

DOI: <https://doi.org/10.34069/AI/2024.75.03.20>

How to Cite:

Chovriy, S., Skyba, N., Dmytrenko, A., Zabiaka, I., & Holovchenko, O. (2024). Strengthening the professional training of staff in EU higher education. *Amazonia Investiga*, 13(75), 234-247. <https://doi.org/10.34069/AI/2024.75.03.20>


Strengthening the professional training of staff in EU higher education

Посилення професійної підготовки кадрів у вищій освіті ЄС

Received: February 10, 2024

Accepted: March 23, 2024

Written by:


Sofiya Chovriy¹ <https://orcid.org/0000-0001-9271-004X>**Nadiya Skyba²** <https://orcid.org/0009-0006-1431-9401>**Alina Dmytrenko³** <https://orcid.org/0000-0002-7743-6289>**Iryna Zabiaka⁴** <https://orcid.org/0000-0002-9535-5490>**Oleksii Holovchenko⁵** <https://orcid.org/0000-0003-0646-4319>


Abstract


The article reveals the most relevant and important for developing world societies to the professional training of personnel in the EU countries in the educational space. The methodological principles of the research are leading provisions of the theory of scientific knowledge; general scientific principles of historicism, systematicity, and scientificity; conceptual provisions of pedagogical, psychological, and sociological sciences; ideas of comparative research experience; and philosophical and pedagogical ideas of the development of modern education. The principles on which the reform of higher education is based are described and the main trends of the structure of world higher education are clarified. The significance of developing educational information networks in the professional training of personnel in the educational space of higher education institutions in the EU countries is shown. The


Анотація


У статті розкрито найбільш актуальні і важливі для розвитку світового суспільства шляхи професійної підготовки кадрів в країнах ЄС в освітньому просторі. Методологічними засадами дослідження є: провідні положення теорії наукового пізнання; загальнонаукові принципи історизму, системності, науковості; концептуальні положення педагогічних, психологічних, соціологічних наук; ідеї досвіду порівняльних досліджень; філософсько-педагогічні ідеї розвитку сучасної освіти. Розписано засади на яких ґрунтується реформування вищої освіти та з'ясовано основні тенденції структури світової вищої освіти. Показано вагомість розвитку інформаційних освітянських мереж у професійній підготовці кадрів в освітньому просторі закладів вищої освіти в країнах ЄС. Висвітлено основні завдання організації навчальних закладів вищої освіти країн світу. Проведене експериментальне дослідження

¹ Candidate of Pedagogical Sciences, Associate Professor, Associate Professor at the Department of Theory and Methodology of Primary Education, Mukachevo State University, Ukraine.  WoS Researcher ID: CAJ-1660-2022

² Lecturer, Department of Foreign Languages for Sciences, Ivan Franko National University of Lviv, Ukraine.  WoS Researcher ID: KHV-9319-2024

³ Doctor of Philosophy, Senior Lecturer of Theory and Methodology of Preschool Education Department, Oleksandr Dovzhenko Hlukhiv National Pedagogical University, Ukraine.  WoS Researcher ID: ISB-4649-2023

⁴ Candidate of Pedagogical Sciences, Associate Professor of Department of Foreign and Ukrainian Philology, Lutsk National Technical University, Ukraine.  WoS Researcher ID: AAD-6434-2022

⁵ Candidate of Sciences in Physical Education and Sport, Associate Professor, Associate Professor of Sporting and Physical Education Department, Sumy State Pedagogical University named after A.S. Makarenko, Ukraine.  WoS Researcher ID: AFI-1656-2022



main tasks of the organization of educational institutions in the world's countries are highlighted. The conducted experimental research is aimed at researching: the effectiveness of professional training of personnel in the educational space; determination of suitability for employment in EU countries; and effectiveness of continuous professional training at the workplace in EU countries. The conclusions summarize ways of professional training of personnel in the EU countries in the educational space of universities.

Keywords: professional training, EU countries, higher education institutions, continuous professional training, employment in EU countries.

Introduction

The training of specialists who can think creatively, specialists of a new quality, who will be able to make non-standard decisions, quickly navigate in the saturated modern space of information, develop and learn throughout life – is becoming a requirement of the time (Marrero-Rodríguez & Stendardi, 2023).

The methodological principles of the research are leading provisions of the theory of scientific knowledge; general scientific principles of historicism, systematicity, and scientificity; conceptual provisions of pedagogical, psychological, and sociological sciences; ideas of comparative research experience; and philosophical and pedagogical ideas of the development of modern education.

