obtaining of fully objective market information about the peculiarities of consumers' motivational sphere in the target market. It is possible to fully capture consumer preferences by using the opinions and estimates of consumers themselves. The specific feature of the focus-group interview is the group interaction of its participants, when the expression of respondents' opinions develops into a group discussion facilitating the expression of different standpoints, explanations and arguments. The basis for identifying the areas of consumer motivations' transformation is the result of a number of market researches undertaken by the author in 2006, 2012 and 2021. The processing of the received data makes it possible to identify certain behavioral peculiarities of high-tech products consumers on the Ukrainian market.

### 4 Results

The content and the succession of stages taken by a consumer in their purchasing behavior differ depending on the source of the stimulus that affects their awareness. Boosting of the incentives of a market actor can be affected by various external stimuli or motivators initiated both by a manufacturer (advertising through mass media or product demonstration), and by people around the consumer. External stimuli can influence the motivational process at its different stages. They either activate specific needs and motivational sphere of the consumer or affect the already started process of a motive development, thereby stimulating and increasing its strength. As an external stimulus a manufacturer uses a product and a complex of marketing communications, which is intended to influence the development of both the motive and consumer behavior. The most common variant of motivation development caused by external stimuli is the situation when certain products that cause human desire to possess them determine their behaviour. These products are able to activate the purchasing behavior even in the cases when the relevant need has not been actualized yet. The results of our study showed that for the majority of respondents the external stimulus plays a crucial role in actualization of a new product or a new model of high-tech products needs. Thus, 68% of respondents of focus-group interviews indicated that they mostly used old technology without significant discomfort and did not pay attention to any inconvenience. However, with the advent of a new technology and a new product they showed interest in it, evaluated its benefits and advantages, waited until it was tested by others, and then made a purchase. Herewith, they were fully aware of the old product's shortcomings in the process of obtaining information about the new one. The general succession of the respondents' actions in this case is the following:

I learned about a new product  $\Rightarrow$ I was interested  $\Rightarrow$ I gathered the information  $\Rightarrow$ I waited for the feedback from the first users of a new item  $\Rightarrow$ I formed my own attitude to it  $\Rightarrow$ I made the purchase  $\Rightarrow$ I estimated all the benefits from consumption. Consequently, a new

product with new features and new opportunities is the main external stimulus of needs activation.

During the research it was determined that the consumer reaction to the external influence and their acceptance / rejection of incentives mainly depend on four groups of factors:

- the first group of factors is associated with the personal characteristics of consumers: their interests, viewpoints, beliefs, innovation, attitudes, self-esteem, cognitive activity, previous purchasing experience;
- the second group of factors is modeled by the market characteristics of a manufacturer: experience in the market, market authority, the intensity of technological innovation, the presence of failed products, brand image;
- the third group of factors, situational ones, is determined by the degree of consumers' awareness of means/products, the number of options of a problem solving, the complexity of the decision made and the uncertainty about how to solve this problem, as well as trustiness or customer loyalty to the brand;
- the fourth and the last group includes 'social norms' of market behavior, which are followed by the consumer, who pays attention to the positive or negative attitude of the society to the manufacturer, to the response to a new technological product, that is to social approval of the solution of the problem in this way.

In addition to these factors, the essential role is played by the consumer awareness of the problem or the stage of a motive development. In the process of conveying the information to the consumer about products that are able to solve the current problem, the psychological stimulation and activation of a motive are taking place. Taking this into consideration, the manufacturer must take into account the level of activation of emerging needs while creating or choosing motivators. The remaining 32 % of respondents indicate the presence of internal needs to possess something new and claim that their being dissatisfied by using existing product stimulates their continuous search for new products and models. Because of this, consumers always buy specialized technical publications, attend trade shows, surf the Internet tracking new technologies and developments of technological leaders of certain product categories. This group of respondents is aware that they are satisfied with a newly purchased product only for a short period of time. After that they continue being interested in new products. The general succession of the respondents' actions in this case is the following:

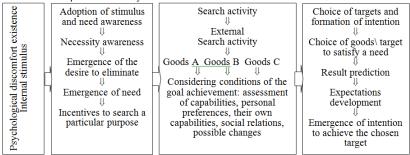
The internal dissatisfaction  $\Rightarrow$  Continuous search and gathering of information about new products  $\Rightarrow$  The interest in the newest technology/product  $\Rightarrow$  Gathering of information about definite technology/product  $\Rightarrow$  The development of attitudes to a new product  $\Rightarrow$  Purchase positive attitude)  $\Rightarrow$  Its adoption or declining during a consumption process  $\Rightarrow$  Communication with the environment on the experience from the using of a new product.

The process of a motive development under the influence of internal stimuli is much more complicated compared to externally stimulated motivation. It is necessary to take into account the wide range of potential internal incentives and possible interconnections that occur between the internal and external factors in the process of needs activation and motivational process deployment. Figure 1 presents the main stages of internally organized consumer motivation.

By both internal psychological processes and characteristics of the individual who is the consumer of innovative products. In the study we also determined the following groups of factors which are taken into account by the consumer when considering different options to meet the needs and which also influence the choice of a specific goal:

- assessment of opportunities the availability of the means to reach a goal (mostly financial ones), spending time and effort:
- consideration of personal preferences the level of demands, habits, beliefs, values, internal adjustments;
- consideration of personal capabilities the availability of knowledge, skills, peculiarities of cognitive processes;
- consideration of social relations the analysis of social values, attitudes, norms, position in the social group, the impact of reference groups, a tendency to conformal behavior:
- consideration of possible changes change of a lifestyle, subjective evaluation of succeeding and meeting needs.

Figure 1: The scheme of motive development caused by internal stimuli



Source: compiled by the author based on the approach proposed by Ilyin (2004)

Considering the researches of Ukrainian consumers' motivations we defined three motives (self-fulfillment, recognition, social affiliation) are classified as socio-emotional and reflect the consumer's desire for socialization, demonstration of their achievements, using elements of social prestige. These motives are caused by already developed social position of a product that is considered to be product status. The results of the study showed that the most important determinants of consumer behavior are those directly related to the status and role position of an individual. Thus, 76 % of respondents agreed with the statement that certain models of high-tech products are status articles and their appliance emphasizes affiliation to a particular

social group. Even a higher percentage of respondents (81 %) believe that the best way to express their individuality in modern society is to purchase technological innovations. However, the representatives of the segment aged 17 to 27 are willing to give up some everyday expenses to have a financial opportunity to purchase more up-to-date technological product (80 % of respondents provided this answer). Accordingly, we have investigated the importance of the impact of the individual (cognitive, emotional or volitional) components and external (social) factors in developing consumer demands for high-tech products (Table 1).

Table 1: The impact of individual and social factors on the consumer needs development

•	The essence and significance of factors						
Group of needs	Individual / (character of mental process)	Consumers*,	Social	Consumers,			
Need for knowledge and intellectual development			I want to keep up with modern development, want to be aware of new technologies	59–71			
Need for self-fulfillment	I want to realize my potential I have needs for achievements / volitional	64–76	impact is unknown	-			
Need for creativity	I want to create / volitional, cognitive	4558	no impact	_			
Need for affiliation and social membership	I feel psychological discomfort caused by loneliness / emotional	49–61	I want to be a part of the world around me	37–49			
Need for new experiences, pleasures	I want to have good time, to get satisfaction from life / emotional	41 4	no impact	-			
Need for freedom and independence	I want to live the way I want / volitional	29–41	no impact	-			
Need for individuality	I want to be different / volitional	55–67	I want the people to notice my individuality	43–54			
Need for stability and safety	r stability and safety  I want to feel protected and to be confident in the future / volitional		My social position must be stable	64–76			
Need for recognition	slight impact	_	I want to be noticed and recognized	24-36			
Need for comfort and easy living	I want to live easy and carefree / emotional	22–34	slight impact	_			

\*Confidence intervals are given in the synthesis of the data on the general summation with confidence probability 0, 95 Source: compiled by the author.

As it can be seen, the activation of the vast majority of consumer needs in the target market occurs due to the internal movements of an individual. So, psychological factors and personality traits of the end user affect consumption patterns and behavioral models. These are:

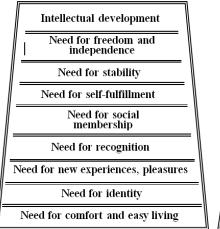
- human desire to meet the needs for personal growth (need for recognition and intellectual development, selffulfillment and creativity);
- desire for individualization of behavior, for emphasizing personal identity (as opposed to adjustment "be like everyone");
- existence of needs for continuous getting of new experiences and pleasures, which is implemented through the active use of new technologies;
- consumer's desires to achieve a stable and secure life, their striving to make the world predictable, measured, organized and to have confidence that priority needs will also be met adequately in the future;
- high adaptability to the new lifestyle and new behavioral patterns that are developed as a result of active use and dissemination of the latest technologies;
- existence of the consumer's utilitarian desire to facilitate everyday life, to save the time to solve domestic problems;

- desire of the individual to achieve and maintain a certain status and role position in the society that requires keeping to the established behavioral patterns, including the consumption:
- prevalence of needs of the individual for active communication, obtaining and disseminating of the information about their experience of using up-to-date products and derived benefits.

The investigation of consumer motivations in the Ukrainian market of high-tech products in different time periods made it possible to identify certain transformation of consumers' market behavior. At the initial stage of the development of the majority of high-tech products markets, there dominated social and rational motivation for purchasing goods. High-tech products were an inherent part of the person who wanted to demonstrate their financial and social status. With the stabilization of the economic and political situation in the country, increasing welfare, commodity saturation and, respectively, meeting of society's basic needs, there was a significant increase in the level of technological literacy of Ukrainian customers. There were also found both changes in consumer preferences and reorientation of qualitative component of demand. The research results of this period testified the transformation of motivational benefits from social and rational aspects toward emotional and social components. The main reasons for the predominance of the irrational motivation when purchasing the goods at this stage of development of the market are defined as predisposition of Ukrainian consumers to conformal behavior and their desire to meet hedonistic needs. It should be noted that a significant social trend in consumption in those days became a demonstrative consumption by the middle and the low social classes, not just by the upper class. It resulted in the purchase of expensive goods, the need for which was overestimated and formed under the "social pressure". There was a high level of social mobility of consumers (despite the lack of a clear social stratification of country's population), allowing the consumer whether to highlight their social status or to keep up with modern trends and show that they are "not worse than others". Global mass media system, which contributed to the expansion of the elements of Western culture and consumption patterns, had a significant impact on the development of new social and cultural needs, new tastes and preferences of consumers.

The effects of the 2007–2008 global financial crisis negatively influenced the pace of the most commodity markets, led to a several times reduction in consumer demand for high-tech products. The experts note that the low solvency of the population that spends half of the aggregate income to purchase food and fast-moving consumer goods limits significantly the demand in the market, which may potentially grow and develop. The key transformational changes in consumer motivations are the desire of consumers to meet primarily the mental and physiological needs: the need for identity, safety and stability (Figure 2).

Figure 2: Hierarchy of the needs of Ukrainian consumers of high-tech products according to the results of 2006 and 2021 researches



Need for freedom and independence

Need for social membership

Need for comfort and easy living

Intellectual development

Need for creativity

Need for stability and safety

Need for new experiences, pleasures

Need for self-fulfillment

Need for identity

Source: compiled by the authors.

It is necessary to point out that the significance and relevance for consumers to meet the needs for new experiences and pleasure of use a new technological device are not changed. This can be explained with the consumers' intention to improve emotional disposition and raise their own level of life satisfaction, despite the decline in the general welfare. It can be achieved through the consumption of technological innovations. This trend is especially observed among the youth who are getting or already have higher education and are professionally oriented.

# 5 Discussion

The study offers fresh insights into the formation of consumer motivation in the market of high-tech products. Our findings indicate that Ukrainian consumers' motivations can be defined into three motives: self-fulfillment, recognition, and social affiliation, which are characterized as socio-emotional and reflect the consumer's desire for socialization, demonstration of their achievements, using elements of social prestige. Waehning and Filieri (2022) on the basis of the German consumers study identified such main motives in consumer decision-making: environmental friendliness, higher quality and territorial identity. Rashel, Ahmed, Lee (2017) determined the impact of high-tech product attributes on consumer satisfaction with cluster research and simple random sampling methods. According to the results,

all factors, except for the physical benefits of the product, had a significant positive impact on customer satisfaction through perceived value. These results indicate the impact of the value of a high-tech product that is perceived by the customer, the relationship between product attributes and customer satisfaction.

It is advisable to pay attention to the suggestion of Breitsohl, Jimenez & Roschk (2022) that politicians and marketers should become socially responsible participants in the consumer market, such an approach can be a positive corporate contribution to the culture of consumption, social welfare and consumer sentiment. Kolb (2020) proves that the development of a marketing strategy implies the mission, vision and values of the company, as well as the need for in-depth analysis and research and only then decide which segment of consumers will be most interested in buying a particular product. Sahadev (2019) evidences the connection between the defining characteristics of high-tech products (frequency of technological innovations, shorter product life cycle, high level of uncertainty of consumer behavior and interests) and variables of marketing marketing channels in the context of high technology. The author proposes a model that includes important consumer behavioral variables related to marketing channel management. Research in experimental and field conditions shows that consumers of high-tech products react more favorably to existing brands of innovative products, so the risk of the strategy of their promotion in the market is reduced (Truong et al., 2017).

The results of the research also showed that such individual consumer's characteristics as age, income, educational background, and professional activities are significantly important when forming consumer needs and have an impact on the nature of their motivation. In particular, the needs of the young are socially-oriented, although the research carried out in 2021 highlighted the importance of strengthening the emotional reasons for buying goods, namely, meeting the needs for creativity and for new experiences and pleasures. The motivation of middle age people is mostly linked to meeting the needs for self-fulfillment. Aged consumers are motivated by the need for stability and safety. As soon as the consumers' income increases, their motivation gets more social and emotional nature. As soon as the level of education increases, the proportion of consumers who are guided by emotional motives of purchasing goods is growing. These findings correlate with the Dai and Li (2022) study, which shows that the majority of people who use hightech products are young people with at least secondary education who have sufficient skills to use high-tech products. But such consumers are quite complex in terms of marketing. In this regard, when formulating a strategy, we agree with the idea of sharing high-tech products focusing on people of different ages and explore their needs to increase customer satisfaction and trust in high-tech brand.

### **6 Conclusions**

The formation of consumer's market behavior begins with the enhancement of motivational process. The disquisition of its structure makes it possible to identify the causes of such behavior and to define the determinants which have a decisive influence on consumer decision-making and direct the consumer's choice. The structure and dynamics of the motivational process depend on the type of incentives which impact the process of intent development as one of the stages of motivation and activate consumer's market activity. The components of a producer's marketing mix and consumer's social environment lead to the development of motivation caused by external stimuli - externally organized motivation. The internal psychological processes of an individual, activation of needs for cognition, creativity, freedom and independence generate internally organized motivation and also encourage people to market activity. The results of the research have shown that at present functioning of Ukrainian consumer market the Ukrainian consumer is more prone to individualization in making purchasing decisions, seeks to meet hedonistic needs, to self-fulfillment, personal development and spiritual growth. Consumer preferences are being transformed from the sociorational aspects towards emotional and emotional and rational components. The authors believe that further researches should pay attention to the ascertainment of dependencies between external determinants of motivational process activation and the nature of activated consumer needs. This information will give companies the possibility to apply communication tools to influence the transformation of consumer motivations, therefore, control the behavior of consumers and determine the direction of these markets.

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# **Primary Paper Section:** A

**Secondary Paper Section: AH** 

# AESTHETIC AND ARTISTIC VALUES AS SENSORY SPIRITUAL COMPONENT OF PERSONALITY

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Abstract: The relevance of research work is due to the need to clarify and detail the term "individual's artistic values" and considered the need for changes in education, in particular, art. The purpose of reseach work is determine the semantic meaning of "individual's artistic values" in terms of internal qualities, personality formations. Objective: analyze and synthesize the terms "aesthetic value", "artistic value", "aesthetic and artistic value of the work", compare them and consider the commonalities between the main provisions of the problem. Research methods: analysis and synthesis of philosophical, art, pedagogical sources; generalization of results. The artistic value of the work is formed "at the intersection" of subjective-creative, information-reproductive, socio-psychological, emotional-sensory, semiotic, educational, motivational-activity aspects of art. The intersections between them are intertwined and interconnected. These aspects can not exist independently of each other, they complement each other, occupying a dominant position, depending on individual's experience, condition, needs, intelligence. Aesthetic and artistic values of personality are system-complex formations that are connected, on the one hand, with the internal sensory-spiritual component of personality (needs, attitudes, assessments), and on the other, subjectively perceived meaning of weight and significance of the work of art, which has a strong influence on the consciousness of the recipient, regardless of temporal and cultural boundaries.

Keywords: Education, art education, school of art, aesthetic education, aesthetic values, artistic values of art work, personalities' artistic values.

# 1 Introduction

Values, as regulators of human behavior, play an important role in the cultural development of society. The formation of aesthetic values occurs in the process of societies' historical development. This determines their diversity. The value relations' quality is influenced not only by subjects and objects, but also by the conditions and circumstances under which this relationship is formed. The significance of the subject is formed when creating a relationship with a person. Therefore, within culture is the formation of special ways of consolidating and transmitting values from generation to generation, represented by traditions or customs, special public institutions: education, cultural institutions, etc. In other words, values serve certain needs of society and have public benefit.

The urgency of the problem arises in the context of several controversies: first, how is the educational usefulness of art combined with the utilitarian usefulness of art works? Secondly, is utility as a value, in relation to art, special in the formation of value orientations of the individual? And next, can the artistic values of the individual be considered as a special specific and individual multifaceted formation, or is this term appropriate only to determine the value of art work?

The purpose of the study is to determine the semantic meaning of "individual's artistic values" in terms of internal qualities, personality formations. We consider it appropriate to define the task: analysis and synthesis of the term "aesthetic value", "artistic value", "aesthetic and artistic value of the work", their comparison, consideration of the main provisions, aspects of the problem.

## 2 Methods

Research methods determine the analysis and synthesis of scientific thesaurus on research issues, generalization of these results; definition of the term "artistic values as the formation of personality". The research methodology is the work of A. Shaftesbury, F. Hutchenson, D. Hume (philosophical theory of beauty and the ability to taste); A. Baumgarten, I. Kant

(theory of aesthetic values of personality and sensory / sensory nature of aesthetics); V. Asmus, Y. Borev, B. Nemensky, L. Stolovich (social content of aesthetic values). Among modern scholars, it is appropriate to single out L. Mikhailov, O. Otych (aesthetic values of the development of creative individuality of the individual and the formation of personalities' aesthetic orientations).

## 3 Literature review

The answer to this question: "Can artistic values be considered as a special specific and multifaceted formation of the individual, or is this term appropriate only to determine the value of art work?" depends on the understanding of the categories of "aesthetic" and "aesthetic value", as well as the categories of "art" and "artistic value". Let us dwell in more detail on these categories.

The term "aesthetic" (derived from the Greek word "aesthetics", meaning sensory perception) acquired philosophical significance in the eighteenth century thanks to A. Shaftesbury (1711), F. Hutcheson (1725) and D. Hume (1757). They developed theories of the sense of beauty and the ability to taste – the properties that allow you to judge the beauty or ugliness, at least at the time.

Baumgarten A. (1750), introducing the term "aesthetics", emphasized the sensory rather than intellectual nature of such judgments. Then the idea grew into I. Kant's concept of aesthetic judgments (1790), which were considered conceptual and based solely on pleasure or displeasure. I. Kant identifies a subcategory of aesthetic judgments (namely, the judgments of the beautiful), which he describes as selfless, that is, regardless of interest in the existence or practical value of the object. This Kantian concept of selfless judgment, rooted in hedonistic experience, is the basis of many modern theories of human aesthetic values.

Gradually, new ideas and views led to the expansion of the category of aesthetics and its components. Aesthetic values were considered not only as formal features of art works (means of expression: color, line, composition, rhythm, proportion, measure, symmetry / asymmetry, etc.), but also that they depend on other properties or may interact with various other aspects (contextual, cognitive, moral). In particular, they can be pragmatic, based on relationships that are related to pragmatic (material, utilitarian) human needs. In this case, they can be determined by the usefulness of the thing. Values can also be outside the pragmatic categories, to reveal the spiritual, non-utilitarian value of the world. In this case, their specificity can be explained by such a concept as meaning. For example, scientists (V. Asmus, Y. Borev, L. Stolovich, etc.) argue that aesthetic values have a social meaning and are closely related to the process of accumulation of sensory-emotional and value-oriented human experience.

Values are different depending on the phenomena inherent in them and are formed in different ways. Thus, the aesthetic values of natural phenomena and some phenomena of social life appear regardless of the conscious intentions of people. However, aesthetic values can be the result of conscious human activity, when it's consciously seeks to create a beautiful, aesthetically valuable. This is an artistic activity in the process of which a product is created that corresponds to the objective laws of aesthetic and artistic value and is the aesthetic value of art. M. Bakhtin in this regard noted that the aesthetic is fully realized only in art and therefore art should focus on aesthetics.