The modernization of European education is inextricably linked with the development of the entire society at the current stage, the characteristic features of which are the updating of the content of education, its structure, the introduction of the credit transfer system into the educational process, and the consistent introduction of innovative technologies into the educational space. The system of higher education and its modernization should be aimed at the education of the individual, and the development of a new generation of people who live by humanistic laws and are aware of universal human values. Modern education faces universal goals: to ensure its competitiveness on the world market, to reach a new level of European education quality, reforming it based on continuity, openness, mobility, democratization, and equal access to education,

спрямоване на дослідження: результативності професійної підготовки кадрів в освітньому просторі закладів вищої освіти; визначення придатності до працевлаштування в країнах ЄС; результативності безперервного професійного навчання на робочому місці в країнах ЄС. У висновках підсумовано шляхи професійної підготовки кадрів у країнах ЄС в освітньому просторі ЗВО.

Ключові слова: професійна підготовка, країни ЄС, заклади вищої освіти, безперервне професійне навчання, працевлаштування в країнах ЄС.

while preserving the authenticity of national education (Sysoieva & Krystopchuk, 2012).

Within the framework of the European Higher Education Area, to increase the competitiveness of education, the position is taken that higher education should be responsible to society and should undertake obligations to support and initiate the intellectual progress of the world economy. It is education that is built on European traditions that will contribute to continuous education, personality development, and social expediency (Egido Gálvez, 2019).

The study of international experience is extremely important, since the lack of a clear national strategy for the internationalization of education leads to a low volume of export of educational services, unsatisfactory rates of development of international educational programs and, accordingly, complicates the effective integration of domestic education into the European and global educational space.

Therefore, the processes of Ukraine's integration into the European educational and economic space, the socio-economic significance of establishing the interaction of higher education with the labor market, the importance of studying the experience of the European Union on this issue, as well as the insufficient theoretical development of the problem determined the relevance of the topic of the article.

Literature review

Many publications analyze the achievements of higher education and outline ways to overcome

the problems of forming a high-quality European educational space. The publication, which contains articles by more than 50 researchers of the Bologna Process: "The European Higher Education Area: Between Critical Reflections and Future Policies", presents the main aspects of higher education: teaching, learning, financing, and management; the process of its internationalization; ensuring the quality of educational space; involvement of higher education seekers in today's educational space; justice and social dimension of the higher education system; superiority and variety of missions; the relationship between education, research, and innovation; the impact of the Bologna process on the European area of higher education and beyond (Curaj et al., 2015).

In the research of Bergan (2019), the progress of the educational space in the present is shown and the main difficulties faced by the higher education system in Europe are highlighted.

The stages of the development of the European area of higher education are analyzed, and the main ways of reforming the world education system are shown, but it is noted that in recent years, as a result of increasing difficulties in the management of the educational sector, the optimism of a person regarding the fulfillment of his obligations has decreased (Zaskalieta, 2019). H. Khoruzhyi (2016) pays attention to the organization and internationalization of lifelong learning, personnel, and institutional provision, considers the content and essence of national and European higher education policy, analyzes historical aspects of the activities of European institutions, educational projects, and strategies of the European Union aimed at modernization higher school.

S. Cankaya, T. Kutlu, & E. Cebeci (2015) singled out and characterized the stages of development of the strategy of the European Union in the field of education, and also showed the need to ensure the quality of education at the current stage of the educational process. Yu. Zayachuk (2015), agreeing with the previous research, revealed the problem of implementation of educational management reforms and structural reforms within the framework of the modern European space. The research A. Dzhurylo (2018), based on the experience of European countries, regarding the distribution of powers between those entities that manage the general education system.

The methodological recommendations developed by the team of authors (Divinska et al.,

2018) include the best foreign practices and relate to the improvement of the educational process of higher education institutions of education: development of standards and professional profiles of scientific and pedagogical workers, prospects of using European educational practices in the activities of higher education institutions, career growth of scientific and pedagogical workers, determination of the effectiveness of models of professional development of students of higher education, based on the competence approach of development of research students, foreign language, valuable competences.

S. Zaskalieta (2019) examines the conceptual foundations and directs the entire scientific search for effective ways of developing the higher education system, proving that in the countries of the European space, the general trend of professional training of specialists is the internal quality assurance of education, analyzes the ways of ensuring the quality of higher education, which include: the availability of the necessary resources; in the higher education sector, monitoring the quality of educational activities and the quality of training at all levels and stages of specialist training.