B. Nemensky notes that the individual has reached a high level of aesthetic development when "the common good and truth are transformed into deeply personal, free, selfless aesthetic pleasure, and general harm, guilt – in the same personal insurmountable disgust" [Nemensky, 1987: 20]. Therefore, true

artistic and aesthetic values evoke honest, conscious, "smart" emotions that affect the development of the individual's intellectual sphere and the individual in general.

According to L. Mikhailova, "aesthetic values are inherent in works of art that have stood the test of time and become the property of world, national cultures and culture of the native land" (Mikhailova, 2018: 9).

The author believes that "aesthetic values contain two layers: the first is the sensory reality, the qualities that form the external form of the object. The second layer of aesthetic value, in particular artistic phenomena, is the result of the refraction of these properties through the prism of human experience, regardless of whether it is the experience of society as a whole, one of social classes (strata) or individual. Spiritual (aesthetic) values are not prone to moral aging to the same extent as material values. Their consumption is not a passive act, on the contrary, in the process of their assimilation a person is spiritually enriched, improves his inner world. The higher place of aesthetic values in the hierarchy of personal values, the stronger their influence on the human's spiritual world. Aesthetic values, perceived and accepted by man as dominant, perform an orienting function in a particular activity on the manifestations of beauty, and thus bring the activities of the individual to a qualitatively new level" (Mikhailova, 2018: 14).

Aesthetic values of the individual, as if imperceptibly correcting the negative effects of socio-cultural environment, reveal the deep, essential links between natural, cultural and social phenomena and processes, affect the world formation as a whole system, and "most importantly – leads to personal awareness of care to everything that harmonizes and preserves its unity and integrity" (Mikhailova, 2018: 24).

Thus, aesthetic values are those things, objects, phenomena and states (for example, works of art or the natural environment) that can cause a person a positive or negative reaction in their aesthetic evaluation. The artistic and aesthetic values of a art work (and much of which will be extended to the environment) are related to the experience it provides when perceived accordingly. If this process provides satisfaction in the perception of human beauty, features, sensuality, grandeur, harmony, proportion, unity, etc., it is a positive aesthetic value of culture. If it causes negative emotions, then the property of the work of art will be negative, in terms of aesthetics.

In art, the social environment, aesthetic values manifest themselves in different ways, but the aesthetic evaluation of phenomena, processes, objects, relationships is always correlated with the criteria associated with the ideas of beauty and harmony. Aesthetic values are represented in the results of artistic creativity, namely in art. Due to its specific nature, art allows to perceive, feel and internally establish the intersections between different phenomena of the world. It is through acquaintance with art works of aesthetic value that the world's integrity, beauty and harmony is revealed. The destructive force is false, artificial values that are now worldwide.

It is necessary to consider "the peculiarities of the aesthetics in art manifestation, and hence the specifics of the art works' impact on the individual's spiritual world, when the degree of aesthetic values influence on other types of orientations increases, contributing to their effectiveness", said L. Mikhailov.

When researching the issues of aesthetic and artistic values, it will be appropriate to pay attention to aesthetic value orientations. The definition of L. Mikhailova's term is considered appropriate, namely, "aesthetic value orientations are due to social influences and internal needs personal systemic formation of fixed attitudes to the perception, evaluation and choice of aesthetic values, focusing on their creation in their own and social activities" (Mikhailova, 2018). Aesthetic attitude in this link creates a basis for practical aesthetic activities, forms a certain aesthetic and figurative assessment of objects, phenomena, arouses interest in it.

## 4 Case study

Art is in the system of aesthetic values. There is a line between the concepts of "aesthetic" and "artistic" value. It is believed that the first category covers everything that satisfies a person's need to enjoy the beautiful, the second – only the results of artistic creativity, i.e. the actual work of art. But both are phenomena of one nature that satisfy spiritual personalities.

A work of art is a carrier of artistic value. But among what can be formally attributed to the field of "art", there are works that have no artistic value. Such works are products of mass art, imitation and surrogate art. Such products have no aesthetic value. It should be borne in mind that the word "work of art" can mean something that simply refers to art, regardless of its artistic value.

Artistic evaluation is an act of awareness value. At the same time, if the artistic value that arises in the process of social artistic practice is objective in nature, then artistic evaluation is subjective. Behind the latter are the interests and artistic needs of a particular cultural and historical subject, it is formed by value requirements that form a historically mobile and complex hierarchical system. In addition, artistic evaluation always carries an emotional, sensual nuance — as if a reflection of the experienced experience, which is then translated into the intellectual level. And this is also a factor in its subjectivity. This, however, does not prevent artistic evaluation to be an effective mechanism in the objective development of culture.

It is important to note that the aesthetic value of satisfaction or dissatisfaction that deserves attention is best seen as directed at this object, not simply caused by it. Thus, the property of aesthetic value is not based on beauty, because many works of art are not beautiful.

Artistic activity arises from the need to separate, concentrate and objectify the aesthetic relationship from other relationships and activities. The specificity of art is that it concentrates the aesthetic principles that are in each of the other activities, forming a significant aesthetic ingot. The aesthetic also exists outside of art, but in art it is clearly concentrated. Therefore, artistic value is a specific kind of aesthetic value and is the beauty of art work.

Based on it, aesthetic values will be the coordinates of the main aspects of art and its artistic value.

- Subjective-creative aspect: the artist creates an artistic image, taking into account the relevance of important internal and social issues through personal sensory, practical experience, transforming and modifying this image in his work with the help of expressive means.
- Information-reproductive aspect: the artistic image reflects
  the "primary" reality, the knowledge of objective reality
  (nature, society, human) in its relationship with the
  individual and society in each particular historical epoch.
- 3. Socio-psychological aspect: personality society. The polarity and unity of the two aspects is as follows: the embodiment of the unique artist's spiritual world, which expresses the subjective reality of both the characters depicted by the artist and the artist itself as a unique person. On the other hand, the social aspect corresponds to the fact that the work of art expresses social attitudes, interests, needs, problems, ideas and ideals depicted by the artist and to which he has a personal relationship.
- 4. The combination of the previous aspects forms the evaluative-sensory aspect. Assessment is the spiritual relationship of subjective reality to the objective, the reflection of the reality phenomena, refracted through the spiritual world, the interests and needs of the individual. The artist not only receives information about the phenomena of reality, but also emotionally and rationally evaluates them.
- 5. The intersection of subjective-creative and sociopsychological indicates the *semiotic aspect/sign*. On the

- one hand, artistic materializes, objectifies the reflection of the world in the minds of the artist and its spiritual world, and on the other forms a specific "language" of art, without which it is impossible to implement the communicative function. The reflection of the artistic maage is embodied in a certain system of artistic means that play the role of a signs' kind that create the "art language".
- The educational aspect of the artist's activities carried out through its work. The educational art potential is realized due to the fact that it reflects reality in terms of social needs and interests, from the certain social norms and ideals standpoint.
- 7. The combination and intersection of all these aspects forms a motivational-activity aspect. These are activities in the field of imagination, casual activity in an imaginary situation, psychological preparation for "serious" activities, development of human cognitive abilities and abilities of mental regulation of activity, "playing" different behaviors and actions, their analysis without pursuing external goals.

Thus, art can't be reduced to one aspect. However, all aspects of a certain systemic unity, unique to each species, genre of art and even each work, participate in the formation of artistic value, acting as "parameters" of its criterion. A work of art combines different characteristics, being a cognitive reflection of reality and its evaluation, material construction and a special kind of sign system, expression of the individual spiritual world of the individual and social phenomenon, game and means of educational influence. And all these characteristics are systematically interconnected, and inseparable in its integrity of the work, which has due to this artistic value.

The artistic value of the work is formed "at the intersection" of all the above aspects of art. The intersections between them are not rigid structures, but like vessels that are intertwined and connected with each other. These aspects can not exist independently of each other, they complement each other, occupying a dominant position, depending on the experience, condition, needs, intelligence of the individual.

## 5 Discussion

What is the artistic value of a art work and what are its complex criteria? We see the following: the truthfulness and honesty of the artist; skill, novelty and professionalism; individuality and originality of creative decisions; the inner living, as if naked, wealth of the expressed spiritual world of the artist; the depth of social problems and the importance of social ideals, taking into account time boundaries and cultural features; art and expressiveness, content; pleasure and aesthetic-value attitude, aesthetic effectiveness of the work.

## 6 Conclusion

Thus, art is a field in which a product / phenomenon / object is created that can have aesthetic and artistic value. A art work that has artistic value is the core of this field and is the bearer of the inner meaning, which affects the formation of personal artistic and aesthetic values. It is plausible and appropriate to say that artistic values are system-complex formations of personality, which are connected, on the one hand, with the internal sensory-spiritual component of personality (needs, attitudes, assessments), and on the other, subjectively perceived meaning the importance and significance of a work of art that has a strong influence on the consciousness of the recipient's personality, regardless of temporal and cultural boundaries.

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## **Primary Paper Section:** A

Secondary Paper Section: AA, AL

## FORMING THE RHETORICAL COMPETENCE OF FUTURE TEACHERS

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Abstract: The content of the author's academic discipline "Rhetoric" is evaluated and the results of experimental testing the effectiveness of its implementation in the process of professional training of future teachers are revealed in this study. The ascertaining in the experimental and control groups, based on the defining the future specialists' level of the personal-activity component of the rhetorical competence mastering is described in the paper. The predominance of the average and low percentage necessitated the enrooting of a special course "Rhetoric" into the training and professional programmes of degree seeking applicants' experimental group. The obtained results showed natural differences between the indicators of the respondents in the experimental and control groups. Applicants, covered by experimental and research training, became more motivated to the rhetorical activity in the educational and professional communication; the system of humanistic values has reached a higher level; the level of speech and rhetorical knowledge itself has increased; the ability to eloquent text creation observing moral and ethical norms of communication was formed. We can state that educational content of the special training course "Rhetoric" is effective in the process of forming the rhetorical competence of future professionals in the educational field

Keywords: Rhetoric, training course, educational content, educational process, experimental and control groups, educational and professional communication, rhetorical knowledge.

# 1 Introduction

The current realities of communicative globalization have led the scientific community to solving humanitarian issues, related to the social aspects of human interaction. This issue correlates with the nationally-consolidated function of the mother tongue within a certain state and motivates the educational paradigm of the XXI century to form a rhetorically competent professional, who is skillfully masters the usage of effective communication strategies and speech tactics. An teachers becomes the predominant of such process. Undoubtedly he should be extremely sensitive to the language, vulnerable to linguistic inaccuracies and persisting in qualified advice and explanations as he is aimed to foster linguistic stability as a social and political phenomenon, based on national traditions, culture and consciousness.

In view of the foregoing, this determines the revival of the Rhetoric studying – the science, aimed at forming humanistic and linguistic oriented personality, good at effective communication in modern multicultural space. The professional significance of rhetorical education is seen in stating of the national moral code (ethos); explicating the laws of cogitative and speech activity (logos); the ability to produce emotionally expressive speech (pathos); organization of speech according to the communicative situation (topos) (Korchova, 2017).

This involves the development of rhetorical competence as an individual quality of an teachers, covering his humanistic value orientation and based on motivation for interpersonal communication; the ability to construct speech according to the

rhetorical laws; capacity to use verbal etiquette formulas and to distinguish the essence of non-verbal means of communication; the awareness of the need for rhetorical self-improvement based on moral and ethical virtues.

The *hypothesis* of the study is that the implementation of the author's content of the discipline "Rhetoric" in the training process of future specialists in education will contribute to their rhetorical competence development.

## 2 Literature review

Theoretical and methodological principles of professional training in the context of the competency-based approach have been substantiated by scientists in a number of publications. Well-known researches focus on outline fundamentals of competency-based education (Sharov, 2019); modernizing the educational process according to principles of competence approach (Palamar, 2018); implication of the competency approach into the educational process of higher school (Ovsiienko, 2017).

At the same time a topical area of contemporary scientific research is the study of the influence of language units on personal development in general, and the future specialists in particular. We consider the concept of sound synaesthesia as an important mean of developing students' creative thinking (Yunosova, Alekseeva, Hlazova & Shkola, 2020); the problem of the neuropsychological basis of communicative influence on a person (Kutuza & Varynska, 2020); language as a means of shaping soft skills of higher education students, which is the basis of their competitiveness (Rudyshyn, Kononenko, Khrolenko, Konenko, Merdov, 2021).

Mentioned topics are inseparable from pedagogical problems of forming the ability to effective interpersonal communication in each sphere of social life. This problem has been reflected in a number of scientific publications. We consider the issue of future teachers' communicative culture forming by means of project teaching (Maksymenko, Bei, Khimchuk & Vovchok, 2020) as very effective tools. Some ideas of the cognitive-based process of primary school students' speech competence forming are appropriate within our research (Hreb, Hrona, Chumak, Vyshnyk & Hreb, 2020). Rather fruitful direction of modern education is pupils' communicative competence forming (based on English) with the means of audio-visual techniques which help both to activate perception for studying lexicon and to give knowledge about communicative strategies and tactics in different communicative situations (Labinska, Matiichuk & Morarash, 2020). Communicative competence is studied as a necessary personal quality of students by K. Myoungkwang (Myoungkwang, 2019), M. Agudo, J. de Dios (Agudo & Dios, 2019). The intellectual methods of assessing the foreign language communicative competence of primary school teachers are analysed by A. Pashko, I. Pinchuk (2019). The results of experimental training aimed at shaping the students' communicative competence of the Pedagogical University are highlighted by J. Beresova and H. Vancova (Beresova & Vancova, 2017).

However, the analysed papers give special importance to the need of forming the foreign language communicative competence. We consider that skilful use of the mother-tongue is also very important for personal and professional development. Therefore, we are of the opinion of B. Todorova (Todorova, 2019), who substantiates forming the mother-tongue (Bulgarian) communicative competence in her article, and A. Iborra and L. Lorente (Iborra & Lorente, 2018), who emphasize the need for a high level of future teachers' communicative competence.

Considering relevance of the need to form communicative skills in various social categories, we posit as predictable scholars' conclusions that educational-professional programs in the

specialty "Philology" in the majority of international educational institutions are aimed at forming a professionally oriented communicative competences of future specialists (Chernysh, Dzhochka, Marieiev, Kuzebna & Shkvorchenko, 2021); the professional competence of masters in the specialty "Primary Education" involves the ability to active listening, participating in dialogues and discussions (Fizeshi, 2020). The only thing that determines us to discussion with the authors of these publications is the exceptional focus on future professionals in certain specialties. In our opinion, not only future philologists need formed communicative skills, because no sector of social life can exist without communication, it requires the ability to communicate at the proper level in the society to successfully fulfill social needs. This becomes even more important speaking about educational professionals, because of their ability to model effective interaction through language code. This correlates with future educators' mastering the soft skills, which is impossible without acquirement of strategies and tactics of language communication.

The analysis of scientific works leads to the conclusion that the person's communicative development requires conceptual and practical actualization of rhetoric as an element of spiritual culture of humanity, instrument of organizing intellectual and speech activity, the basis for the formation of effective communication (Korhova, 2017). As rhetoric in society involves symbolical nature of linguistic code and communication is a mean of life symbolization its educational worth is national attitudinal grounds, promoting and approving of high spiritual and ethnic moral, and formed rhetorical knowledge and skills contribute to personal forming as valuable in society, his successful entering into society, professional growth, alignment between private, professional and social dialogue. Accordingly, purposeful and intensive mastering of the language system, the laws of rhetoric, the right choice of rhetorical strategies, awareness of the rules of cultural communication, understanding the principles of communicative intentions and tolerant communication is the basis of personal language culture and intellectual growth.

The theoretical and practical potential of rhetoric in the professional development is considered to be the logical inference of such generalizations. Theoretical and methodological grounds of linguistic and rhetoric education at higher pedagogical establishments are studied in some papers (Sadova, 2018; Konivitska, 2019) and other studies.

The well-known works substantiate a number of theoretical conditions, offer models, and define methodological bases of rhetorical skills / rhetorical culture forming. At the same time, these studies do not fully demonstrate an effective algorithm of their practical implementation in the process of future educators' rhetorical competence development.

In this context we consider characterizing the content of the author's teaching discipline "Rhetoric" and presenting the results of its testing in the educational-professional process of future specialists' in the educational field training as relevant.

# 3 Materials and methods

The purpose of the article is to summarize the results of experimental work on the implementation of the author's content of the training discipline "Rhetoric" in the educational process of future teachers.

Research goal and objectives of the study led to use a set of methods, including theoretical: system analysis of sources and current educational legal and regulatory instruments in order to ascertain the state of the problem; comparison, generalization in order to clarify the results of the study; empirical: observation over the educational process, interviewing, testing, questionnaires, students' papers analysis to determine the future educational specialists' rhetorical competence mastering; a pedagogical experiment to determine the level of rhetorical competence; statistical: quantitative analysis, comparison

according to Pearson criterion  $(\chi^2)$  to determine the statistical significance of research results.

## 4 Research methodology

Testing of *hypothesis* demanded research and experimental survey which was conducted in three stages – analytical and ascertaining, formative, control.

The objectives of the *analytical and ascertaining stage* were: to interpret rhetorical competence as necessary quality of a future professional in the social sphere; to generalize the main directions of modern domestic and foreign rhetorical training of socionomists; to develop the diagnostic tools (tests, questionnaires, control sections, speech patens), and to determine the levels of future educational specialists' rhetorical competence in the conditions of traditional training; to specify the content and to develop the educational and methodological complex of the educational component "Rhetoric" for its introduction into the training of future professionals in the field of education.

Implementation of research goals involved the use of a set of methods:

- theoretical: historical, systematic, critical analysis of philosophical, psychological and pedagogical, methodological sources on the research problem, content analysis (curricula, textbooks, manuals), generalization (especially scientific and pedagogical experience), synthesis, abstraction:
- empirical: expert assessment method, questionnaires, interviewing, observation over the educational process, analysis of the students' writings;
- statistical: quantitative analysis of the results gained trough experimental study.

The formative stage of the research was aimed at practical implementation of the teaching and methodological complex of the training component "Rhetoric" in the process of the professional formation of educational specialists.

Implementing the author's academic course "Rhetoric" lasted for three years (from 2017 to 2020) and was based at Oleksandr Dovzhenko Hlukhiv National Pedagogical University, Ivan Franko Zhytomyr State University, Borys Hrinchenko Kyiv University, Bohdan Khmelnytsky Cherkasy National University. 285 of Bachelor degree students in Educational Field Education / Pedagogy. We must focus attention at the mathematical statistics formula which was used to determine the size of a representative sample within the general number of participants:

$$n = t^{2} \frac{w(1-w)N}{\Delta^{2}N + t^{2}(1-w)w}$$
 (1),

Where n – the selection scope,

N - general scope,

w – sample share of the studied quality,

 $\Delta$  is the margin of sampling errors (on condition that  $\Delta=5~\%$  , t=2).

Considering that we do not operate on information about the sample share, we take it equal to 0.5; respectively w (1-w) = 0.25 (Piskunov & Vorobiov, 1979).

At the time of the pedagogical experiment in Ukraine, about 1,000 people were educated in specified specialties (2nd, 3rd year of study; ED "Bachelor"; full-time). Accordingly:

$$\mathbf{n} = \frac{1}{2^2 \frac{0.25 \times 1000}{0.05^2 \times 1000 + 2^2 \times 0.25}} = 4 \frac{250}{0.0025 \times 1000 + 1} = 4 \frac{250}{3.5} = 285$$

Thus, 285 respondents is sufficient number for representative sampling within this research. 139 applicants in four specialities (pre-school education - 38 students, primary education - 26 students, secondary education - 45 and professional education - 30) were in the experimental group (EG. 100 %) so they studied "Rhetoric". 146 applicants (pre-school education - 40 students, primary education - 29 students, secondary education - 47 and professional education - 30) were in the control group (CG. 100 %) and they were trained according to the traditional methods.

The distribution of education applicants into EG and CG was based on the results of the diagnostic test, meeting the criteria of modern research (Honcharenko, 2012):

- determining the number of EG and the CG students were based on the size of a representative sample – the total number of students covered by the pedagogical experiment;
- the selection of the EG and the CG responded to the cluster sample type, granting the qualitative and quantitative similarity of both groups.

Formative work in EG was carried out, referring to the S. Honcharenko's study (Honcharenko, 2012), taking into account the variable and invariant conditions. Among the invariant conditions were the same number of classroom hours for studying the disciplines of the curriculum, and the hours for students' individual work in the experimental and control groups. Variable conditions were caused by the implementing of the author's special course "Rhetoric" in the educational program within the experimental group of higher education applicants in the mentioned specialties.

The level of students' rhetorical competence in the EG and CG at the formative (and ascertaining) stage of the pedagogical

experiment was determined by the data of diagnostic methods (tests, questionnaires, final test) on a four-point scale; high level -4 points; upper-intermediate -3 p.; intermediate -2 p.; low level -1 p.

The beginning of the formative experiment was considered scientifically correct under the condition of insignificant discrepancies of EG and CG indicators of rhetorical competence formation

The control stage involves analysis and statistical calculation of the results, which led to use a set of methods:

- empirical: observation over the educational process, interviewing, testing, questionnaires, students' papers analysis to determine the future educational specialists' rhetorical competence mastering; a pedagogical experiment (summative and formative) to determine the level of rhetorical competence;
- 2) statistical: quantitative analysis, comparison according to Pearson criterion  $(\chi_2)$  to determine the statistical significance of research results.

#### 4 Results

Levels of the future teachers' rhetorical competence formation was carried out by such means at the ascertaining stage of the pedagogical experiment: students' survey, written tests, checking the unit tests.

The results of the ascertaining stage show insignificant differences between the indicators of the students' rhetorical competence formation of experimental (EG) and control groups (CG) (Table 1).

Table 1. Levels of the future teachers' rhetorical competence formation at the ascertaining stage of the pedagogical experiment

Lovels	EG		CG	Difference	
Levels	Persons	%	Persons	%	%
Completely competent	10	7	12	8	-1
Mostly competent	19	14	23	16	-2
Somewhat competent	76	55	73	50	5
Incompetent	34	24	38	26	-2

The predominance of the intermediate and low percentages persuades in respondents' inability to rhetorically correctly construct high-level verbal interpersonal interaction. Depleted students' verbal expressions show standardization of their thinking. The reason, probably, lies in the fact that future specialists master the content of general and professional training cycles disciplines isolated and without practical projecting onto future professional communication.

In this case an integrative factor, aimed at organizing personal communicative abilities, is necessary. The author's training course "Rhetoric" is proposed as such factor. "Rhetoric", an optional component of the processional cycle, was introduced into the curriculum of professional training of EG students.

The aim of the discipline is to foster the acquisition of the rhetorical thesaurus, rhetorical algorithm for eloquent text creation (discourse creation) and modeling of subject-subject interaction, depending on the communicative situation in the educational sphere.

The course is organized according to traditional directions of teaching academic disciplines:

 theoretical, aimed at deepening the linguistic and rhetorical knowledge, taking into account the educational sphere of future specialists' professional activity, at understanding the role and place of rhetoric in professional development, at mastering rhetorical theory;  practical (dominant), aimed at forming the abilities and skills to improve the future educational experts' rhetorical competence.

We emphasize that the introduction of the experimental complex in 2019 has not been hindered by the remote format of the educational process caused by the COVID-19 pandemic. In order to model the process of distance learning in "Rhetoric", Google services were used, particularly Classroom and Meet/Zoom, which provides online communication between the participants of the educational process The multifaceted, dynamic and multifunctional nature of the services allowed not only to summarize the educational content of the discipline, but also comprehensively implemented theoretical and practical mastering of the material, and monitored the level of students' educational achievements.

With the help of the Meet / Zoom service the lecture block on "Rhetoric" was modeled through the activation of subject-subject interaction as "teacher – student", "student – student" using interactive methods (for example, the method of problem lecture with elements of heuristic conversation, educational discussion, lecture-visualization, explanatory-illustrative method based on students' life experience and their future professional activities).

We focus on the demonstration of multimedia presentations that accompanied the theoretical material.

The multi-sensory educational environment, created by audiovisual elements, allows activating right-brained cognitive processes; speech presentation is left-brained. Involvement of more senses made it possible to increase the perception and comprehension of educational material. According to the operational principle, the demonstration of information-filled prepositional slides and information-complete postpositional slides was practiced in studying "Rhetoric".

Such presentations encouraged students to think, helped to search for information and led to self-reflection. In addition, tables, diagrams, illustrations were used to stimulate future professionals' thinking activity and clearly showed the theoretical information.

Practical (seminars) contained several components:

- cognitive, aimed at a fundamental learning of the rhetorical knowledge system;
- operational and technological, focused on forming practical abilities and skills that are the basis of rhetorical proficiency;
- ethical, based on the principles of cultural and speech etiquette, according to the educational specialist' professional ethics.

One of the approaches, used in Meet service, was *exercising*. The developed system of exercises and tasks in rhetoric corresponds to the principles of humanism and anthropocentrism of the educational space of higher schools, provides preservation of socio-cultural ideological and thematic content of textual material to overcome psychological stress of students in future professional interpersonal educational communication. The exercises and tasks within the Google Classroom can be classified as:

- Motivational and actualizing, stimulating interest in rhetoric, rhetorical activity, actualizing the acquired knowledge, for example:
  - Do you agree with professor's A. Koval, the author of works on stylistics and culture of Ukrainian speech, words: You should not speak like everyone else, not to stand out, you should get used to correct accent and speak correctly everywhere, with everyone. Then "everybody" ("usi") will gradually become accustomed to the quarter ("kvarta'l"), to the phenomenon ("pheno'men"), and to the expert ("expe'rt"). Describe the essence of interpersonal communication, referring to the knowledge of Psychology. Remember the basic patterns of Ukrainian accentuation.
  - According to the psychological features of verbal communication, comment on the Nelson Mandela's quotation: If you talk to a person a language he understands, – the words reach his head. If you talk to a person his language, the words reach his heart.
- Cognitive and gnostic, aimed at intensifying students' cognitive activity and promoting the acquisition of new information, such as:
  - Make the reference scheme on the topics (at your choice): "Speaker's external culture", "Gender aspects of communication", "Elements of intercultural communication in educational space".
     Be ready to comment on it.
  - Express your views on the controversy: the power's word or the power of the word.
  - Choose arguments and counterarguments to the theses, formulated by aphorisms: Form a person in yourself this is the most important thing: you can become an engineer in five years, and you need to study the whole life to become a person (V. Sukhomlynskyi); To be silent is to believe in oneself (A. Camus); Do not be afraid of anything. He, who is afraid, is haunted by failures. Fear is sometimes acceptable in everyday life. But at the

crucial moment, drive the fear away. Doubting even for a moment, you will be defeated (Takuan Soho).

- 3. *Praxeological and creative*, forming a willingness to communicate in education, for example:
  - Prepare a written presentation of the chosen genre (scientific report, scientific mini-lecture, popular science conversation, scientific-storytelling with elements of conversation) in order to declare it in classroom, using one of the reproductions of a painting by a contemporary Polish caricaturist P. Kuczyński;
  - Suggest possible ways of communicatively solving the conflict situation described: The teacher entered the classroom. Seeing a cigarette butt on the floor, looking around the boys, he asked: "Whose is it"? "Yours", – replied one of the students, «you were the first to see it!"

This system of exercises was aimed at stimulating students' critical thinking, developing empathy, sociability, ability to reflect, formation of personal self-assertion in interpersonal relationships in the group; made it possible to organize mutual learning and training on Rhetoric in the context of overcoming external and internal limitations and higher education applicants' thinking standards through communication.

Simultaneously with the method of exercises in practical classes we used the method of reproductive and heuristic conversations, learning discussion (when considering theoretical issues), observation of language (rhetorical analysis), method of illustration (recognition, characterization of elements of rhetorical activity), cognitive games, situational analysis. The complex of individual, group and collective activities potentiated students' rhetorical self-actualization, and the team work helped to form skills of interaction between a rhetorician and a listener by means of speech, ability to reflect, active thinking, analysis, comparison, generalization and free communication.

individual (self-guided) work was aimed at systematization, generalization and deepening of acquired theoretical knowledge and practical skills. The plans of individual work included practical exercises and contained tasks of various types: study of the main and additional literature on a particular topic; referrals of sources and reports preparation; performing exercises to improve communicative skills, developing not only rhetorician's skills, but also the addressee of public speaking; creative tasks (simulations of audiovisual materials, presentation, round tables, staging of the given mini-project on thematic issues, interactive educational-popular mini-lectures preparation and conducting, discussion of the problem on pre-agreed ideological and thematic content, laboratory meeting). It was target at developing students' creative abilities in order to master the culture and technique of speech and the foundations of public speaking: principles, rules, forms of interaction between a rhetorician and a listener by means of speech as the basis of rhetorical competence of a future specialist.

We consider students' group creative work as an important form of studying Rhetoric. Despite serious problems in the rhetorical training of future professionals, particularly, introverted communication, communicative uncertainty, difficulties with improvised public speaking, inability to build constructive dialogue and polylogue, ignorance of the rules of discussion, and the specificity of Rhetoric as an important area of human culture, we offer creative and differentiated tasks on project technology, aimed at developing the student's autonomy and initiative, stimulating interest in public speaking, improving oratory abilities, developing critical thinking by means of self-directed search, modeling concepts, selection of arguments, formulation of theses, which allows to integrate rhetorical theory with practice. We focus on group creative work, which allows selfmanagement of activities, as everyone, working in a team, chooses the type of work, according to their level of ability to perform it. The result of such creative interaction is the presentation of author's multimedia projects, aimed at realizing that the Word, Language, Rhetoric is an inseparable triad, that allows to inform, promote, think, evaluate, persuade, encourage, discuss.

The summarizing part of academic discipline "Rhetoric" was "Rhetorical Workshop", focusing on the preparation, proclamation and analysis of a public speaking. The list of topical educational topics of speeches consisted of three conditional groups:

- strictly scientific ("Inclusive education", "Cordocentrism of domestic Rhetoric", "Rhetoric as a tool for becoming a future specialist", etc.);
- educational ("Modern teacher's linguistic dress code", "Language manipulation in education: why and for what?" etc.):
- aphoristic ("The main task of civilization is to teach a person to think" (T. Edison), "Morality is better understood in short expressions than in long sermons and speeches" (K. Immerman), "Everyone sees what we seem, few feel what we are" (N. Machiavelli) etc.

It is noteworthy that students often preferred aphoristic themes. This allows us to talk about the respondents' increasing gradation of thought and speech activity.

The introducing of the mentioned forms and methods in the professional training of future professionals in the educational field was adjusted by a set of pedagogical conditions. Anthropocentrism of learning to form future educators' system of humanistic values was implemented through the textual content of the teaching material, focused on the human external and internal world. The integrity of the rhetorical training led to the constant updating of students' acquired knowledge and skills. The rhetorical space, created by interactive methods (heuristic conversation, lecture-visualization, project method, educational discussion, cognitive games, etc.), encouraged future specialists to improve their skills of active listening, communicating according to moral and ethical norms and laws of thinking and speaking activity.

Observation of students' seatwork in the classroom (and also online classes); analysis of their self-learning; checking of creative tasks; review written works and tests, testing and other techniques were used as sources for experimental investigation. The results of the control stage show significant differences between the indicators of the rhetorical competence formation of EG students studied "Rhetoric" as a special course, and CG students, whose training was carried out according to the traditional system (Table 2).

Table 2. Levels of the future teachers' rhetorical competence formation at the control stage of the pedagogical experiment

Levels	EG		C	Difference	
Levels	Persons	%	Persons	%	%
Completely competent	38	27	13	9	17
Mostly competent	40	29	15	10	19
Somewhat competent	35	25	63	43	-17
Incompetent	26	19	55	38	-19

The obtained results have led to the conclusion that the introduction of a special training course motivates students to communicate; helps to understand the importance of personal oratory in the professional sphere; and forms an adequate self-esteem of professional suitability. The effectiveness of the indicated methodology is confirmed by the applied interactive technologies, which activate future professionals' thinking and speech activity; intensify rhetorical reflection that accompanied each type of students' educational activity during lectures and practical classes, while individual studying, doing creative work and control diagnostics.

We greatly emphasize that at the beginning of the experimental work students' rhetorical reflection was partly reduced to delivering the subjective emotional impression of the cognized or produced text (for example, "good" "bad", "like" / "dislike"). This has indicated the necessity of making detailed flowcharts of rhetorical analysis and introspection, which significantly changed the quality of rhetorical reflection. Skilful rhetorical activity, as a result of formed rhetorical competence, is indeed reflexive, because all stages of preparing a public speech, from invention (invention of the idea) to reflection / relaxation, are imbued by the speaker's awareness of own speech activity algorithms.

Considering this facts, the last questions of all diagnostic tools (control works) as a kind of litmus test of self-control, were aimed at reflection, particularly because they provided the actualization of related information systems, required critical reflection of students' knowledge and skills to focus them on future professional activity. This is an effective mechanism for forming respondent's conscious attitude towards the future activity.

We focus on students' adequately assess of their levels of communicative and rhetorical skills (opposed to the level of rhetorical knowledge). This fact is indicated by the results of self-awareness. At the same time, students are aware of the need to improve skills, because, in their opinion, rhetorically correct speech "gives confidence", "increases self-esteem", "it is necessary for future professional activity", "it helps to be

realized in the profession", "it is an indicator of human culture", "it allows to express one's opinion correctly and accurately", "it helps to mutual understanding during communication"; because "a specialist must be educated", "we, Ukrainians, must be fluent in our mother tongue".

We note the positive dynamic of EG students in a rhetorical manner (in accordance with the laws of thought and speech, the preparation and pronunciation stages of a public speech respecting moral and ethical standards and communicative speech features) to construct and act professionally oriented utterances in a simulated communicative situation.

Generally the students of the EG demonstrated the ability to work with language material while doing numerous practical tasks (motivational and actualizing, cognitive and gnostic, praxeological and creative exercises; situational tasks; rhetorical tasks and projects, etc.); simulating communicative situation; speech building; interrelating with the audience; using means of activating listeners' attention; active listening; psychological perception of the interlocutor (his inner experiences, motives of communicative activity) in order to prevent conflicts; communication in the form of conversation, discussion, according to the moral and ethical norms.

We also emphasize the upward trend of the reflexive component in the diagnostic. 63 % of EG students were able to make a realistic evaluation, while in the experiment forming it was about 30 %. There were no significant changes in CG.

The common level of the future teachers' rhetorical competence formation is illustrated by the diagram (Figure 1), in which CC – completely competent, MC – mostly competent, SC – somewhat competent, IC – incompetent; EG AS – experimental group at the ascertaining stage of the pedagogical experiment, CG AS – control group at the ascertaining stage of the pedagogical experiment, EG CS – experimental group at the control stage of the pedagogical experiment, CG CS – control group at the control stage of the pedagogical experiment.

The dynamics of future teachers' constituents of rhetorical competence is summarized in Table 3.

The average indicators of the EG and CG respondents' levels of rhetorical competence confirmed the positive dynamics of the studied personal quality forming under the influence of the experimental factor.

The difference between the percentage indicator of the EG at ascertaining and control stages is: Completely competent -+20 %, Mostly competent -+15 %, Somewhat competent --30 %, Incompetent --20%. The difference between the percentage indicator of the CG at ascertaining and control stages is too small.

Statistical significance and level of reliability of the obtained results were confirmed by calculations using Pearson's criterion ( $\chi^2 - 95\%$  with  $\chi^2$  emp - 82,2).

Figure 1. The common level of the future teachers' rhetorical competence formation

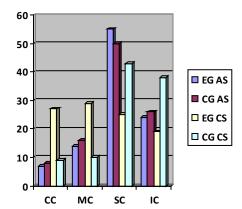


Table 3. Dynamics of future teachers' rhetorical competence development: the students of ascertaining and control groups

Studied		EG			CG			Comparison CG and EG by the $\chi^2$			
personal quality	Level	Ascertaining stage		Control stage		Ascertaining stage, %		Control stage, %		Ascertaining	Control
		persons	%	persons	%	persons	%	persons	%	stage	stage
	Incompetent	34	24	26	19	38	26	55	38	1,77	82,2
Rhetorical competence	Somewhat competent	76	55	35	25	73	50	63	43		
	Mostly competent	19	14	40	29	23	16	15	10		
	Completely competent	10	7	38	27	12	8	13	9		

#### 5 Discussion

Summing up the results of research and experimental work, carried out in three stages (analytical, formative, control), allows confirming the hypothesis of the study: the implementation of author's discipline "Rhetoric" in the process of training future educators contributes to the formation of their rhetorical competence. Statistical data (systematized results of diagnostic tools), testify an increasing of students' mastering the lingorhetorical knowledge and communication skills, which is the basis of communicative literacy and rhetorical competence of the individual.

We agree with O. Turko, T. Kravchuk, I. Kutsyi (Turko, Kravchuk, Kutsyi, 2021) that it is necessary to use the innovative tools (game technologies, project technologies, interactive technologies, etc.) for forming students' communicative competence. However, we emphasize that this should be interpreted not only in the context of mastering a foreign language, but also the mother-tongue.

It should be noted that the experimental training, namely teaching the author's educational component "Rhetoric", was carried out taking into account humanistic and anthropocentric approaches through the construction of subject-subjective interaction, which allowed to influence the formation of future professionals' system of human values and value-based attitude to the rhetorical communication in the educational sphere; they allowed students' self-realization by means of skillful mastery of the word.

Experience on implementation the training course "Rhetoric" in the educational process allows to identify a number of professional and personal factors that contribute to the formation of rhetorical competence of future professionals in the educational field, specifically: professional – creating an anthropocentric educational environment; involving students into interactive communication; encouragement of problem situations in educational sphere communicative solution; personal – consideration of future professionals individual

abilities, promoting rhetorically correct speech, actualization of rhetorical self-improvement due to personal and pedagogical reflection of future specialists in the educational field.

Accordingly, rhetorical activity has become a real pedagogical existence for the future specialists in the educational field, a free choice of optimal communication strategies and tactics, a procedural component of their self-expression, a creative factor of professional mastery formation.

Given this, the academic training course "Rhetoric" as a part of professional cycle can be included in the curricula of the future professionals in the field of education training.

#### 6 Conclusions

Summing up, we can state that forming the rhetorical competence of future educational specialists could be effective and efficient using the author's educational component "Rhetoric" granted by such didactical components:

- sociocultural, that contributes to the students' exposure to domestic and foreign culture by mastering the cultural and historical experience of mankind;
- personality-centered, which made it possible to introduce interactive learning in the conditions of face-to-face and distance educational process, to involve students into solving problem situations, simulating discussions, debates, disputes, updates the need to develop the creative potential of future specialists;
- activity approach, which focuses on constructing dialogue in the educational sphere based on humanistic values, intensifying the ability to verbal and non-verbal interaction;
- competency-based, which encouraged future educators to develop not only rhetorical knowledge and skills, but also personal ability to communicate effectively, and to develop professional self-improvement through rhetorical selfeducation.

The results of the experimental study show significant differences between the students' rhetorical competence formation of the experimental and control groups.

The main difficulties with implementing the author's methods were caused by the low level of students' motivation to form their own rhetorical competence. Text-centric approach to organizing the practical training (completing tasks on texts) made it possible to overcome these difficulties, as far as interpretation of the ideological and thematic content of the text material and situational modelling on the basis of their own speech strategy subconsciously contributed to the respondents' opinion about the need to improve their own rhetorical competence.

An important area of further research is to fill the author's course with interdisciplinary projects in order to improve it. This would increase the future teachers' motivation to master rhetorical competence as a necessary professional quality.

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## **Primary Paper Section:** A

**Secondary Paper Section:** AM

# PEDAGOGICAL CONDITIONS OF TRAINING FUTURE BACHELORS OF ARTS IN LINGUISTICS FOR PROFESSIONAL TRANSLATION PRACTICE

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Abstract: One of the principal linguist's activities is translation practice. Since translators mediate intercultural communication, their role in society is increasing. In the process of training future Bachelors of Arts (BA) in Linguistics for professional translation practice, paramount importance is given to pedagogical conditions, i.e., specially created circumstances, factors of action, the interaction of the pedagogical process subjects, the totality of which determines the effectiveness of forming professional competence of future Bachelors of Arts in Linguistics. The training of future specialists is determined by the level of their personal and professional development. The student in linguistics, at the present stage of social development, is required not just to use the knowledge, abilities, and skills received in a higher education institution but also to be ready to continuous creative self-development both professionally and personally. This article aims to develop a structural and functional model and investigate the relationship between the pedagogical conditions of future bachelors' professional training and learning outcomes. The research method is the psychological, pedagogical, scientific, and methodological literature analysis on the research problem. Also, there are systematization, generalization, and interpretation of the material under consideration. Pedagogical conditions of professional competence formation of future BA in Linguistics (presence of motivational and valueenvironment in the educational process; development of personal and professionally significant qualities, moral and moral improvement of the future specialist) in higher education institutions have been determined. The pedagogical experiment in evaluating the dynamics of students' professional development, as an indicator of the effectiveness of the connection between the pedagogical conditions of future bachelors' professional training and the results of learning, was held. The essence and structure of the "Bachelors' readiness for the professional and pedagogical practice of linguistics" concept, providing high-quality formation of professional and pedagogical knowledge, skills, professionally significant qualities of a teacher, were defined. The model of training future BA in Linguistics for professional activity has been formed. The efficiency and effectiveness of motives in translation activity have been found out. The effectiveness of a necessary set of pedagogical conditions has been proved. The practical value of the scientific article lies in the creation of a structural and functional model based on four blocks with its subsequent implementation in practice

Keywords: Linguistics, pedagogical conditions, foreign languages, bachelor, training program, university, future linguist-translator.

## 1 Introduction

The continuous development of modern society, constant transformations in the labor market led to increased qualification requirements for future linguists, whose skills are formed while studying at university.