L. Pukhovska, A. Vornachev, & S. Leu (2015) prepared a manual based on the materials of comparative studies of the European Center for the Development of Vocational Education and Training, where they used European periodicals, monographic studies and characterized the trends in the professional development of non-specialists and the current state of the educational space in the countries of the European Union.

Therefore, many publications analyze the achievements of higher education and outline ways to overcome the problems of forming a high-quality European educational space. However, the problem of professional training of personnel in the educational space of higher education institutions in the EU countries is relevant and important today for the development of world society.

Despite a significant number of studies on the development of educational systems in the member states of the European Union, the study of the European experience regarding the interaction of higher education has not yet become the subject of a separate, coherent scientific study, in particular, the conditions, stimulating factors and mechanisms for regulating the interaction of higher education in the European Union have not been disclosed.

The relevance of the study of the selected problem is also strengthened by the need to resolve the contradictions regarding the development of the interaction of higher education with the labor market in Ukraine, namely, between:

- the need to balance the interaction of higher education with the domestic labor market and the imperfection of mechanisms for regulating this process at different levels (state, higher education, labor market);
- the quantitative and qualitative discrepancy between the professional training of specialists in the field of higher education and their employment in the domestic labor market;
- the socio-economic significance of the interaction of higher education with the domestic labor market and the lack of an effective model of harmonization of this interaction;
- the presence of European experience of higher education and the absence of substantiated directions for its practical application in Ukraine.

Therefore, the study of the experience of the European Union on this issue is important for the development of strategies for the modernization of higher education in Ukraine. Under these circumstances, the study of professional training of personnel in higher education in the European Union is of particular scientific interest, where mechanisms and models of state influence on solving economic and social problems are being fundamentally rethought. Changes in European policy are aimed at mitigating and overcoming the economic and financial crisis. Therefore, modernization of higher education is important for creating conditions for building a new Europe with an economy based on knowledge.

The aim of the study. To reveal the most relevant and important for the development of world society ways of professional training of personnel in the EU countries in the educational space of higher education institutions.

Methodology

The methodological principles of the research are leading provisions of the theory of scientific knowledge; general scientific principles of historicism, systematicity, and scientificity; conceptual provisions of pedagogical, psychological, and sociological sciences; ideas of comparative research experience based on the

simultaneous study of pedagogical, socio-cultural and economic phenomena; philosophical and pedagogical ideas of the development of modern education.

To realize the goal, the following general scientific research methods were used:

- *theoretical* – study and study of normative sources, methodological literature, psychological and pedagogical literature, philosophical literature, scientific work of foreign and domestic scientists on the problem of professional training of personnel in the EU countries in the educational space of higher education institutions, the peculiarities of their work in today's conditions; for the semantic load and delineation of the conceptual boundaries of the studied phenomenon;
- *logical-systemic analysis, analogy, classification, generalization of practical and scientific-theoretical data, deduction, induction* – to determine the most relevant and important for the development of world society ways of professional training of personnel in the EU countries in the educational space of higher education institutions;
- *comparison of the obtained data* – to clarify the dependencies and cause-and-effect relationships of professional training of personnel in the EU countries in the educational space of higher education institutions;
- *empirical methods and pedagogical experiments* – questionnaires, observations – to find out and verify the use of the operation of the most relevant and important for the development of world society ways of professional training of personnel in the EU countries in the educational space of higher education institutions; quantitative and qualitative analysis of research results using methods (non-parametric Pearson χ^2 test – for verification of experimental results) of mathematical statistics.

Experimental research is aimed at researching:

- effectiveness of professional training of personnel in the educational space of higher education institutions;
- determination of suitability for employment in EU countries;
- effectiveness of continuous professional training at the workplace in EU countries.

Recommendations for the effectiveness of professional training of personnel in the educational space of higher education institutions and continuous professional training at the workplace in EU countries have been developed. The strategic tasks of EU member states in the field of professional training of personnel in the educational space of higher education institutions are outlined.

Research relies heavily on the accuracy and reliability of the data. In research work, the quality of data collection and analysis not only adds weight to the research but also contributes to the formation of sound conclusions, which is the key to academic success.