Professional training of linguists is one of the states, public and personal priorities in the dynamic development of the modern world. In this regard, the problem of training Bachelors of Arts in Linguistics who are competent to respond a modern society's challenges is principal in the higher professional education system (D. Gouadec, 2007). Translation practice is related to the semantic processing of information, which is determined by socio-economic and legal categories, and translators are subjects that ensure national security in the information sphere. The training of highly qualified translations by students in the process of solving professional tasks is one of the priority strategies of modern linguistic education (W. Koller, 2000).

Reforming the educational system and changing the priority spheres of state policy in the education sphere make it necessary to form competencies essential for the professional environment of BA in Linguistics.

Pedagogical conditions, i. e., pedagogical circumstances that promote the development of students' linguistic creativity during the translation process, optimize the process of their linguistic creativity development and competence formation (Gile, 2009).

Bachelor's degree educational programs in linguistics should be designed to provide students with fundamental knowledge on the one hand, and on the other hand, to meet the practical requirements for professionals during employment.

Traditionally, a theoretical and practical knowledge background in a foreign and native language, as well as typical translation methods, were sufficient for linguistic professionals to be successful in their careers (C. Schmit, 2006). Considering the growing demand for translation services in the labor market, nowadays it is necessary to form a specialist's readiness to implement technological and behavioral aspects of future professional activities, which include:

- understanding of the oral and written translation activities essence within the communicative situation context,
- ability to make thorough preliminary preparation for translation depending on the type, ability to see and critically evaluate the translation product (D. Svyrydenko, 2014).

The modern translator operates under the conditions of rapid development of automatic translation tools. Therefore, it is especially relevant to develop skills of using modern technologies that increase the translator's productivity.

### 2 Literature Review

Teaching methods of translation should have a technological basis, to provide more than just a set of some techniques and translation methods within the existing translation types, it should form functional-technological and functional-behavioral models, to provide the translator with technologies based on conscious/subconscious understanding of the activity type and to allow adequate response to standard/non-standard situations during translation (M. Orosco, 2002).

The search for optimal and effective ways that affect education quality has intensified in recent years. The training criterion of a modern specialist becomes something other than the knowledge, skills, and abilities volume, but also the ability to make scientifically grounded and technologically competent decisions, the ability to think creatively and solve non-standard professional tasks, to independently acquire new scientific knowledge, as well as self-development during professional activity.

The scientific and theoretical basis of the BA in Linguistics professional training consists of the works by A. Dudley-Evans (2005) and A. M. St. John (2004). There we can identify various issues of the translation theory or practice and the translator training issues under modern conditions. Translation competence issues were devoted to the works by D. Hymes (2000), Karnedi (2015), and H. Perraton (2009).

A. Dudley-Evans (2005) states that one of the criteria for determining the quality of teacher readiness for professional-pedagogical activity is the level of professional and pedagogical knowledge and skills, personal and professionally significant qualities. According to A. M. St. John (2004), the professional-pedagogical activity of a future teacher is a universal activity, which is aimed at teaching a particular specialty, career and professional development of a student, and the readiness of

undergraduate linguists for professional translation activity is a complex result of this activity.

H. Perraton (2009) notes that the model of forming bachelors' readiness for professional-pedagogical activity is designed upon the principles of integrity, predictability, dynamism, unity of theory/pedagogical practice, and provides the formation of professional and pedagogical knowledge and skills, professionally significant qualities in students, promotes the growth of the creative level of self-actualization.

S. Campbell (2002) substantiates the universality of linguistic specialists as a new quality of linguist training efficiency for successful professional translation activity.

Educational processes modernization has a significant impact on the professional training of future BA in Linguistics for professional translation practice.

P. Thornton & C. Houser (2009) have proposed a model, a holistic and dynamic system of motivational-target, professional-activity, and emotional-reflexive components, aimed at improving the process of bachelors' readiness formation for professional and pedagogical activity.

Due to the need for global rethinking and transformation under the competence approach of the higher professional education content and structure, many researchers, in particular, H. McBer (2000), J. Lee, and J. Huh (2018), emphasize the introduction of new strategies of linguists' and translators' professional training. Each strategy is based on a certain professional competence, which formation according to D. W. Proctor (2009) and L. Tinsley Royal (2000), is a necessary condition for professional training that meets the modern educational standards requirements.

S. Midraji (2003) and Rubrecht Brian (2005) investigated innovative ways to form abilities in students based on the experience of leading European and American universities.

D. Gouadec (2007) identifies the following competencies in the portrait of a specialist:

- key one's the basic competencies that ensure normal human life activity in society are summarized;
- professional and learning competencies;
- social (in the strict sense) competencies they characterize an individual's interaction with the society, community, and other people.

Papers by D. Hymes (2005), B. Moser-Mercer, B. Class, K. Seeber (2005), and the materials of authoritative international organizations in the field of higher professional education (UNESCO, UNICEF, UNDP, Council of Europe, Organization for European Cooperation and Development, International Standards Department, etc.) reveal problems associated with a competence-oriented approach to the formation of educational content and quality requirements to the professional training of Bachelors of Arts in Linguistics.

The analysis of scientific literature on the research topic showed that there are many studies (L. Tinsley Royal (2000), D. W. Proctor (2009)) devoted to the issues of preparing students for professional activities. However, the problem of building competence in translation practice among future Bachelors of Arts in Linguistics is insufficiently developed.

The article aims to develop a structural and functional model and to study the effectiveness of the pedagogical conditions in the professional training of future undergraduate students for professional translation practice.

## 3 Methodology

The article uses the modeling process of preparing future Bachelors of Arts of Linguistics for professional translation activity. The motivational component levels of readiness for professional translation practice were determined using the Motivation of Professional Activity methodology.

The pedagogical experiment was conducted from September 2020 to June 2021. We carried out diagnostics in the experimental and control groups. Students of the 1st-4th years were chosen, and 176 people took part in the research.

The pedagogical experiment was conducted in three stages. The first stage (September – November) includes the division into control and experimental groups, their diagnostics. The second stage (November – April) includes the implementation of the pedagogical management technology of BA in Linguistics professional development within the learning process. At the final stage (April – June), the obtained results are analyzed and systematized, and the conclusions are drawn.

The following levels of professional culture manifestation of BA in Linguistics were singled out: reproductive, adaptive-situational, and creative. The following qualitative components were evaluated for their detection: axiological, cognitive, and technological.

The following indicators were selected as evaluation criteria: motivational-valuable (students' understanding of the importance and necessity of professional activity, motivation for self-expression in the profession, readiness to form professional competence in professional translation activity); cognitive (volume, depth, and awareness of professional knowledge); activity-practical (practical abilities and skills in translation activity, independence manifestation).

The self-organization efficiency is controlled by observation and learning quality. Learning activity efficiency is checked by observation of the rationality of learning activity planning.

### 4 Results

The idea of the professional translation training during foreign language teaching without considering the specialist model outside the context of the translator's professional activity, in isolation from other professionally significant knowledge and skills, in isolation from linguistic, professional, and life experience, remains persistent.

First of all, it is necessary to ensure adaptation and organic transition from language skills to translation skills (adaptation to switch from one language to another) with parallel assimilation of basic lexical material on basic topics and formation of primary translation skills both by its types and in terms of translation decision-making technology. It can be provided as part of the pedagogical conditions of the translation course.

In the future, it is logical to improve the initial translation skills within the scope of the topic topics determined in the course with a parallel expansion of vocabulary and the number of standard and creative methods of making an adequate translation decision in different translation situations.

The pedagogical conditions include:

- updating the content of the educational process of future BA in Linguistics;
- organization of the process of learning disciplines and selfmanagement:
- the use of technologies aimed at enhancing professional communication;
- implementation of the transition to the strategy of direct translation through appropriate methods and systems of exercises;
- the result is the mastery of the initial skills of translation strategy, necessary for the development of an individual educational professional trajectory;
- analysis of the diagnostics of the achieved results (evaluation of the level of student's cognitive activity and

the level of mastery of the translation strategy per the developed criteria and indicators);

 further improvement of the direction of development of individual educational professional trajectory of each student

The implementation of these conditions, in general, focuses the educational process on achieving the unity of professional personal development and formation of professional-activity competence of future BA in Linguistics.

The first condition of bachelors' positive motivation to master the system of professional competencies is realized through correlation of motives, needs, interests, and objectives, which makes personal sense of any activity.

In the formation of bachelors' readiness for future professional and pedagogical activity, the following motives are taken into account:

- social motive, contributing to the awareness of the need for socially significant future professional and pedagogical activity;
- the motive of achievement, the need to develop students' intellectual potential, technical and technological thinking, mastering the content in the field of professional and psychological and pedagogical sciences and their application in practical activities;
- the motive to improve theoretical knowledge and practical skills contributes to their deepening in the process of performing various non-standard tasks and situations.

We consider as necessary to build the process of mastering translation activity according to the algorithm, which includes the following sequence of actions:

- preliminary analysis of the initial level of students' cognitive activity and their translation practice potential;
- goal-setting selection of personally significant professional learning goals aimed at effective development of each student;
- 3) development of students' cognitive activity.

The developed model of preparing future bachelors for professional translation activities includes qualification characteristics of a graduate of a higher educational institution, goals, objectives, content, methods, means, training forms, as well as indicators and criteria of training efficiency.

The developed structural and functional model of future BA in Linguistics training for professional translation practice (Table 1) is a set of targets, content, technological, and result-evaluation blocks.

The model's integrity is stated by the organic connection between the goal and the result, namely, the formation of professional competence of future BA in Linguistics.

The formation of pedagogical conditions based on ethno-, linguistic-cultural knowledge of students through linguistics and with the support of linguistic-cultural communication in the educational space, accumulation of self-realization experience in the future professional activity influences the professional training and development of students' language competence components. The linguistic competence components have peculiarities for carrying out professional activities using a foreign language, which is manifested in the following:

- comparison of the national and foreign cultural phenomena in social and professional spheres;
- students' skills are based on the unity of communicative and professional actions, person's cultural and professional behavior
- experience in implementing future professional activities based on the cultural features of the professional multicultural environment and its subjects.

The professional mobility of a linguistics student is realized in the mastering key competencies process. The professional level of mastering key competencies ensures the formation of a high level of communicative and cognitive mobility, which manifests itself in:

- responsible attitude to learning;
- aspiration for acquiring new knowledge;
- acquisition of practical communication skills;
- desire to intensively learn the language and culture of other nationalities.

To assess the level of future BA in Linguistics readiness formation for professional translation practice, the criteria-diagnostic apparatus of professional translation practice implementation includes five criteria, as well as the levels of readiness formation: low, medium, and high.

The low level of readiness is characterized by fragmentary and non-systematic knowledge of the norms of source and target language usage, linguistic, subject, and historical and cultural realities of the countries, which leads to a decrease in the translation quality. During interpreting, the student is not able to retain key information in memory, demonstrates a very low rate of translation, disorganization during the graphic design and preliminary translation discussion.

The intermediate level of readiness for professional work as an interpreter is characterized by systematic knowledge of the norms of language use and the target language, the use of modern information technologies in translation activities, but not always the student can effectively apply them in translation practice.

A high level of proficiency is characterized by a confident command of different types of translation and interpretation, including stressful conditions; the presence of good translation memory and developed translation intuition; the ability to distribute and switch attention when performing different types of translation activities, to maintain the optimal pace of translation for the customer (when interpreting).

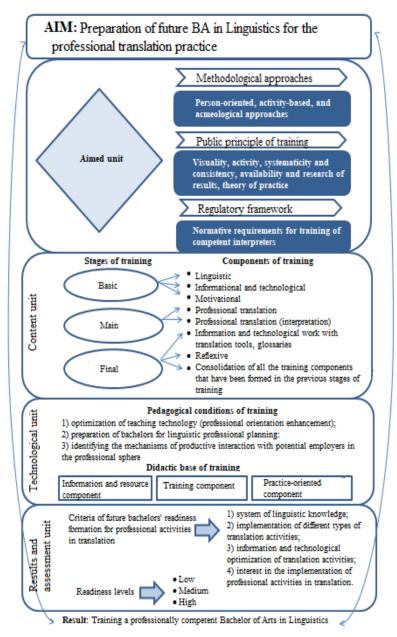
We analyzed the state of professional competence of future BA in Linguistics by considering the content of the academic disciplines, as well as by surveying the Ukrainian higher pedagogical education students.

The pedagogical experiment was conducted from September 2020 to June 2021. The 1st-4th year students were selected for the experiment. There were 176 participants involved in the study. The control group included 81 people, and the experimental group – 95 people. During the diagnostics of the initial research base, there was the assessment of the students' professional development dynamics in the experimental and control groups as an indicator of the effectiveness of the connection between the pedagogical conditions of future bachelors' professional training and the learning achievements.

The pedagogical experiment was conducted in three stages. At the first stage of experimental work (September – November), the control and experimental groups were determined, their diagnostics were carried out, the necessary materials for monitoring students' personal growth and ensuring it during the educational process were prepared. At the second stage (November – April), the technology of socio-pedagogical management of BA in Linguistics professional formation in the process of learning in a higher educational institution was implemented. At the final stage (April – June), the obtained results were analyzed and systematized, and we made conclusions.

Based on the findings of Chen, C. M. & S. H. Hsu. (2008), L. Tinsley Royal, 2000, which revealed the levels of manifestation of specialist professional culture in linguistics, diagnostics in the experimental and control groups were carried

Table 1. Structural and functional model of future Bachelors of Arts in Linguistics training for professional translation practice



Source: Hymes. D. The concept of communicative competence revisited (2000).

out. The following levels of professional culture manifestation of a BA in Linguistics were identified: reproductive, adaptive-situational, and creative. To identify them, the following qualitative components were evaluated: axiological, cognitive, and technological. As criteria for their evaluation, we chose: motivational-valuable, including such indicators as students' understanding of the importance and necessity of professional activity, motivation for self-expression in the profession, willingness to form professional competence in professional translation activity; cognitive – indicators: volume, depth, and

awareness of professional knowledge, mastery of methods of receiving, processing and use of information in professional translation.

Taking into account the fact that at the initial stage students had no practical skills and work experience, the data of the third activity-practical block at the ascertaining stage were not considered.

Table 2. Assessment of manifestation of the main components of professional competence of BAs in Linguistics in the process of

management pedagogical conditions realization (beginning/end) (%)

	it pedagogicai conditions realization (beginning)	Manifestation levels							
Compo- nents	Criterion and indicators	Initiative a	nd creative	Adaptive and situational		Reproductive			
		CG	EG	CG	EG	CG	EG		
	Motivational criterion								
Axiological	Understanding the importance and necessity of the profession	26,8/36,5	25,8/38,7	20,0/43,3	48,8/41,9	23,3/20,0	25,7/22,7		
olog	Motivation in mastering the future profession	23,2/33,4	22,5/32,3	56,7/53,3	51,/45,5	20,0/13,3	25,8/19,4		
Axio	Willingness to master the core competencies of the work	20,0/30,0	19,4/41,9	20,0/53,3	51,6/38,7	30,0/16,6	29,0/22,6		
	Average figure		22,6/37,6	52,7/50,0	50,6/42,0	24,4/16,6	26,8/21,5		
0	Cognitive criterion								
Cognitive	Volume, depth and awareness of knowledge	26,5/36,7	29,0/32,2	46,6/53,3	48,3/45,1	26,5/20,1	25,7/22,6		
gni	Possession of translation methods	26,7/43,3	19,4/35,4	53,3/40,0	54,8/48,3	20,1/16,5	22,5/16		
ల్ల	Possession of translation technology	26,7/26,6	19,4/32,2	50,0/40,0	51,6/45,1	23,3/20,0	25,8/19,4		
	Average figure	26,6/35,5	22,6/33,2	49,9/44,4	51,5/43,1	23,3/18,8	24,7/19,3		
	1	erion							
Technological	Availability of practical skills in the field of translation	-/25,8	-/48,4	-/25,8	-/33,3	-/60,0	-/6,7		
	Manifestation of creative independence	-/22,6	-/54,8	-/22,6	-/30,0	-/56,7	-/13,3		
	Successful experience of working with clients in the field of translation	-/19,4	-/51,6	-/29,0	-/26,7	-/60,0	-/13,3		
	Average figure	-/22,6	-/51,6	-/25,8	-/30,0	-/58,9	-/11,1		

At the formative stage, taking into account the peculiarities of each sub-stage, corresponding tasks were solved, which contributed to the optimization of students' motivational and value sphere, effective mastering of methods of self-organization, collection, processing, and use of various information on translation activity; stimulation of creative independence in the development of practical skills and abilities; organization of optimal conditions for the formation of universal and professional competences. Management activity was based on the monitoring of students' professional growth taking into account the tasks of each semester, their mastery of the program of academic disciplines, fulfillment of practical training tasks.

Examination of the experimental work materials allowed us to distinguish characteristic stages of a student's professional

formation: approval of professional choice for mastering the profession of a bachelor in linguistics; mastering the basics of theoretical knowledge, determination of values and beliefs; mastering the basic competencies of professional activity; formation of the basics of professional competence, professional culture as a graduate in the direction of a BA in Linguistics.

We analyzed the results of the Motivation of Professional Activity technique to determine the formation levels of readiness for professional translation jobs and got the following data: 19,7 % in CG and 6,5 % in EG students had a low level of motivation, 55,2 % in CG, and 56,3 % in EG students had a medium level of motivation, 25,1 % in CG and 37,2 % in EG students had a high level of motivation (Table 3).

Table 3. Levels of BA in Linguistics' readiness for professional translation practice according to the main components

	Co	Components of the future BA in Linguistics' readiness for professional translation practice							
Levels	Motivational		Ir	formative	Operational and Procedural				
	CG (%)	EG (%)	CG (%)	EG (%)	CG (%)	EG (%)			
Low	19,7	6,5	45,3	31,2	11,0	8,7			
Medium	55,2	56,3	27,7	39,5	64,0	56,2			
High	25.1	37.2	37.2	29.3	25.0	35.1			

At the final stage, according to the experiment results, the diagnostics of professional competence of BA in Linguistics in the control and experimental groups was carried out. The same qualitative characteristics of graduates' professional competence manifestation in the control and experimental groups were assessed. The same methods were used at the ascertaining stage (Table 4).

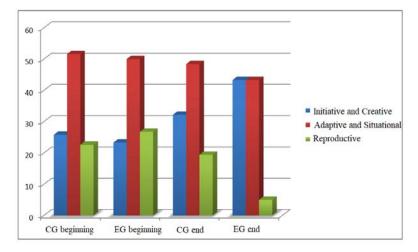
The expert assessment results analysis according to the highlighted indicators shows a definite increase in the professional development of future BA in Linguistics. However, we note that the qualitative growth indicators of the experimental group are significantly higher than those of the control group. It testifies that taking into account the dynamics of bachelors'

professional formation growth allows influencing both the student and the educational process, motivating and stimulating purposeful activity in professional-personal growth through pedagogical management conditions.

Quantitative and qualitative analysis of the results indicates that as a result of the experimental work students in the experimental group concerning the control group have a higher level of manifestation of professional competence. In the control group, there is an increase in professional competence. It testifies that the pedagogical conditions of management provide the necessary level of professional formation of Bachelor of Arts in Linguistics.

Table 4. Diagnostic results of the manifestation of professional competence formation levels in the control and experimental groups (%)

	Control	Group	Experimental Group		
	Beginning	End	Beginning	End	
Initiative and Creative	25,8	32,2	23,3	43,3	
Adaptive and Situational	51,6	48,4	50,0	43,3	
Reproductive	22,6	19,4	26,7	13,4	



Histogram 1. Dynamics of manifestation of the professional competence formation levels in the control and experimental groups

In the experimental group, there is a higher dynamic of graduates with the initiative-creative level of professional competence manifestation (by 11.1 %), and most importantly, with a reproductive level in the experimental group lower than in the control group (by 6 %). Overall, in the experimental group, 94 % have a high level of the professional culture manifestation basics.

As a consequence of the study, we found that the pedagogical conditions of teaching linguistics (optimization of practical training of future teachers of natural disciplines in the learning process, integration/updating of educational content, and orientation of the educational process on the development of creative reflective individuality) have a significant impact on the personal development of students, professional translation activity, organization of independent work, skills of working with educational material (classification, systematization, analysis, synthesis, order of study of the discipline), the ability to formulate opinions in writing, the cognitive development, creative thinking, etc.

#### 5 Discussion

Linguistic training implies teaching how to translate. Mastering its different types, using lexical, grammatical, and syntactic transformations, analyzing algorithms, analyzing the structure and semantic architectonics of text and parts, post-translation editing (L. Tinsley Royal, 2000). Recognizing the importance of linguistic training of a linguist, we share the opinion of E. Gentzler (2001) that "knowing the meaning of the grammar rules is not enough to actively use language as a means of communication. It is necessary to know the world of the language being studied".

Based on this, the content block of the model has a separate component of general cultural training, which corresponds to the formation of intercultural competence and is simultaneously responsible for the general cultural outlook, breadth of interests, and erudition of a future linguist (J. Raven, 2011).

The process of future BA in Linguistics professional training is conditioned by the formation of their freedom, as a professionally significant personal quality that manifests itself during language activities (Guirong Pan, 2010).

The model of social and pedagogical management of professional formation represents the interrelation and components' interdependence, which allows providing monitoring of students' professional personal growth and, taking into account its data, to provide influence both on students and the educational process through teachers, teaching courses, and practices organizers (D., Svyrydenko, 2014).

The technology of model implementation of pedagogical conditions of students' professional growth management is built in stages. It is focused on social order and labor market needs, possibilities of the educational process, socio-cultural environment of educational institution aimed at the formation of university graduate mentality, dynamics of students' professional formation, peculiarities of their motivation and activity in mastering the profession, as well as data of students' professional and personal growth monitoring.

While organizing the learning process, it is necessary to consider not only the peculiarities of students' learning but also their motivational advantages, which mainly lie outside the learning activity (Lai, 2013).

The foreign experience of W. Neunzig and H. Tanqueiro (2005) shows that the effectiveness of future teachers' professional training depends on the practical orientation of the content. It meets the needs of society in specialists, not only having high professional potential but also capable of disclosing this potential in conditions of real professional activity. In general, it can be argued that the considered model implementing a practice-oriented approach to the learning process has potential for modernization of higher education. It provides preparation of future bachelors in linguistics for professional translation activities, various training to determine the readiness to use translation technologies in professional activities, the introduction of special courses to monitor the development of this process, and its subsequent correction.

To improve the efficiency of higher education, it is necessary to create such psychological and pedagogical conditions when a student can take an active personal position and fully express himself as a subject of learning activity. The relevance of this research is determined by the changes in contemporary professional and pedagogical issues, as well as the need to implement the ideas of modernization of future specialists' professional education in linguistics and intercultural communication field.

The results obtained during the experimental work allow us to conclude positive dynamics of the professional competence formation level. Thus, the obtained data allow us to conclude that the research objectives have been achieved. The connection between the pedagogical conditions of future bachelors' professional training and the training results has been established.

#### 6 Conclusion

The presentation of assessment results at the beginning and the end of the experiment demonstrates the effectiveness of pedagogical conditions set for the professionalism formation of

BA in Linguistics during the professional training process in a higher education institution.

The model of preparing future BA in Linguistics for professional translation activity includes interconnected blocks:

- target (methodological approaches, didactic principles, regulatory requirements in higher education);
- content (training components and stages of their implementation);
- technological (pedagogical conditions, methods, forms and means of training process construction for future BA in Linguistics):
- evaluating (criteria and indicators of future BAs in Linguistics readiness for professional translation training).

During the training process of qualified translators, linguistics becomes relevant not only as a means of international communication but also as a condition for the professional competence of a future specialist in the translation practice. Thus, the developed structural and functional model of future BAs in Linguistics training for professional translation activity is a holistic, dynamic pedagogical formation with the existing internal links and interconnected elements. The given model is made following the logic of the educational process and peculiarities of future bachelors' training in linguistics.

The pedagogical conditions, ensuring the effectiveness of bachelors' readiness formation for future professional-pedagogical activity, we have attributed to:

- formation of positive motivation of bachelors to master the system of professional competencies;
- mastering production and pedagogical technologies;
- ensuring the development of students' creative potential;
- development of scientific and methodological support for the formation and improvement of theoretical knowledge and practical skills.

The selected pedagogical conditions (presence of motivational and value-environment in the educational process; development of personal and professionally significant qualities, moral and moral improvement of the personality of a future specialist) statistically influence the development of personal and professional qualities and formation of general cultural and professional competences of BA in Linguistics.

The conducted research does not pretend to completeness, as it does not cover the whole range of problems of Bachelor's professionalism formation in linguistics. Further development may be connected with content, methodological and didactic support of the professionalism formation process of a Bachelor of Arts in Linguistics while studying the course.

Implementation of the technology of pedagogical conditions of management of professional formation of a BA in Linguistics requires creation and consideration of necessary conditions of organizational and technological, sociocultural, and personoriented nature.

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#### THE FUNCTIONING OF TERMINOLOGY IN ACADEMIC AND SCIENTIFIC TEXTS

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Abstract: The internationalization of education brings specific changes to the learning process at universities, the greatest of which is the increased use of the Ukrainian language in professional discourse. Since the students must use both their native and foreign languages, there is a significant problem of terminological interference. The aim is to analyze the use of the terminological system of scientific and academic texts to solve the problem and promote professional communication and integration of students in the global dimension. The second part of the research quantitatively evaluated the influence of the terminological system of Ukrainian scientific texts on the formation of a coherent system of word-formation processes perception in conditions of intensive integration of scientific knowledge and their dissemination among foreign students. It was found that for 30 years of an independent approach to terminological system development in Ukrainian science, the attitude to terms borrowing and formation of own linguistic field of scientific reproduction perception of science and education development has been diametrically changed.

Keywords: Iinternationalization of higher education; professional discourse; terminology; communicative competence; information thesaurus.

## 1 Introduction

Internationalization is an important part of higher education today. It is recognized as a process of integrating an international, intercultural and global dimension into the purpose, function, or delivery of higher education at the institutional and national levels. The process targets both national and international students.

In the case of national students, internationalization is facilitated by the lack of educational opportunities in their countries, while attracting international students is a way to invest additional money or obtain high-level human resources.

The process takes two forms: internationalization at home and internationalization abroad. Internationalization at home can help students gain in-depth knowledge and acquire the necessary intercultural communication skills. Internationalization abroad takes the form of education through the openness of educational resources and mobility. Statistics show that by 2021, 2.7 million students were studying outside their country of origin. In many cases, internationalization means increasing the use of the Ukrainian language at universities for international students. Many universities now offer courses or full programs in Ukrainian for international students. Courses are offered either through content and language integrated instruction or in the form of parallel language courses. In such courses, students can attend lectures in their native language (L1) and then do reading assignments in a foreign language (L2). It is reasonable to combine them with additional language training.

There is one feature that most programs have in common, especially in the science and linguistics fields. It is the use of specialized discourse and terminology. During the course, students face a double burden: they must learn terminology in

their L1 and learn the same terminology with their L2. Moreover, learning terminology is different from learning general vocabulary because students must learn both the term and the concepts denoted by that term, establishing a structure of knowledge. Learning the correct terms is especially important because they contribute to knowledge acquisition and knowledge transfer in a specialized context. Terminology learning methods are of great interest today, especially in the field of Ukrainian for specific purposes, but in some aspects during the process of learning, the terminology is not given enough attention. One of them is terminological interference when learning terms in two languages simultaneously. Nowadays, new terms appear so quickly and come from so many sources that an enormous amount of polysemy and synonymy is inevitable when translated into other languages. One term may acquire different interpretations and equivalents, which makes the situation even worse. This process is not standardized or regulated, which introduces certain terminological chaos, interfering with communication and the perception of the integrity of the understanding of its essence, use, and origin.

This article *aims* to determine the role of terminology in scientific and academic texts of specialized discourse for students of humanitarian universities, as well as to identify and observe the most important difficulties associated with the study of terminology and the ways to overcome them.

Hypothesis: let us assume that studying the scientific Ukrainian terminological system and understanding the origin of terms and borrowings will form a unique idea of the linguistic picture of the world, its many-sidedness, and uniqueness. The research reveals deep and semi-conscious roots of "inferiority" and lack of a national terminological system; we should provide for a reassessment of attitude to the origin of terms and their use.

## 2 Literature review

The history of the formation of Ukrainian terminology is part of the history of the whole lexical language system development. The first attempts to collect and arrange the Ukrainian scientific terminology were undertaken in the second half of the XIX century.

Levchenko (1862) proposes to use Ukrainian words as a basis for scientific terminology and ignore foreign borrowings, especially those that proved difficult for the people's speech. In response came an opinion written by Yefimenko (1870). It also considers the principles of the approach to the creation of Ukrainian terms. The author suggests that terms should be formed from the bases of words available in the native language. In addition, Yefimenko (1872) notes that the ending of terms, which received foreign-language origin, should correspond to the forms of the national language. The main opinion expressed in the article concerns the necessity of creating a Russian-Ukrainian scientific terminological dictionary.

Only a few professional terms of foreign origin were taken into this dictionary. In addition, they were translated into Ukrainian neologisms, which were not always successful and capable of replacing words of international use. The German-Russian dictionary by Patrician (2006), which was published shortly before in Lviv, had a significant influence on this edition. The words of foreign origin in this dictionary were transferred to Ukrainian words. Almost all neologisms have not survived in our language, but some of them have remained, although not with a narrow terminological meaning.

The idea of creating a dictionary, but now a terminological one, was supported by I. G. Vergratsky (1870) in Western Ukraine, who published "Beginnings to the Teaching of Nomenclature and Terminology of Nature" in six editions during 1864–1879. This scholar is the founder of Ukrainian scientific terminology. Now his works are of great interest.

The Lviv Scientific Society named after T. H. Shevchenko began to carry out terminological work systematically since the 90s. Its aim was the creation of science through the Ukrainian language, which implied the formation of national scientific terminology. The materials related to Ukrainian scientific terminology began to appear regularly in the notes of this society. In addition, the authors of these articles were specialists in technical and natural spheres, as there were no philologists among them.

The next period of the Ukrainian scientific terminology research was connected with the creation of scientific societies in the East of Ukraine (1913 – Kyiv, 1918 – Luhansk). After 1905, the statutes concerning the prohibition of the Ukrainian language were limited in the Russian Empire. Everywhere began to arise societies, which aimed at creation of national terminology (at the Kyiv Polytechnic Institute, the society named after H. Kvitka-Osnovyanenko in Kharkiv; Luhansk Scientific Society).

The Kyiv Ukrainian Scientific Society was also engaged in terminology research. In May 1911, it published its first book, the "Collection of Natural and Technical Section". It included articles by Ukrainian scientists and engineers from different spheres of technology and natural science. The Dictionary of technical expressions, despite other tasks, was the evidence that the digest's authors pursued the goal of creating a Ukrainian scientific, in particular technical terminology. It belonged at the end of each digest.

After the proclamation of the Ukrainian People's Republic in 1917, Ukrainian became the official language of legislation, administration, and the army. The demand for Ukrainian textbooks and dictionaries increased dramatically. At that time, the "explosion of terminology formation in the Ukrainian language" was noticed. Terminological dictionaries were created by societies, sections, and individual authors. In 1918–1919, more than 20 terminological dictionaries of different branches (medicine, physics, chemistry, mathematics, geography, justice, and others) were published in Eastern Ukraine.

The Terminological Commission was created by the Kyiv scientific society in August 1918. The commission aimed to unite all the disparate societies, commissions, and individuals who were engaged in working with terminology. The Orthographic-Terminological Commission was also created by the Academy of Sciences. Its scope of work was not limited to the compilation and publication of dictionaries. A lot of work was done in different directions: compiling, drafting, and developing the theory of the term. The 20s of the XX century became a new stage in the development of Ukrainian scientific terminology. These years were a fruitful period of national terminology creation due to the appearance of multidisciplinary terminological dictionaries. It was the result of the cooperation of Eastern and Western Ukrainian schools. The two terminological commissions of the Kyiv Scientific Society and the Academy of Sciences united and, in 1921, created a common one called the Institute of Ukrainian Scientific Language. That was an institution of the Academy of Sciences, which consisted of six departments and 84 divisions. The main purpose of each section was to create a corresponding dictionary. Each section collected living material among the people from ancient books and ancient manuscripts to achieve this goal, with the help of its many reporters. Highly qualified experts in the natural and technical sciences and philologists rallied around this institution. They concluded and published more than 40 terminological dictionaries from various fields of science and technology.

The theoretical foundations of term creation have been given in the IUSL Dictionary Compilation Guide (2008). The need to use the lexical material of a particular language and literary sources deserves special attention; the need to create a new term in linguistic dissonance visions. In case if it is necessary to conduct a foreign term, the borrowings must be created by the terminological material of another foreign language, in which, perhaps, this fiefdom is independently and fully developed.

Tendencies of Ukrainian scientific linguistics of the 20–30-s of XX century were a logical continuation of the research conception of the end of the XIX century. All work of the Institute was based on researches of Ukrainian linguists, writers, scientists, united around Shevchenko Scientific Society.

The task to develop the Ukrainian scientific language was suspended in 1933. The struggle against "national harm on the linguistic front" began. After the liquidation of the authoritative scientific center that coordinated the terminological work all over Ukraine, the Institute of Ukrainian Scientific Language, in 1930, the real war was started against the Ukrainian scientific and technical terminology.

New "purified" Institute of Linguistics published terminological dictionaries - "Terminological Bulletins" (1934–1936), which "fixed" 14.5 thousand lexical terms of Ukrainian terminology and which made from 50 to 80 % of original Ukrainian terms.

Unfortunately, after the liquidation of the most authoritative scientific center (Institute of Ukrainian Scientific Language), which coordinated terminological work throughout Ukraine, the development, further study, and standardization of the Ukrainian scientific terminology stopped in 1930. The publication of scientific journals and monographs in the Ukrainian language was prohibited. As a result of this totalitarian action, the Ukrainian terminology began to abound in the language of hybrids, incorrect translations, and inappropriate borrowings; the new generation of scientists (even those whose native language was Ukrainian) did not have sufficient knowledge of the scientific Ukrainian language.

It was a difficult period in the development of Ukrainian scientific terminology because the results of many years of research and creativity of Ukrainian scientists have been forgotten, dictionaries and Ukrainian-language textbooks have not been published. This period is characterized by complete stagnation in the development of Ukrainian terminology.

Even though the science was developing, the Ukrainian terminology was not used in this field because there was no need for either textbooks or dictionaries in the Ukrainian language. For more than 40 years, only a few works (monographs, textbooks) were published in Ukrainian. Even the "Khrushchev Thaw" did not shake the fundamental principle of terminological policy in the USSR dictated by the Resolution of the SPA of 1934: "...the Ukrainian terminology can only be spoken only from the time of Soviet power in Ukraine".

A Dictionary Commission was created by the Ukrainian SSR Academy of Sciences in 1957. It was headed by Academician I. Shtokalo, whose main task was to publish 18 Russian-Ukrainian and Russian-Russian dictionaries. Nevertheless, the result of its work was the edition of 16 Russian-Ukrainian dictionaries. None of the Ukrainian-Russian dictionaries was published.

The special "Recommendations of the All-Union Conference on the Development of Terminology in the Literary Language of the USSR" were adopted which promoted the policy of "unification of nations" and "fraternity of peoples" in the linguistic question in 1961.

In the 70s, all specialized scientific journals of the Academy of Sciences of the USSR on natural and technical sciences were translated into Russian, which led to further Ukrainian scientific and technical terminology russification. The conference participants stated in their speeches that the main source of development and replenishment of Ukrainian terminology is the Russian language. As a result of this regulation, some of the Ukrainian terms were simply replaced by Russian ones. Almost all borrowings that were not presented in Russian were removed.

Such terminological policy of the Soviet Union entailed the loss of individual features of Ukrainian terminology, latter almost turned into a copy of Russian terminology and lost its linguistic richness and individuality. For several decades Ukrainian

scientists were in the conceptual field of the related Russian language. This language penetrated the consciousness of Ukrainians so strongly that sometimes only an expert can distinguish between the Ukrainian and Russian forms. The Ukrainian language has adopted those terms of the Russian language that are used with inappropriate meanings. Borrowed translations were constructed with deviations from the norms of Ukrainian word-formation.

New possibilities of terminological problems have appeared since Ukraine declared independence in 1991. New branch terminological dictionaries have been issued for translation. However, not all areas of science and technology have a thorough Ukrainian terminology. The creation and unification of the required terminology is a priority for terminologists.

For the first time in Ukraine began to create its state standards of terms and definitions. To achieve this goal at the National University "Lviv Polytechnic" in 1992 by the State Standard of Ukraine and the Ministry of Education of Ukraine, the Technical Committee of Standardization of Scientific and Technical Terminology was created. Thanks to the selfless work of specialists and the participation of scientists-philologists, scientists became possible, despite world experience, in "Terms and definitions" during the period from 1992–1996. more than 600 State Standards of Ukraine (SSU) were developed.

An important achievement of terminology development is the organization of various terminological conferences, in particular, Russian terminology and modernity (1996, 1997, 1998, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2011). The results of the conferences showed a lack of ordering of terminology, which complicates the prepared and professional communication between scientific and scientific-technical workers. It also causes errors in the preparation of technical documentation. Therefore, the primary task of linguists is to standardize the existing terminology.

The modern stage of terminological development, as linguists note, is to a certain extent similar to the period of the twentieth century. The similarity consists in the ways search of combining the best achievements of terminology of the past, oriented not only on foreign sources but also on internal resources of the Ukrainian language, with the modern practice of common use of international terms.

These studies allow us to trace the history of the development of terminological systems, the process of nomination of special concepts that passes through several stages (the period of the initial concepts' denotation, the stage of adding the common words to the terminology); to reveal the framework moments of system organization of terms at the level of nomination and paradigmatics; to reveal linguistic and non-linguistic factors affecting the construction of terms, development, and formation of terminological systems; to facilitate its process of standardization and codification, and its possible prediction in the future

### 3 Materials and methods

The materials of new dictionaries on forestry, information systems, linguistic dictionaries of comparable speech, research methods - comparative-comparative, historical and ethnographic were used. To achieve the goal, we used a comprehensive methodology, which allowed us to carry out a holistic study of the factual material. General scientific (generalization, induction, deduction) and empirical-theoretical methods (analysis, synthesis, method of comparison, and classification) were used in our work. The process of selection of terms was carried out by the method of continuous sampling. The descriptive method, the method of dictionary definitions, and the method of semanticcomponent analysis were used for the inventory and distribution of the studied terms into thematic groups, establishing their definitions, determining the semantic structure of the studied language units, and revealing semantic changes in the scientific terminological system concerning synonymic. The structural and word-formation methodology is reflected in the analysis of word-formation models of terms. The method of quantitative analysis consists in determining the frequency of the studied terms and their thematic groups in Ukrainian scientific opinion.

#### 4 Results

The importance of specialized communication is noted in some of the international certification standards established for higher education. One of the most important standards is the European Network for Accreditation of Humanitarian Education (ENAEE). This standard emphasizes the development of such qualities as global and critical thinking, effective communication (both written and oral), and knowledge system building. One of the methods that contribute to the effective development of such competencies is terminological training. The cognitive component of the term is represented by the ability to conceptualize and construct a system of thinking. At the same time, the communicative side takes into account the transfer of knowledge and its assimilation.

A term can play several roles related to its communicative and cognitive sides; the roles may include knowledge fixation, discovery, and transfer. Each of the roles can serve a different function. Within the role of knowledge fixation, there is an instrumental function (the ability to use a concept when an image becomes an object of thought) and a function of knowledge fixation. The latter function is related to the development of knowledge by changing the conceptual paradigm.

According to existing theory, the development of knowledge occurs when old concepts, expressed by terms, begin to improve or revise. As a result of this process, there is a need to introduce new concepts, which, in turn, gives impetus to the transition to a new level of scientific knowledge.

The transfer of knowledge is represented by the training and information functions. The performance of the latter function terms in technical and scientific texts creates a special system of concepts, which allows obtaining information from texts.

One of the most important functions of terms belongs to the development of knowledge. Heuristic functions allow us to consistently organize knowledge, organize and create a unique view of the world and form the perception of its integrity. It also includes the classifying function and the analogical (modeling) function. The first function allows the specification of existing concepts; the second provides the new concepts' creation by analogy with already existing ones. The classifying function should be divided into clarifying and differentiating functions of terms synonyms, including foreign terminology.

Thus, knowledge and proper use of terminology will allow students to obtain world-class abilities in information analysis, the conceptualization of representations, and engineering problem-solving.

To use terminology appropriately in university courses, several problems must be solved. The terms used must have an unambiguous correspondence to the concept (absence of polysemy and synonymy). Its meaning must correspond to the concept expressed by the term. It must be clear, concise and have the derivational ability and linguistic precision. In contrast to the increase in polysemy and synonymy, polysemy in meaning is indicative of the critical state of terminology.

Terminological standards have become less binding, and the creation process of terminological units is characterized by chaotic development and perception due to the uncontrolled spread of foreign-language information on the Internet and the intensive process of borrowing foreign words. The situation is complicated by the lack of special training and knowledge of specialists who create new terms, which leads to the variability of terms when one concept corresponds to several terms

simultaneously, and their use is not fixed in standard dictionaries.