The following digital data collection tools were useful in the study:

- Google Forms – a simple tool for creating surveys that allows you to collect data from respondents, create different types of questions, and collect answers in spreadsheets.
- SurveyMonkey – a modern survey tool that offers a wide range of customization options and analytical tools for analyzing the collected data.
- JSTOR, Google Scholar, and other academic search engines provide access to scholarly articles, books, and other academic resources that may be useful for literature review and theoretical data collection.
- Zotero or Mendeley – bibliography management programs that help organize research materials, store references, and format bibliographies and citations according to different citation styles.
- Microsoft Excel or Google Sheets – spreadsheets are useful for organizing and analyzing collected data when working with quantitative data.
- SPSS, R, or Python for more advanced data analysis, statistical analysis, and processing of volumes of data.

The reliability and validity of the obtained results, and the objectivity of their assessment were ensured by the methodological soundness of the initial positions and the qualitative mechanism for evaluating the quality under study, the use of a complex of complementary research methods, and the involvement of a group of respondents from a higher educational institution in the analysis of its results.

To assess the homogeneity of experimental and control data, statistical processing was performed

using MS Excel and SPSS (Statistical Package for Social Science).

The total sample size is 70 subjects, among whom are students of physical education. When forming the sample, the criteria of meaningfulness, representativeness, and equivalence were taken into account. The sample was formed by random selection using the technical procedure for calculating the selection step.

The results of the experimental study confirmed the applicability, optimality, and effectiveness of the proposed pedagogical conditions for the formation of an environmental culture of an ecologist in the process of professional training.

Results and discussion

1. The principles underlying the reform of higher education.

The reform of higher education, research, and determination of the most relevant and important for the development of world society ways of professional training of personnel in the EU countries in the educational space of higher education institutions is based on the following principles:

- 1) the national idea of higher education, multiplication, and preservation of educational national traditions of each country. The higher education of each country is called upon to educate a citizen of the state, as well as to promote a harmoniously developed personality for which the need to improve the general educational and professional level and fundamental knowledge is associated with the strengthening of one's state;
- 2) the development of higher education should be subject to the laws of the market economy. At the same time, it is necessary to take into account important factors – political, social, social consciousness, spiritual life, moral and psychological values, and culture. Many problems that have accumulated in the system of higher education are primarily related to the imbalance of the complex of the specified factors of social transformations;
- 3) in the context of trends in the development of educational systems: the world, in general, and European, in particular, the development of higher education should be considered.

For high-quality professional training of personnel in the educational space in any country, it is necessary to bring the regulatory and legislative framework of higher education up to global requirements, organize the list of specialties, structure the components and the entire system of higher education accordingly, constantly review the content of higher education; to ensure higher education access to international information systems and to improve the informatization. It is necessary to constantly fill the content of education with the latest materials, not only focus on market specialties and constantly introduce modern educational technologies with a high level of informatization in higher education (Piolli & Sala, 2022).

2. The main trends in the structure of world higher education.

The structure of higher education on a global scale is extremely diverse, but there are two dominant trends:

- 1) a single system or unitary higher education is provided by universities or similar institutions that offer both professionally oriented programs of different levels and durations, as well as general academic degrees. In Austria, Spain, Italy, Sweden, and Finland, this is exactly how education is. In a separate group, some scientists single out countries with "integrated" universities (Spain and Sweden), which include specialized higher educational institutions and secondary schools;
- 2) a double or binary system with a traditional university sector, the basis of which is the concept of a university, on which it is based, as well as a separate sector of higher education – non-university, which has a clearly defined structure. This system of education – the binary system of higher education – exists in most of the developed countries of the world (Belgium, Greece, Denmark, Norway, Switzerland, the Netherlands, Germany, France, Great Britain, Ireland, and several other countries of the world), where there are numerous specialized institutions along with university sector that educates a large part of the youth (Topuzov et al., 2023).

For global higher education, the tendency to expand and improve "short and professionalized" higher education is quite effective. An example is the recently created "university institutes" in France, where thorough education is obtained

under the condition of good organization of the educational process and, as a result, graduates easily find work. Along with the development of a strong non-university higher education sector, trends towards a single comprehensive university system have contributed to a broader interpretation of the term "university" – an institution with coherence between learning, teaching, and student success in it, intensive collaboration, where individual learning is given great attention, which differs from the definition traditionally used of a continental European university. Today, this tendency is observed in the universities of those countries that managed to immerse themselves the most deeply in the process of creating an information society (Ricardo-Barreto, et al., 2020).

3. The main tasks of the organization of educational institutions of higher education in the countries of the world.

Until recently, poorly structured higher education systems performed a fairly limited number of tasks related to conducting technological and scientific research with the simultaneous training of scientists, strengthening and preserving the state structures of the country, as well as providing highly qualified specialists in the country's economy. Institutions of higher education in most countries of the world performed these tasks by using disciplinary training: mono- (or malo-). Vocational training was transferred to workplaces if higher education was general (Japan is an example) (Moya et al., 2020).