Variation can manifest itself on different levels and sides of language. First of all, there are many graphical variants of the same term, which appeared as a result of the reflection in the written speech of the same concept through various graphic means. In addition to graphic modifications of terms, there are also phonetic variants: phonemic and accentual. Phonemic modifications differ in pronunciation. They may be associated with the soft or hard pronunciation of consonants before vowels. For example: f[r'e]ym - f[r'e]ym [fr J 'ejm] - [fr 'e jm] (frame) 'part of the data transmitted over the network', K[mie]n -K[mie]n [dom J' en] – [dom 'en] (domain) 'part of the name hierarchy on the Internet'. Accent modifications are associated with a change in the place of accentuation. Here in the examples, the marked syllable is indicated by capital letters. For example: backbOn - bEkbon [be kb' on] - [b 'e kbon] (backbone) 'the main data route or the main route of the Internet', DomEn -Domain [dom J 'en] - [d 'om en] (domain). In these pairs of percussive variants, the normative variant occupies the first place, and the colloquial variant used in vernacular takes the

All these problems demonstrate the need to work on terminology standardization for their unambiguous understanding and the elimination of terminological barriers. It is necessary to unify and internationalize terminology to ensure the effective communication of professional engineers at the international level. It will greatly facilitate the internationalization and integration of scientific research. As a result of the terminological material analysis, we found that the systematics of nominative units in the system of forestry terminology is expressed in the functioning of four classes of nominative units, such as terms, the terminologized common-use lexical units, professionalisms, and nomenclature (taxonomic) names. Let us consider each group in more detail.

Among the analyzed forestry terminological units, we distinguish general scientific terms, interdisciplinary terms, and specific terms according to the degree of specialization of their meaning.

Forestry terminology contains the following general scientific terms: adaptation, structure, system, potential, method, species, norm, optimization, plan, forecasting (prediction), productivity, resources, genus, development, structure, type, etc.

The vast majority of such names clarify the meaning of terminological phrases, for example, adaptation to global climate change, the structure of the stand (planting structure), root system, landscape potential, forest accounting methods, forest management methods, type of forest crops (forest species), recreational load norm, landscape optimization, ecological optimization, afforestation plan, increment forecasting, forestry forecasting, stand productivity, forest resources, a system of forestry measures, the forest age structure, forest type, mulch tree type (stand type), and so on.

The functioning of forestry terminology is associated with the use of such interdisciplinary terms:

- biological (climate, mesorelief, phytomass, flora, plants' formation);
- botanical (monocenosis, zoocenosis, breeds (forest tree species), associated species, photosynthesis, phytoclimate);
- zoological (zoophages, eagle, deer, forest fauna);
- ecological (abiotic factors, ecosystem, natural environment, waste, resources, greening);
- chemical (nucleic acids, phosphorus, calcium, sulfur);
- physical (radiation dryness index, natural radioactivity, solar radiation, irradiation of wood);
- geographic (landscape, agricultural landscapes, buffer zone, topography);
- economic (non-wood forest products, hunting products);

- farming (low-wood farming (undergrowth), forest seed farming (seed production), accounting (birds' inventory), animal accounting (animal inventory), natural resource accounting (natural resource inventory), balance (forest heat balance), revision);
- medical (cycle (cycle of substances), biological cycle, veins);
- technical (machines, threshing machine, chopping machine, forestry tractor, wood threshing machine, technology);
- architectural (mosaic);
- geodesic (leveling tool, geodesic point (geodesic station);
- military (tablet, map-board).

It should be noted that some of these terms retain a common lexical meaning within the forestry term system, for example, taxa (fixed rate, tax) – "an officially determined stable price for goods or a certain amount of payment for a certain type of labor and services". Bilodid (1979) and Gensiruk (2007) determined tax (fixed rate) as "cash charges by loggers when a forest goes to the roots"

Only a small number of terms indicate a narrowing of their meaning (compare: taxation (inventory) - "1. Determination of a tax, a price for anything. 2. Material valuation of a forest (determining the stock and quality of timber). 3. Determination of quantity and quality of something", Bilodid (1979) and forest inventory (forest area estimation) – "determination of the stock, the yield of intermediate assortments and tax value of wood in stands" Gensiruk (2007), forest inventory selective (shifting sampling of the site) - "the detection of quantitative and qualitative characteristics of the object"; association (association) - "1. Voluntary association of persons or organizations to achieve a common economic, political and cultural goal, cooperation, association 2. Connection of something as a whole 3. Relationship between an individual neuropsychological asset..." and association - "naturally formed within a certain habitat with similar conditions of existence, vegetation, homogeneous in species composition...".

We can record the change of meaning of a small number of terms within the forestry term system (compare: sketch (outline) - "1. The contour of an object; contour... // Contour drawing. 2. General characteristic of a phenomenon, person, review of events, etc." and sketch (outline) - "man-made schematic plan of a land plot with marking of land contours, local objects, results of measurements on it..."; updating (update) - "regular changes in the information funds...; a set of operations to maintain the information base in a state reflecting all changes of an object at present" and actualization (updating) - "bringing together forest fund data of different ages to the same date; one of the comparative-historical methods of studying the history of forest development"; taxator (forest cruiser) - "1. 2. Fiscal agent" and taxator (forest cruiser) - "forestry specialist, forestry engineer, who performs the whole range of field and service logging".

Terms in pure forest represent the core of the analyzed terminology and denote the names of industry specialists (logger, forest surveyor, forester, woodsman, woodcutter, ranger); forest science (forest taxation (forest inventory, silviculture), silvicultural science); forest pyrology (forest fire science); forest ecology, forest signs (woodland, a forest plantation, stand, matched stand); tree species groups (wood species dominant, associated species, wood species with high wood strength, shade-tolerant species, sun-tolerant species; plant litter types (soft humus, silt, moraine); processes (afforestation, silvicultural operations (felling), voluntary and selective felling (selection), even-aged felling, clear-cutting, sanitary felling, stump removal); equipment (wood threshing machine, windrowing machine (windrower), grapple skidding, forwarder, etc.

The terminologized, commonly used lexical units constitute a significant group in the forestry terminology system. Such terms are understandable to an ordinary speaker of the language, who

actively uses them in his speech. However, these lexemes are an obligatory component of the terminological system because, without them, their integrity would be violated. The use of pronunciation words to denote the names of specific concepts is the basis of this process because, more often, there is an expansion or narrowing of their meaning. "The movement from the sphere of commonly used vocabulary to terminology occurs along two lines: through the development of secondary terminological meanings in common lexical units and the use of commonly used words in compound terms".

Common names, which originally were used in oral professional speech, later began to be applied to specific concepts in scientific publications, and as a result, such names established themselves as general scientific terms.

In the forestry terminology system, such processes are the names of forest areas (meadows, thickets, woodlands, glades, tracts, forest massifs); forest types (birch forests, beech forests, alder woods (alder forests), hornbeam woods (hornbeams), oak woods); tree species (young, growth); additional species, tree parts (top (apex), branch (twig), leaf); wood defects (overgrowth, curl, stigma, veins, cracks, wormhole); plant names (birch, alder, lily of the valley, camomile, oak, pine tree, spruce (fir); birds (stork, swallow, quail, owl); animals (wolf, fox, bear); names of processes (peeling, lighting (first clearing), sawing (pruning), thinning, sprouting); plant diseases (cancer, burn), and so on.

A distinctive feature of some forestry terms is the identity of their meanings with the meaning of the common word. For example, such lexemes as a tree (wood), forest oak, snowball tree, maple, rootstock, undergrowth, dryness (stagheadedness), pole-stage forest, layerage (storey structure) are recorded in the Ukrainian dictionary as common words, for example: "tree (wood). 1. A perennial plant with a hard trunk and branches forming a crown. 2. The wood of this plant, going for construction and various products"; "Dibrova (oak forest). Deciduous forests on fertile soils, where oaks predominate"; "Kalyna (snowball tree). 1. A shrubby plant, 2. The berries of this plant"; "Podship (rhizome)".

Some special dictionaries present the mentioned lexemes as terms: Tree – "a perennial plant with a characteristic aboveground trunk, crown, and roots"; oak forests – "forest ecosystems", with the dominance of one of the oak species in the rootstock" Gensiruk (2007); rootstock – "a plant to which a shoot or bud of another plant is transplanted" Gensiruk (1999); snowball tree (Kalyna) – "genus of shrubs of the honeysuckle family" Gensiruk; young growth is "the young generation of woody plants under the crown of a forest or on logs" Vintoniv and Grijuk (2009); layerage is "the vertical division of a stand into layers" Tunica, Boguslaev (2014); dryness is "the dying off of the tops and upper branches or the tree crowns" Krinitsky (2006); stands – "a group of trees forming a more or less homogeneous forest area" Vintoniv and Grijuk (2009).

Commonly used words can often flesh out the meaning by typing the term signs, thereby providing a requirement for unambiguous terms, compare, e.g.: fit (additional species) -"1. The action of meaning to fit. 2. Shrubby wood blown up to accelerate the growth of slow-growing species. 3. An additional sprout of cereals, formed later from the main stem" and fitting (additional species) - "in forestry, these are secondary tree species created with favorable conditions for the growth of the main tree species"; seedling (seed tree) - "1. A plant, the fruit of a plant, and grains, tubers, are left as seeds. 2. An area designated for growing plants for seed with those plants. 3. A seed specialist" and seedlings, "trees that are left on the root during clear-cutting for subsequent log sowing for natural regeneration"; illumination (first clearing), "1. The meaning of the action to illuminate. 2. Light from any source. 3. Technical equipment which is a source of light" and lighting (first clearance) - "the care of young stock up to 10 years of growth, kept in all plantations".

Commonly used lexical units are also used as components of terminological word combinations, for example, direction (logging direction, logging destination); seed (seed control), seeding material); forest (forest exploitability, forest canory, recreational forests, forest outliers); age (forest plantation age, stands' age, logging age); oak forest (oak forest, oak-derived silkworm (procession moth), oak green leaf miner, oak crested moth (oak moth), oak flea, beetle, moth, brown oak bronze moth, oak bark beetle), etc.

Professionalism is a word or phrase peculiar to a certain professional group language. Such names are used "as colloquial synonyms-equivalents to stylistically individual professional nomenclature or words-terms, and often beyond the literary norm." Rusanovsky, Taranenko (2004).

The use of professionalism is due to the specific activities of specialists in the forestry field and is associated with the use of a significant number of dialectal names in the terminological system under consideration.

In the field of forestry, professionalisms are a nationally specific reality. Some of them have no English equivalents, and some are dialectal names. Forestry professionalisms serve to denote names persons, depending on the type of of (haievyi / haiovyi = forester); types (horyzontalka = barrel rifle with a horizontal arrangement of barrels; dvostvolka - bore shotgun with two barrels; Triinyk = combined shotgun with smooth - bore and threaded barrels; Shtutser = disposable rifle carbine; boltovyk = threaded carbine with hand overloading chub and smooth - bore rifles with vertical placement of barrels); production facilities in the forest (upper stock) = forest's log depot; lower stock (nyzhnii) = depot industrial log; Volok = skidding road, jack ladder = planting, school (shkolka) = seedling house, ovary (matochnyk) = forest seed garden, plantation types = elite trees, dry out = snag; density of plantings and crowns = groups of rushes or tods, contributing to a better microclimate for major species at a young age by uniform shading; windows = gaps between tree crowns; oak in a coat = lighting the top of oak seedlings; plantation tier = layer, parts of wood and its defects; smelnyak = resin stump; obrizka (trimming) = waste wood, hornblende (rohovytsa) = hardened wood, rascheh = crack in the wood along the trunk; method of cutting knots (per lance = cutting knots to the surface of the log); tools (klupa = lathe carriage, lantset = Kolesov's planting iron, visniak = cutting tool for stripping the bark, rompak = cutter); different types of processes (stacking wood = stacking round wood; stamping = marking trees, prydelka (attaching) = grafting of seedlings, pidsochka = process of getting birch or maple syrop), beetles (drukar) = eight – toothed cutter); animals (kosyi = rabbit, rohach = moose, elk (sokhatyi) = moose, sakach = wild boar, sulphur (sirak) = wolf); layers of wood (act (apas) = layer of wood, determining the age of the tree, decrease (nyzka) = layer on the tree, located directly under the bark), and

Such names "enable users interested in the development of Ukrainian technical knowledge to experiment and improve terminology on their language, more boldly introduce new equivalents, look for a reasonable dialectic between borrowed and their own".

Summarizing the problem of the relationship between terminology and professional vocabulary, Pavlova (2008) identifies three views. According to the first opinion, these two concepts are identical. The second opinion points to the difference between professional vocabulary and terminology due to a certain historical feature. The third opinion suggests that terms and professionalisms have both common and distinctive features. Pavlova (2008) focuses on attributes that help distinguish between professionalisms and terms. We have presented them in table 1.

The distinctive features shown in Table 1 are also typical for forestry professionalism. We will try to describe them more specifically.

Table 1: Distinctive features of terms and professionalisms by Doroshenko and Lysenko (2018).

Professionalism	Terms
Do not belong to the	They are a normative part of
normative special	the scientific language's
terminology	special vocabulary
General and special	They are fixed in dictionaries
dictionaries are less	and function simultaneously
common; they exist mainly	in two spheres (fixation and
in the field of functioning	functioning)
Used mainly in oral or	Written speech is the
spoken language	dominant area of functioning
They have a slightly wider	May be known to people who
scope of special use	are not related to the defined
scope of special use	professional field
Characterized by the desire	Deprived of connotations,
for expressiveness,	i. e., expressive color
imagery, expression	-
Systemic connections are	Systemic connections are
less pronounced within a	expressed to a large extent
particular industry	within a particular industry
Appear during professional	
communication as	Appear in the process of
secondary forms of	scientific research and
expression and are often	function in scientific
used as professional	communication
colloquial doublets of	communication
official terms	
They are characterized by a	
lower degree of	Characterized by the highest
specialization of word-	degree of specialization of
forming means in	word-forming means
comparison with terms	
Belong to the periphery of	Belong to the center of the
the terminology	terminology

#### 5 Discussion

First, forest professionalisms do not belong to the normative special vocabulary; they are used mainly in oral communication and colloquial language because, as noted above, they have parallel dialectal names (e. g., yew – gew, thesina; nongni-tree – nekhnii-tree; ash – elm, holly, jasenina). Therefore, such names are not recorded in special dictionaries.

Secondly, these terms are used in professional communication as doublets of official terms (e. g., side, vertykalka = the barrel of a rifle with a vertical arrangement of barrels; school (shkilka) = nursery (nursery farm).

One suitable form for this purpose would be a bilingual or multilingual information thesaurus for a particular subject branch. A thesaurus is a type of dictionary that regulates specialized vocabulary within a particular information system. A thesaurus has some advantages over terminological standards: it can be continuously updated and reviewed at certain periods. This work is usually done by the same specialists, which gives it a continuous character. Modern information technology will allow the thesaurus to be placed online and openly accessible to users. The thesaurus can include many languages, and there is no need to republish it since all the work is done digitally.

Creating a thesaurus includes the following stages:

- delimitation of the subject domain;
- selection of words reflecting the topics of the subject domain and making a list of words;
- creation of classification schemes of representations in the subject domain;
- alignment of the list of words and classification schemes with their mutual updating;
- construction of the alphabet and other parts of the thesaurus;

 experimental testing and modification; creating rules for updating thesaurus.

Such a thesaurus with unified terminology of a particular subject branch can become the basis for the formation of the professional communicative competence of future technical specialists.

Modern international educational standards impose strict requirements on graduates of technical universities. These requirements require professional thinking and communication as one of the main components of a future engineer. It should be manifested both at the national and international levels. The basis for the development of such competencies can be terminological training, but the need for unification and normalization of terminology.

The internationalization of higher education brings some changes in the learning process at universities. In particular, when learning specialized vocabulary, students are introduced to concepts in both their native and foreign languages. Only knowing the exact equivalents in both languages will make professional communication effective. However, the growth of polysemy and synonymy in terms seriously impedes this process. What is needed is work of standardization, which can be done in the form of an information thesaurus. Frequent examples of English borrowings include: department, brand, business, default, dealer, business lunch, inflation, license, voucher, privatization, holding, flash mob, emission, margin, teenager, speaker, provider, inauguration, coalition, PR, image, extradition, separatist.

Oral borrowing occurred predominantly in early times, while in more recent times, written borrowing has become more important. Words borrowed orally tend to undergo significant changes in the act of perception. On the contrary, written borrowings, in general, retain their spelling and some features of the phonetic structure. Their assimilation is a time-consuming process.

We can say that most borrowings come to the Ukrainian language through mass media, entertainment, music, and culture in general. In particular, the mass media is the main channel through which most of the borrowings and neologisms enter our language. Every day, there are articles in newspapers that contain a large number of lexical units that are not peculiar to our native language. To a certain extent, this can be seen as positive progress, but on the other hand, excessive borrowing can cause serious damage to our language, crowding out the native Ukrainian vocabulary. Interestingly, translators trying to convey foreign sources often choose not to translate but rather borrow a foreign word. It explains why words such as trader, intension, underground, message, and others, can often be found in modern newspapers. According to the authors, it is better to use Ukrainian words when there are correspondences in the language. For example:

- 1. Trader merchant;
- 2. Intention intent, plan;
- 3. Message information.

The choice of media discourse analysis necessitates a terminological critique. The next chapter analyzes different perspectives on the scope and essence of the concept itself.

The systemic functional approach allows us to distinguish the main functions of borrowings and neologisms. In addition, it allows us to analyze the mechanisms of value realization in the process of term production or translation, including its functioning in discourse, interpretation of perception, and axiological identification.

Since the source of analysis is limited, it is necessary to emphasize media discourse as a field of full-fledged functioning of neologisms and borrowings. It is necessary to analyze the main features of borrowings to determine the value of

borrowings as their immanent property. The value itself is seen as an immanent property of media discourse, which determines the characteristics and specifics of the functioning of discursive points.

Borrowings and neologisms constitute perhaps the greatest challenge to the professional translator. Technology gives birth to new objects and processes, and new ideas, concepts, and nuances derive from the media. Social science terms, slang, dialects entering the linguistic mainstream, and transmitted words make up the rest. A few years ago, 300 new words were counted in four consecutive issues of the French weekly Express. It is noted that each language acquires 3,000 new words a year. Neologisms can be defined as newly lexical units or existing lexical units that acquire new meaning (Doroshenko, Lysenko, 2018). Neologisms cannot be quantified because so many hang between acceptance and oblivion, and many of them are shortlived individual coins. Their number is increasing rapidly, as we become more linguistic as well as self-conscious. Articles, books, and dictionaries devoted to them are appearing with increasing frequency. Because they usually first arise in response to a particular need, most neologisms have a single meaning and can therefore be translated out of context, but many of them soon acquire new (while sometimes losing old) meanings in the target language.

According to the Dictionary of Historical and Comparative Linguistics, lexical borrowing is the transfer of a word from one language to another as a result of some contact between speakers of two languages.

Language as a social concept and the continuous evolution of vocabulary is a process, which is reflecting the development of society. The reasons for the introduction of neologisms and borrowings into the language are manifold:

- the need to define or describe a new concept;
- to find the most precise and expressive definition;
- to find the shortest answer (language economy);
- to create an image, to escape tautology;
- to evaluate and characterize.

One of the primary functions of neologisms and borrowings is the realization of meaning: the evaluation of the object defined by the neologism or borrowing itself, the meaning of the concept, and the situation. This process is determined by the needs of society. Lexical borrowing is not just the result of the need to name a new reality or concept but also the expression of the subtle tones of individual moods, feelings and to evaluate a certain idea of reality.

## 6 Conclusion

Thus, the formation of Ukrainian scientific and technical terminology is a long and multi-stage historical process, which became especially active after Ukraine gained independence in 1991. The development of selective thematic terminology was carried out by constantly increasing the number of scientific and technical subjects selected from the national language. The influence of internal and extralinguistic factors has led to a significant number of borrowings from English, German, French and other languages in the Ukrainian scientific and technical terminology.

In the conditions of integration changes, it is necessary to pay not only declarative attention to restoration of scientific approaches to the formation of the Ukrainian scientific terms but also to develop own layers and foundations of scientific definitions which are necessary for designation of the maintenance and essence of the development of a terminological system.

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**Primary Paper Section:** A

Secondary Paper Section: AI, AM

# STRATEGIC GUIDELINES FOR THE DEVELOPMENT OF UKRAINIAN PARLIAMENTARISM IN THE CONDITIONS OF GLOBALIZATION

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Abstract: The purpose of the research lies in substantiating the theoretical and applied principles of the study of strategic guidelines for the development of Ukrainian parliamentarism and assessing the impact of globalization processes on it. It has been established that the development of Ukrainian parliamentarism is significantly influenced by globalization processes and takes place in conditions of instability and persistent uncertainty. It has been proven that in current conditions the value of the globalization index is formed by taking into account such indicators as the index of the life quality of the population, the index of state instability and the index of democracy, which characterize the parameters of the development of Ukrainian parliamentarism and, at the same time, have a significant impact on the globalization index.

Keywords: globalization, Ukrainian parliamentarism, state instability, democracy, parliament.

#### 1 Introduction

The development of Ukrainian parliamentarism, enhanced by globalization factors, takes place within the framework of the national-historical and political conditions for the formation of the state. It is aimed at ensuring the principles of democracy, human rights, the duties of a citizen, the rule of law and human right, however, it is characterized by a tangible imbalance between European standards and norms and their actual compliance. The necessity to transform the political system involves political modernization and the transformation of the social-economic sphere of the society. In the process of such a transition, the preservation of political stability and expanding the possibilities and forms of political participation, which can be achieved through the effective functioning of political institutions, are of paramount importance. In this context, the role of parliamentarism and the significance of parliament in the system of higher state authorities are being actualized. After all, the development of Ukrainian parliamentarism is characterized by both positive trends in the formation of statehood, and crisis phenomena leading to the emergence of oligarchic parliamentarism. Ukrainian parliamentarianism is significantly influenced as a result of globalization processes, which provide for the interdependence and mutual influence of states and the society, as well as the guarantee of democracy and social progress.

#### 2 Literature Review

The integration of Ukraine into the European space, geopoliticization and mega-regionalization have increased the influence of globalization processes on the development of Ukrainian parliamentarism, which is affected by permanent political crises, and it is contradictory and inconsistent. Under such conditions, the ability of the parliament to address the pressing needs of the political system and respond quickly and effectively to threats and vulnerabilities becomes of particular importance.

Parliamentarism is interpreted as a system of organization of the state power, the characteristic features of which are the recognition of the leading or essential role of parliament and consideration of the formation features of Ukraine's development strategy in the conditions of globalization (Hirman et al., 2021).

The development of Ukrainian parliamentarism is significantly affected due to political instability in the country, and the evolution of the political structuring of the Ukrainian parliament, according to the viewpoint of Rosenko et al. (2021), is associated with political crises destabilizing the processes of democracy, political culture and national consciousness.

An equally important factor in the sustainable development of Ukrainian parliamentarism is the provision of democracy, which involves ensuring political liberalism and recognition of the public standpoint (Goshovska et al., 2021).

Yarovoy (2014) emphasizes the strengthening of democratic development and the need to conduct investigations on Ukrainian parliamentarism in conjunction with the formation of democracy; the scholar also argues that the social-economic readiness of the society to accept democracy as a strategic guideline for the development of parliamentarism is important.

At the same time, Kosinsky (2017), as a result of his own scientific research, has come to the conclusion that the formation and development of Ukrainian parliamentarism takes place on the basis of such values as democracy, ensuring the rights and freedoms of man and citizen. However, as Nyznyk (2021) argues, the parliamentary practice of Ukraine is characterized by experimentation in the introduction of the e-parliament and the institutionalization of the parliamentary opposition, which significantly hinders the development of parliamentarism and requires the development of a set of appropriate measures necessary to solve this problem.

Choudhry et al. (2018) have revealed the close relationship between Ukrainian parliamentarism and constitutional stability in the country, the violation of which leads to a recurrence of institutional conflict between the president, parliament and the government, fragmentation and weakness of the party system, which destabilizes the parliament.

Cheibub & Rasch adhere to a similar standpoint (2021), identifying two main trends in the development of European parliamentarism that affect Ukrainian realities, namely:

- strategic interaction between the parliament and the government;
- protecting the parliament from mutual interference.

At the same time, scholars argue that parliamentarism is a flexible system, and it is influenced by external and internal factors. Precisely because Ukrainian parliamentarism is significantly influenced by geopolitical processes, it is vulnerable to the influence of globalization, the need to study the trends of which has emerged relatively recently, and the term itself was proposed by Levit (1983) in 1983 as an interpretation of a transnational corporation due to the merger of national markets.

The subsequent transformation of the political system of Ukraine depended on the crisis phenomena that were observed in the country in the context of globalization and led to collapse and stagnation (Lin, (2014), where globalization was seen as a generalization of recommendations for reforming the country (Williamson, 1997; Williamson, 2003). However, the desired effect was not achieved, and the introduced model of globalization in the countries of Central and Eastern Europe did not succeed due to its incapacity in the political sphere. Consequently, the search for new interdependencies and interrelations in the formation of a new global level of parliamentarism development, which is positioned in terms of the interconnection of political systems at the international level, has acquired an urgent need (Robertson, R. T. (2003). Such an organization of parliamentarism in the context of globalization, according to the viewpoint of Omae (1995) is interpreted as the

end of the "nation state" and the beginning of the "world without borders", in which there is no concept of the state and global corporations function, as well as the creation of a truly unified world is also envisaged (Anderson, 2001).

Globalization is considered one of the vectors of promising and effective multi-format cooperation at the international level and, at the same time, a new direction of human development, united by a common idea, due to transformational conversions of world processes and phenomena. Matviychuk (2016) considers globalization to be an exceptional feature of international relations, and the author connects it with the integration of national systems into the global financial, economic and social-political space in economic, social and political dimensions, which ensure the intensification of the processes of transnationalization of the economy and politics, the integration of the population into international social institutions and the political weight and influence of the country on the world processes and opportunities for their change.

Shevchenko & Solod (2017) argue that the processes of globalization intensify the unification of social-economic and political life of the society and the state-national model, resulting in significant destructive changes in Ukrainian parliamentarism.

Therefore, the institution of parliamentarism is one of the most significant elements of the modern political system, reflecting the degree of democratization of the society; it is characterized by the important role of the parliament as a democratic representative body that actively influences the society without violating human rights, freedoms and other values.

The purpose of the research lies in substantiating the theoretical and applied principles of the study of strategic guidelines for the development of Ukrainian parliamentarism and assessing the impact of globalization processes on it.

## 3 Materials and Methods

In the course of the research, general and special methods of economic analysis have been used and applied, namely: analysis, synthesis and scientific abstraction in order to clarify the essence of Ukrainian parliamentarism concept and globalization; comparisons and analogies in order to determine the state and trends of Ukrainian parliamentarism in the context of globalization; generalization and systematization for formulation of hypotheses, formation of conclusions and generalization of research results; graphic in order to visualize the empirical investigations; correlation-regression analysis in order to determine the impact of indicators such as the quality of life index, the index of state instability and the index of democracy on the value of the globalization index. Ukraine was chosen to conduct the research.

The information base of the research is based on the reports for 2014–2021 as follows: Rankings KOF Globalization Index according to the globalization index; Fragile States Index is an index of state instability; Democracy Index in terms of the index of the democracy; Quality of Life Index by Country in terms of population quality of life index.

#### 4 Results

Establishing an effective system of interaction between the state and the society on the basis of recognizing the leading and significant role of the national collegial and permanent representative body in the process of implementing state power functions, at the present stage of social-economic development of Ukraine, is one of the priority strategic tasks of the state. The definition of the parliamentarism essence and its role in socialpolitical life, for the most part, is considered as the formation and functioning of the legislative mechanism and the coverage of other functions of the Ukrainian parliament is insufficiently substantiated. Limited investigations on ensuring real people's representation and positioning of the parliament as a representative institution, lead to the formation of a number of contradictions in the system of implementing the principles of parliamentarism in Ukraine. As a result, the development of Ukrainian parliamentarism takes place within the framework of the support of international organizations and programs coordinating the activities of the Verkhovna Rada of Ukraine in order to ensure effective legislative activity, democracy and openness of the legislative process, promoting the adaptation of national legislation to international norms and standards, strengthening the functions of parliament for ensuring the adequate control, as well as opportunities for broad public participation in the legislative process.

It becomes obvious that Ukrainian parliamentarism is significantly influenced by the processes of globalization, forasmuch as in the idea of globalism, the global level of economic organization is complemented by political and social parameters. At the same time, there is a hypothesis that globalization does not contribute to the sustainable development of transitive countries, which includes Ukraine, and the acceleration of its pace leads to growing social inequality, political instability and other destabilizing phenomena.

In order to assess the extent of the country's integration into the world, the Swiss Institute of Economics calculates a combined indicator - the Index of the globalization level of the world, which makes it possible to determine the country's place in the international ranking and the status of its absorption by global processes. We consider it appropriate to reflect the dynamics of the globalization index (KOF Globalization Index) in Ukraine in 2014–2021 in Figure 1, as well as to make forecast assessments of the analysed indicator in the conditions of 2022–2023.

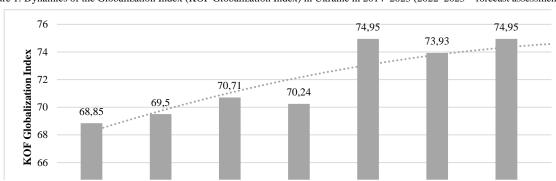


Figure 1: Dynamics of the Globalization Index (KOF Globalization Index) in Ukraine in 2014–2023 (2022–2023 – forecast assessments)

Source: calculated on the base of Rankings KOF Globalization Index, 2014–2021.

According to the results of the conducted studies, periods of social and political instability in Ukraine are accompanied by a decrease in the globalization index. According to forecast assessments made for the period up to 2023, the globalization

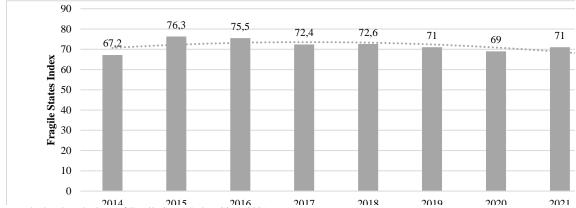
index tends to increase slightly within the range of 74–75. However, military confrontations to the invasion of the Russian Federation on the territory of Ukraine and the waging operations cause even greater deepening of the processes of social-political

and financial-economic instability and humanitarian crisis, the consequences of which cannot be foreseen in today's conditions.

Accordingly, the study of the development of Ukrainian parliamentarism, at the present stage, is undergoing significant destructive changes, as evidenced by downward trends regarding the state instability in Ukraine (Figure 2), the index of which in 2014 was 67,2 (exacerbation of political instability due to the Revolution of Dignity and the reform of power). The period

of 2015–2016 is characterized by an increase in the value of the analysed indicator, indicating the deepening of the problems of ensuring political stability in the country and the imbalance of the parliamentary system. In the subsequent future, in 2017–2021, a downward trend is observed in the index of the state instability in Ukraine. The forecast assessments prove a continued decline in the state instability index to 61–62 in 2023, which is a positive development feature for Ukraine.

Figure 2: Dynamics of the index of state instability in Ukraine in 2014–2023 (2022–2023 – forecast assessments)



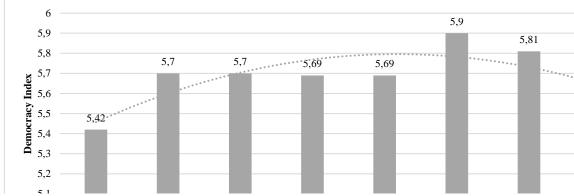
Source: calculated on the base of Fragile States Index, 2014–2021.

Nevertheless, the social-political crisis in Ukraine threatens other crisis phenomena. In particular, it is the issue of ensuring the democracy in the country.

The processes of democracy formation in Ukraine are intensifying in connection with the country's aspirations to successfully integrate into the European Union; they are accompanied by intensified liberalization of domestic markets, standardization of regulatory support, decentralization, digitalization and privatization. It becomes obvious that the processes of globalization, which in recent years have been

detached by the issues of combating the COVID-19 pandemic, have a destabilizing effect on the indicators of democracy, reducing their value (Figure 3) and disrupting the sustainable development of democratic institutions. Furthermore, there are significant shortcomings in the development of Ukrainian parliamentarism in the context of democracy, due to the imperfection of the functioning of democratic institutions. Under such conditions, increasing the level of political literacy and maturity of the population, overcoming "legal nihilism" and conducting the relevant reforms are of paramount importance.

Figure 3: Dynamics of the Democracy Index in Ukraine in 2014–2023 (2022–2023 – forecast assessments)



Source: calculated on the base of Democracy Index, 2014–2021.

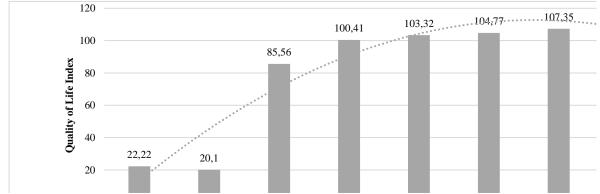
If we analyze in detail the tendencies of the Democracy Index in Ukraine, the highest level of its provision was set in 2019 (5,9) and 2020 (5,81), and the lowest – in 2014 (5,42). The period 2015–2018 is characterized by relative stability, as evidenced by the value of the Democracy Index in the range of 5,69–5,70.

It should be noted that the tendencies in Ukrainian parliamentarism, democracy and the state stability, taking into account the impact of globalization, significantly influence the living standards, the quality index of which, developed and calculated by the Economist Intelligence Unit, also varies significantly (Figure 4).

The period of the Revolution of Dignity, the temporary occupation of the Autonomous Republic of Crimea and the outbreak of military operations on the territory of the Luhansk and Donetsk regions in 2014–2015 have led to a sharp decline in the quality of life of the population to an indicator of 20,1–22,22. Nevertheless, the gradual reformatting of the state power, increasing the level of democratization of the society and reducing the state instability have had a positive effect on the value of the analysed indicator, which proves the upward trend of the quality of life index in Ukraine for the period 2016–2021 from 85,56 to 111,93.

In order to determine the correlation between such indicators as the index of state instability, the index of democracy, the index of globalization and the index of quality of life, we propose to conduct correlation and regression analysis using the software package Statistica 6.0. At the same time, we will define the index of globalization as a performance indicator, and we will consider the quality of life index  $(x_I)$ , the index of state instability  $(x_2)$  and the index of democracy  $(x_3)$  as factors – indicators.

Figure 4: Dynamics of the quality of life index in Ukraine in 2014–2023 (2022–2023 – forecast assessments)



Source: calculated on the base of Quality of Life Index by Country, 2014–2021.

The results of the conducted analysis have made it possible to establish a strong relationship between the analysed indicators (equation 1), which is indicated by a correlation coefficient R=0.835, and the statistical significance of the model is confirmed by the value of Fisher's F-test (3.4)=3.076.

Y = 56,149 + 0,640 
$$x_I$$
 - 0,233  $x_2$  + 0,264  $x_3$  (1)  
R = 0,835;  
R<sup>2</sup> = 0,698; p < 0,05000,

where: Y – the globalization index;  $x_1$  – the index of quality of life;  $x_2$  – the index of state instability;  $x_3$  – the index of democracy.

The conducted analysis of the influence of factors on the performance indicator – the index of globalization gives grounds to state as follows: the value of the globalization index significantly depends on the indicators of the quality of life of the country's population, state instability and democracy; an increase in the life quality of the population has a positive (directly proportional) effect on the globalization indicator – with the growth in the life quality of the population, the globalization index shows positive trends, which is confirmed by the regression indicator r=0.640. Regarding the index of state instability, a negative (inversely proportional) effect is observed – an increase in the index of state instability leads to a decrease in the index of globalization (regression indicator r=-0.233). The growth of the democracy index also has a positive (directly proportional) effect on the value of the globalization index (r=0.264).

As a result of the investigations conducted, it has been established that the strategic priorities for the development of Ukrainian parliamentarism in the context of globalization are the formation of political opposition, public society, a clear separation of power, its functions of control and responsibility. It is equally important to ensure and strengthen the democratic fundamentals for the development of Ukrainian statehood and ensure the proper level of the life quality for the population and their unimpeded participation in the political process.

## 5 Discussion

The results of the studies of the strategic guidelines of the development of Ukrainian parliamentarism in the context of globalization make it possible to assert that the development of Ukrainian parliamentarism takes place in the conditions of the establishment of Ukrainian statehood, the unpredictability of the development of events and social-political instability, and it is significantly influenced by the processes of integration into the world community. Along with this, a strong relationship has

been established between the indicators characterizing the parameters of Ukrainian parliamentarism and the globalization indicator (correlation coefficient R=0.835). It has been proven that the growth of the life quality of the population and the strengthening of democracy increase the importance of the globalization indicator, however, the growth of the level of state instability decreases it. Destructive changes are especially noticeable during the period of exacerbation of political instability.

In the context of the irreversibility of globalization processes, the sustainable development of Ukrainian parliamentarism requires the formation and implementation of an effective strategy, the main guidelines of which lie in ensuring democracy, political stability, social-political culture, as well as recognizing the public standpoint, taking into account the factors of multi-format international cooperation.

The presence of certain contradictions and insufficiently thorough studies of Ukrainian parliamentarism in terms of ensuring representation of the people hinder the full implementation of the basic principles of parliamentarism and require improvement and further research. Ensuring social-political stability in the country and the effective performance of its functions by the parliament are of particular importance.

## 6 Conclusion

Therefore, the conducted studies of the strategic guidelines for the development of Ukrainian parliamentarism in the context of globalization give grounds for the conclusion that Ukrainian parliamentarism is significantly influenced due to the exacerbation of the social-political crisis in the country; it takes place in the conditions of the Ukrainian statehood formation and requires approval and implementation with international standards and norms. Ensuring the political stability at the present stage is a priority task of the state, the effective implementation of which requires the active participation and well-coordinated interaction of the parliament with the public. It has been established that the intensification of globalization, regional challenges and threats determine a new level of development of Ukrainian parliamentarism, the main strategic guidelines of which are the stable development of democracy and the functioning of the parliament as a democratic representative body, ensuring political stability, improving social-political culture and recognition of the public standpoint.

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**Primary Paper Section:** A

**Secondary Paper Section:** AD

## LEGAL PRINCIPLES OF INCREASING THE INSTITUTIONAL CAPACITY OF THE VERKHOVNA RADA OF UKRAINE

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Abstract: The purpose of the academic paper lies in substantiating and highlighting the results of studying the legal principles of increasing the institutional capacity of the Verkhovna Rada of Ukraine. Established that the essence of the institutional capacity of the Verkhovna Rada of Ukraine lies in ensuring a dynamic process of forming rules and procedures of legislative activity, as a result of which its independence from other institutions of power is achieved. It has been proven that in the context of globalization and integration of countries into the European space, three groups are distinguished among the countries of the European Union, characterized by common signs of increasing the institutional capacity of the central legislative authorities.

Keywords: institutional capacity, Verkhovna Rada of Ukraine, bodies of legislative power, parliamentarism, legislative process.

#### 1 Introduction

The growing scale of globalization, geopoliticization, and megaregionalization create significant risks, threats, challenges, and dangers to the social-political and social-economic development of the countries of the world; moreover, they have significantly deepened in the conditions of military confrontation of Ukraine against the Russian Federation. The threat to the territorial integrity of Ukraine, the unresolved issues of the dead, missing, wounded and internally displaced persons, the aggravation of the risks of the defence capability and national security of Ukraine and neighbouring countries against the background of overcoming common deep macroeconomic shocks require radical solutions and increasing the capacity of political systems in order to effectively confront the problems and challenges outlined.

The effective functioning of legislative bodies at the current stage is extremely important and should be aimed at protecting the interests of a wide range of social groups in the context of the Euro-Atlantic vector of development. Along with this, increasing the institutional capacity of the Verkhovna Rada of Ukraine is one of the most significant strategic priorities for the development of parliamentarism, forasmuch as the legislative framework is an effective tool for structural restructuring of the country.

## 2 Literature Review

The lack of systematic parliamentary reform in Ukraine and the tangible consequences of the social-political and socialeconomic crisis, reinforced by military actions, do not contribute to increasing the institutional capacity of the Verkhovna Rada of Ukraine. This is evidenced by the imperfect formation of a single coordination centre for parliamentary reform, non-systematic work on the implementation of recommendations, in particular, on updating the Roadmap and actions on its implementation, imperfection of the targeted system of generation and decisionmaking, ineffective communication, inconsistency of the powers of the Verkhovna Rada of Ukraine with the norms and standards of the Constitution. Tashtanov et al. (2016) argue that the reform of the Verkhovna Rada of Ukraine is moving from authoritarian rules of functioning, which have been characterized by undeniable and powerful centralization and non-transparency of the power structure, to a system characterized by the rule of law parliamentary democracy, which corresponds to international democratic norms and standards. However, according to the viewpoint of Nyznyk (2021), domestic

parliamentary practice does not contribute to increasing the institutional capacity of the Verkhovna Rada of Ukraine, in particular, in terms of organizational and legal parliamentary control.

Moreover, Lykhach (2018) notes that certain provisions of the Constitution of Ukraine (Constitution of Ukraine, 1996), which regulate the powers of the Verkhovna Rada of Ukraine and its relations with other governmental institutions, significantly influence, and in some cases make impossible the implementation of the representative functions of the Verkhovna Rada of Ukraine, in particular:

- the limited influence of the Verkhovna Rada of Ukraine on the Cabinet of Ministers of Ukraine in terms of its responsibility, the application of a vote of non-confidence in the Government and the dismissal of ministers;
- limitation of the powers of the Verkhovna Rada of Ukraine regarding responsibility for the implementation of foreign policy and security policy in terms of the appointment and dismissal of the leading diplomatic and military corps;
- inequality of powers of deputies, use of interests of political forces in the budget process;
- inconsistency of the structure of parliamentary committees with the structure of government institutions;
- insufficient level of openness of the activities of the Verkhovna Rada of Ukraine;
- insufficient level of institutional capacity of the Apparatus of the Verkhovna Rada of Ukraine.

Taking into account the tendencies outlined, the scholar proposes to revise the basic principles for the implementation of the reform of parliamentarism in order to increase the institutional capacity of the Verkhovna Rada of Ukraine and ensure its effective performance of legislative, control and representative functions.

The close interconnection between the institutional capacity of the Verkhovna Rada of Ukraine and constitutional stability has been established by Choudhry et al. (2018), who claim that the violation of the balanced functioning of the Verkhovna Rada of Ukraine, the Cabinet of Ministers of Ukraine and the activities of the President causes the emergence of an institutional conflict between them, the solution of which requires the modernization of approaches to studying the fragmentation and weakness of the party system, as well as the stabilization of the activity and increase of the institutional capacity of the Verkhovna Rada of Ukraine. The proposed theory is substantiated by Cheibud & Rasch (2021), who believe that the institutional capacity of the Verkhovna Rada of Ukraine is significantly influenced by geopolization and globalization, as a result of which it proves its excessive flexibility and vulnerability.

It should be noted that from among the main Recommendations on internal reform and increasing the institutional capacity of the Verkhovna Rada of Ukraine (On measures to implement recommendations on internal reform and increase the institutional capacity of the Verkhovna Rada of Ukraine, 2016), the obligation of the Apparatus has been determined to conduct a thorough analysis of each draft law that is submitted for consideration in order to identify duplication, contradictions and ambiguity in relation to the current legislation.

Goshovska et al. (2019) consider the institutional stability of the Verkhovna Rada of Ukraine as a dynamic process of forming rules and procedures of legislative activity aimed at ensuring independence from other institutions of power and developing a system of political representation of public interests based on the effectiveness of mechanisms of control over the executive power, openness and transparency of the legislative process.

Dzyuba (2021) adheres to a similar position, who is convinced that increasing the institutional capacity of the Verkhovna Rada of Ukraine can be a guarantee of international and European cooperation, forasmuch as it will allow strengthening the constitutional role of law-making, supervision and representation, increasing the quality of legislation, improving the legislative process, enhancing transparency and efficiency activities of the Verkhovna Rada of Ukraine.

However, Kosynskyi (2017) proves that there is a significant imbalance in Ukraine between the development of legislation and the observance of such principles as democracy, the rule of law and the legal order, which requires in-depth measures, in particular, the implementation of parliamentary reform.

In this context, Politt & Bouckaert (2017) associates the effective functioning of the central legislative bodies of the country with their activities in the political sphere and the civil society. At the same time, Mauleman (2021) considers the legal principles and opportunities for improving the institutional capacity of the Verkhovna Rada of Ukraine through the prism of the quality of the public administration and is inclined to believe that it directly depends on the results of the reform of parliamentarism; however, Usmanova (2022) claims that the institutional capacity of the central body of the state's legislative power depends on the level of development of the democratic society.

It is obvious that the issues of increasing the institutional capacity of the Verkhovna Rada of Ukraine have not arisen instantaneously, but exist for many years, as confirmed in the investigations conducted by Rosenko et al. (2021). Moreover, in the conditions of globalization and European integration, the central body of legislative power plays a significant role in the system of forming inclusive political responses to risks, threats and dangers thanks to the creation of a reliable legislative basis. This thesis is most fully substantiated in the World Report on the Public Sector for 2021 (National Institutional Arrangements for implementation of the Sustainable Development Goals: five-year stocktaking, 2021). Along with this, Saburova (2021) argues that measures to increase the institutional capacity of the Verkhovna Rada of Ukraine should take into account not only the interests of the state, but also of the civil society.

It is also worthy of note that Al-Atti (2018) emphasizes the importance of the coordinated interaction of the central body of the legislative power in the country with the bodies of the executive power, and the institutional capacity of the Verkhovna Rada of Ukraine significantly depends on the implementation of the democratic principles of public administration, which are declared in strategic documents regarding the development of Ukraine in the conditions strengthening the globalization processes. According to the viewpoint of Hirman et al. (2021), increasing the institutional capacity of the Verkhovna Rada of Ukraine depends on the degree of its recognition and role in the state, and Rosenko et al. (2021) are convinced that its weakness lies in protracted political instability, political crises and constant destructive changes occurring in the processes of establishing democracy, national consciousness and political culture.

The purpose of the academic paper lies in substantiating and highlighting the results of studying the legal principles of increasing the institutional capacity of the Verkhovna Rada of Ukraine.

## 3 Materials and Methods

In the course of the research, the general scientific and special methods of economic analysis have been used and applied as follows: analysis and synthesis in order to determine the essence of the institutional capacity of the Verkhovna Rada of Ukraine; comparisons and analogies for the implementation of analytical assessments of the state and development trends of the institutional capacity of the Verkhovna Rada of Ukraine, as well as the legal basis for its improvement; generalization and systematization for the purpose of formulating scientific

hypotheses and forming conclusions and summarizing research results; grouping and cluster analysis based on the use of the k-means method for grouping the countries of the European Union and Ukraine in order to identify the place of Ukraine among the countries of the Eurozone according to the Integral indicator of public governance (Governance Research Indicator Country Snapshot); graphical and tabular methods for visualization and visual display of the research results.

The countries of the European Union and Ukraine were chosen for the research.

The research information base is based on reports for 2018–2021: Worldwide Governance Indicators according to the Integral indicator of public governance (Governance Research Indicator Country Snapshot).

#### 4 Results

Ensuring the institutional capacity of the Verkhovna Rada of Ukraine in the conditions of a protracted social-political, social-economic and military crisis is an extremely difficult task. The reform of Ukraine's parliamentarism hasn't ensured the desired effect and is notable for its incompleteness. The growing influence of destabilizing factors, threats and risks to the national interests of the country, effective resistance to which depends on the level of development of diplomatic structures, indicates the existence of a number of problems of legislative natures, empirical assessments of which are extremely difficult and depend on the optimal choice of criteria, methods, assessment tools

At the international level, in order to determine the effectiveness of public governance and to establish the institutional capacity of the legislative body, it is customary to calculate the Integral indicator of public governance (Governance Research Indicator Country Snapshot), which involves the use of international assessment methods and interstate comparisons according to such sub-indices as the right to vote and accountability, political stability and absence of violence, government effectiveness, legislation quality, rule of law and control of corruption. We consider it expedient to monitor the value of all the indicators outlined in the countries of the European Union during 2018–2020 and to single out the place of Ukraine among them, which will make it possible to find out the level of institutional capacity of the Verkhovna Rada of Ukraine.

As evidenced by the results of the conducted study on the dynamics of the values of the sub-index "right to vote and accountability" in the countries of the European Union and in Ukraine in 2018-2020 (Figure 1), such highly developed countries as Finland, Sweden, Denmark, Luxembourg and the Netherlands provide a high level efficiency of public governance. In such countries, the society freely expresses its will by participating in the electoral process. Slightly below, however, the optimal values of the analysed indicator have been recorded in Austria, Germany, Ireland, Belgium, Estonia, Spain, France, Malta and Portugal, where there are facts of falsification of the results of elections to bodies of various levels of public governance. From among the countries of the European Union, the lowest values of the sub-index "right to vote and accountability" are observed in Bulgaria, Croatia, Hungary and Romania

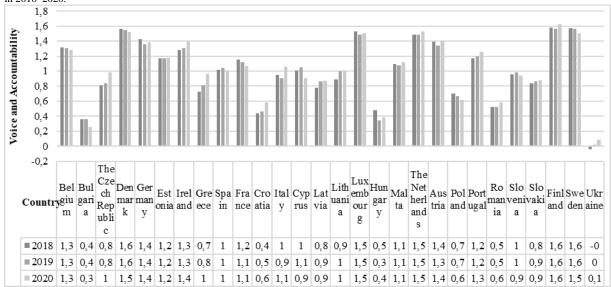
As for the position of Ukraine regarding the implementation of the right to vote and accountability in the country, the results of the research confirm its significant backwardness from the countries of the European Union. Despite minor positive shifts in the analysed indicator, Ukraine shows extremely low values: in 2018-0.04; in 2019-0.02; in 2020-0.09, which indicates significant problems of a political nature, the presence of destabilizing factors towards ensuring the possibility of participating in the electoral process.

The next indicator is the sub-index "political stability and absence of violence", the meaning of which among the countries

of the European Union during 2018–2020 is ambiguous (Figure 2), and in Ukraine – a critical one. In-depth studies have shown that political stability is established in highly developed countries, as well as the absence of violence is observed (Luxembourg, Denmark, Portugal, Sweden, the Netherlands,

Malta, and Ireland). In countries with high rates of social-economic development, but with a number of unresolved issues of a social-political nature, respectively, and indicators of political stability are somewhat lower (Finland, Austria, Lithuania, and Slovenia).

Figure 1: Dynamics of the values of the sub-index "right to vote and accountability" in the countries of the European Union and in Ukraine in 2018–2020.

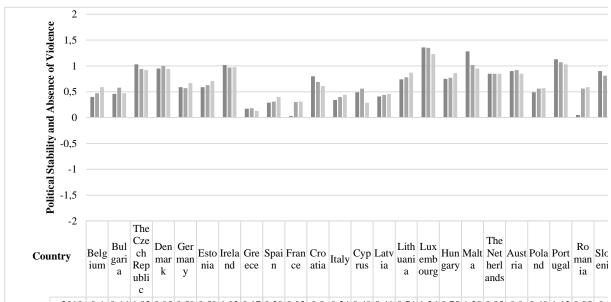


Source: it has been compiled based on Worldwide Governance Indicators, 2018-2020.

The analysis of developing countries, represented by Ukraine, has revealed that the value of the sub-index "political stability and absence of violence" has a negative or minimal value (Greece, Romania, and Ukraine). It is worth noting that from among the countries of the European Union, there are states that position themselves as countries with a high level of

development, but are politically unstable, where a high probability of destabilization of the activities of state authorities and their forced resignation due to the use of violence is observed, as well as frequent changes in the political course and the instability of the peaceful election process.

Figure 2: Dynamics of the values of the sub-index "political stability and absence of violence" in the countries of the European Union and in Ukraine in 2018–2020.



= 2018 0.4 0.46 1.03 0.05 0.50 1.02 0.17 0.20 0.03 0.8 0.34 0.40 0.41 0.74 1.36 0.75 1.28 0.85 0.0 0.40 1.13 0.05 0.0 Source: it has been compiled based on Worldwide Governance Indicators, 2018–2020.

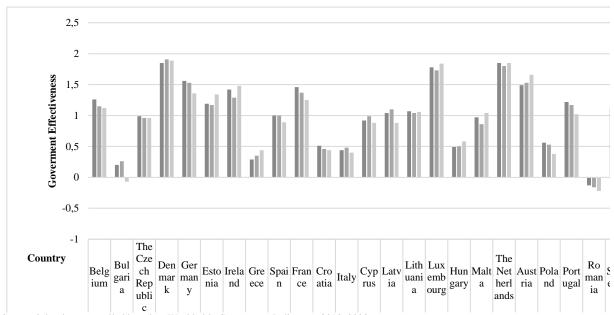
Concerning the efficiency of the government in the countries of the European Union and in Ukraine in 2018–2020, the values of this sub-index (Figure 3) show the following results, namely: the highest indicators of government efficiency have been recorded in Finland (1,95–2,06), Denmark (1,85–1,91) and the Netherlands (1,80–1,85), respectively; the lowest ones have been revealed in Romania (-0,13 – -0,22), Bulgaria (-0,07–0,26) and

Ukraine (-0,30-0,41), which testifies to the level of quality of services provided by state authorities, the competence of officials, as well as the independence of their activities from political pressure.

Studies of public governance through the prism of assessing the quality of legislation (Figure 4) indicates the provision of high

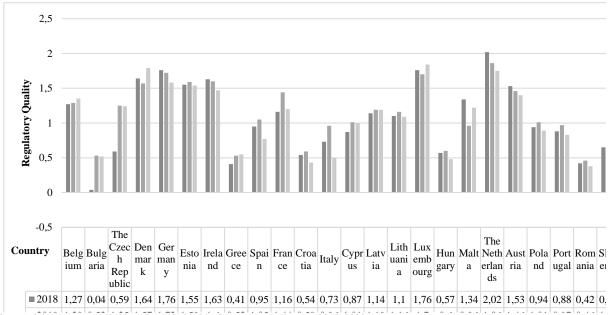
standards of compliance with legislation in highly developed countries, a low level of trust in legislation in countries with lower indicators of the level of development, and frequent facts of violations of legislation in developing countries.

Figure 3: Dynamics of the values of the sub-index "government effectiveness" in the countries of the European Union and in Ukraine in 2018–2020.



Source: it has been compiled based on Worldwide Governance Indicators, 2018–2020.

Figure 4: Dynamics of the values of the sub-index "quality of legislation" in the countries of the European Union and in Ukraine in 2018–2020.



Source: it has been compiled based on Worldwide Governance Indicators, 2018–2020.

Establishing the compliance of the effectiveness of political, economic and social measures implemented in the country with the norms of the current legislation indicates the level of trust in it, which is much higher in highly developed countries to compare with the other states. It is obvious that the quality of legislation is interrelated with the rule of law, which also measures the level of trust in legislation, the effectiveness of the country's legal system and the degree of compliance with laws. We consider it expedient to reflect the change in the value of the sub-index "rule of law" in the countries of the European Union and in Ukraine in 2018–2020 in Figure 5.

It should be noted that in the context of persistent uncertainty and instability, the emergence of new significant legal and institutional changes is observed, significantly influencing the institutional capacity of the Verkhovna Rada of Ukraine and the legislative authorities of the countries of the European Union, as well as their ability to effectively prevent and counter corruption risks that pose a threat to both society and politics.

Studies on the level of perception of corruption in the countries of the European Union and in Ukraine in 2018–2020 and control over it (Figure 6) allow us to state that, according to this indicator, the leaders among the countries of the European Union are Denmark, Finland, Sweden, Luxembourg, the Netherlands, where enhanced control measures have been introduced to effectively combat corruption.

2,5 2 1,5 Rule of Law 0.5 -0,5 The Cze The Den Ger Esto Irela Gree Spai Fran Croa Italy Lith Lux uani emb corv a cris ric nd veel enio or Country Belg Bulg ch Cyp Latv mar man ourg ium aria Rep nia nd ce n ce tia rus ia erla ria nd ugal ania e y a ubli nds c 06 0 06 1 01 0 50 1 05 1 70 1 0 0 42 1 14 0 26 1

Figure 5: Dynamics of the values of the sub-index "rule of law" in the countries of the European Union and in Ukraine in 2018–2020.

Source: it has been compiled based on Worldwide Governance Indicators, 2018–2020.

Such countries as Bulgaria, Greece, Romania and Ukraine have been distinguished by significant corruption scandals, in which the organizational and legal mechanism for preventing, detecting and countering corruption is weak and needs to be revised and improved. Moreover, the legislation regarding responsibility for committing acts of corruption, which, at the current stage, is characterized by excessive loyalty, needs to be enhanced.

2,5 2 1,5 Control of Corruption 1 0,5 0 -0,5 -1 -1.5The The Czec Den Lith Luxe Hun Malt Neth Aust Pola Port Rom S Ger Esto Irela Gree Spai Fran Croa Italy Country Belg Bulg Cypr Latvi ium aria h Repu mark wan erlan ria nia nd ce gary urg ds blic ■ 2018 1,47 -0,2 0,54 2,2 1,94 1,51 1,57 -0 0,65 1,32 0,08 0,25 0,64 0,33 0,5 2,09 0,09 0,58 1,93 1,61 0,65 0,84 -0,2 0

Figure 6: Dynamics of the values of the sub-index "control of corruption" in the countries of the European Union and in Ukraine in 2018–2020.

Source: it has been compiled based on Worldwide Governance Indicators, 2018–2020

It becomes obvious that the principal indicators that make it possible to conduct the empirical studies of the institutional stability of legislative bodies indicate an unstable tendency regarding their change in the countries of the European Union and in Ukraine during the analysed period. It is extremely difficult to track common and distinctive features; therefore, we suggest using the technology of cluster analysis based on the application of the k-means method in order to group the countries of the European Union according to the Governance

Research Indicator Country Snapshot and determine the place of Ukraine among them (Table 1).

The obtained results make it possible to form three groups of countries, which are characterized by common and distinctive features regarding public governance and the institutional capacity of legislative bodies. The first group includes Belgium, Denmark, Germany, Estonia, Ireland, Luxembourg, the Netherlands, Austria, Finland and Sweden, which ensure high European standards of institutional capacity, transparency of the

electoral process, political stability, efficiency of public

authorities, high quality of legislation and supremacy of the law.

Table 1: Grouping of the countries of the European Union and Ukraine according to the Governance Research Indicator Country Snapshot in 2018–2020

20	18	20	19	2020		
Country	Cluster number	Country	Cluster number	Country	Cluster number	
Belgium		Denmark		Belgium		
Denmark		Germany		Denmark		
Germany		Estonia	1	Germany	1	
Estonia		Ireland		Estonia		
Ireland		Luxembourg		Ireland		
France	1	The Netherlands		Luxembourg	1	
Luxembourg		Austria		The Netherlands		
The Netherlands		Finland		Austria		
Austria		Sweden		Finland		
Finland		Belgium		Sweden		
Sweden		The Czech Republic		The Czech Republic		
The Czech Republic		Spain	2	Spain	2	
Spain		France		France		
Croatia		Cyprus		Cyprus		
Italy		Latvia		Latvia		
Cyprus		Lithuania		Lithuania		
Latvia		Malta		Malta		
Lithuania	2	Portugal		Poland		
Hungary		Slovenia		Portugal		
Malta		Bulgaria		Slovenia		
Poland		Greece		Slovakia		
Portugal		Croatia		Bulgaria		
Slovenia		Italy		Greece		
Slovakia		Hungary	3	Croatia		
Bulgaria		Poland		Italy	3	
Greece	1	Romania	]	Hungary		
Romania	1	Slovakia		Romania		
Ukraine		Ukraine		Ukraine		

Source: it has been compiled based on Worldwide Governance Indicators, 2018–2020.

The second cluster includes the Czech Republic, Spain, France, Cyprus, Latvia, Lithuania, Malta, Poland, Portugal and Slovenia, which are characterized by the presence of high European standards of institutional capacity; however, certain facts are observed indicating the presence of problems in ensuring the transparency of the election process, political stability and compliance with current legislation.

The third group includes such countries as: Bulgaria, Greece, Croatia, Italy, Hungary, Romania and Ukraine, most of which have not completed the processes of transformational restructuring and parliamentary reform, and are also characterized as countries of the transitive type. This group of countries has significant destructive changes in all sub-indices of the Integral indicator of public governance, and the institutional capacity of the legislative bodies is improperly ensured.

Taking into account the above-mentioned, it can be argued that the provision of institutional capacity of legislative bodies in highly developed countries is more perfect than in countries with a lower level of social-economic development.

#### 5 Discussion

The results of the conducted research on the legal principles of increasing the institutional capacity of the Verkhovna Rada of Ukraine make it possible to state that the activity of the Verkhovna Rada of Ukraine is imperfect, and the law-making process needs to be reformed. The close interconnection between the institutional capacity of the Verkhovna Rada of Ukraine and constitutional stability has been revealed, which is manifested in the consistency of the provisions of the Constitution of Ukraine with the powers of the Verkhovna Rada of Ukraine.

The European integration vector of the development of Ukraine determines the implementation of European standards and norms in the direction of increasing the institutional capacity of the Verkhovna Rada of Ukraine. The conducted studies of the state

and tendencies regarding the legal principles of increasing the institutional capacity of the central body of legislative power in the countries of the European Union and in Ukraine give grounds for asserting that they significantly depend on the level of social-economic and social-political development of the country. Highly developed countries are able to provide higher indicators of the institutional capacity of the legislative body, while countries of the transitive type, which include Ukraine, position themselves as countries with an imperfect organizational and legal mechanism.

It is obvious that in the conditions of the irreversibility of European integration processes, it is possible to increase the institutional capacity of the Verkhovna Rada of Ukraine by forming and implementing an effective strategy for the development of the Verkhovna Rada of Ukraine on the basis of democracy, political stability, multi-format international cooperation and social-political culture. In the matter of the legal principles of increasing the institutional capacity of the Verkhovna Rada of Ukraine, a number of unresolved issues of its provision should be noted, in particular as follows:

- ensuring the transparency of the activities of the Verkhovna Rada of Ukraine, as well as parliamentary and legislative procedures requires improvement;
- ensuring systematic planning of legislative work;
- increasing the effectiveness of parliamentary control.

## 6 Conclusion

Thus, the conducted studies on the legal principles of increasing the institutional capacity of the Verkhovna Rada of Ukraine provide grounds for the conclusion that the strengthening of globalization processes and the desire to integrate into the European Union create new challenges and threats, as a result of which the activity of the Verkhovna Rada of Ukraine undergoes significant destructive changes and requires an increase in the level of institutional capacity. It has been proven that a low level

of legislative provision of public governance in comparison with the countries of the European Union is observed in Ukraine, which is confirmed by the value of the following indicators, namely:

- the right to vote and accountability;
- political stability and the absence of violence;
- government effectiveness;
- quality of legislation;
- rule of law;
- control of corruption.

In addition, according to the Integral indicator of public governance, Ukraine is in the same group with such countries as Bulgaria, Greece, Croatia, Italy, Hungary, Romania, which have gone through transformational restructuring and need improvement and modernization of the legislative process.

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