Currently, the main tasks of organizing the educational process of higher education institutions, which, in parallel with the university sector, have professionally oriented training programs, are almost the same in most countries:

- to offer economically beneficial and professionally oriented types of education to meet the needs of the labor market;
- meet the needs of the growing number of entrants without a significant increase in government spending on higher education;
- to propose programs in which applied research will be partially used, and they will be primarily focused on teaching using innovative methods; improvement, and renewal of already existing professionally oriented education.

With the growing diversification of higher education structures in professional training,

there is a parallel diversification of qualifications and degrees in the educational space of higher education institutions, which are issued in EU countries by various educational institutions.

There is a traditional differentiation:

- between a structure with a fairly long academically integrated study – of a "continental European" degree;
- between the structure with a shorter duration of study – "English-American" university degree for obtaining the first degree and the variety of post-baccalaureate studies based partly on the modular system.

In some countries (e.g. Finland, Denmark, Portugal, and Italy) shorter cycle degree types are introduced into the national degree structure. In other countries (for example, in the Netherlands, and Germany), such a system is implemented along with the traditional tiered structure. There is also continuous diversification of qualifications in the non-university sector.

In certain professional areas, a large number of new programs have been introduced for obtaining a bachelor's degree, and several courses have been developed after obtaining a bachelor's degree. Courses can lead to double major degrees or national degrees. Educational institutions that do not have the right to master's programs – these are non-university-type institutions – can cooperate at their own will with foreign institutions that legally have such a right. The specified educational institutions thus get the opportunity to offer international master's programs to students (Sysoieva & Krystopchuk, 2012).

4. Development of educational information networks in the professional training of personnel in the educational space of higher education institutions in EU countries.

Speaking about the international experience of the development of informational educational networks, its problems, and advantages, we should note the activities of international organizations such as UNICEF and UNESCO, which take an active part in the processes of education renewal, aim to consider and solve the problems of youth development, and also direct their efforts to satisfaction of human needs in the modern world.

UNICEF – United Nations Children's Fund and UNESCO – United Nations Educational,

Scientific and Cultural Organization are organizations whose activities are prioritized in the field of lifelong learning, healthy lifestyle, and human development; these are organizations that implement the idea of "free dissemination of information" in their work and provide open access to it. Each organization during its existence has created its own information network to provide wide circles of those who are interested in this problem and for the needs of educators.

In connection with the need for the development and application of the communication and information sphere, UNESCO has created its own infrastructure, the spectrum of which covers the educational sector as a leading one in solving the organization's global tasks (Morosini et al., 2023).

5. Subordinate the main substructures of the UNICEF information network.

Let's highlight the subordinate main substructures of the UNICEF information network:

1. Communication and Information Sector, which consists of departments:
 - Information Society department;
 - Department of Freedom of Expression, Democracy, and Peace;
 - department of communication development. The sector develops in three strategic directions:
 - promotion of free dissemination of ideas and universal information;
 - promotion of pluralism and independence of the media;
 - promotion of modernization of information infrastructures.
2. The Education Sector with its infrastructure, covers a wide range of problems in the field of education.

6. The Educational Information Network in the European Community is one of the most famous international educational networks.

EURYDICE – The Educational Information Network in the European Community is one of the most famous international educational information networks. This educational network, created by the European Union, pays special attention to education, its directions, and development. The European Union, giving

priority to the educational network and taking into account the diversity of the educational systems of European countries, believes that such isolated diversity is cultural wealth for each country (Bolaños, 2021).

The EURYDICE network, an educational information network, was created and works for a better understanding of the identity of each country, and its peculiarities and leads to the creation of a European mutual space, fruitful cooperation, which is possible only through the dissemination and possession of the necessary information about the aspects of education systems (Sysoieva & Krystopchuk, 2012).

The impetus for improving the professional training of personnel in the educational space of higher education institutions in the EU countries is the fact that for all European countries, the ever-increasing emigration of citizens has become a significant problem in recent years (Sysoieva & Krystopchuk, 2012).

7. Experimental study of the effectiveness of professional training of personnel in the educational space of higher education institutions and determination of suitability for employment in EU countries.

In our time, great importance is attached to suitability for employment, therefore the term "employability" is becoming more popular – in the content of which is placed to solve the production situation – possession of educational approaches to obtaining knowledge, a set of skills, abilities, as well as the ability for professional development and the desire for continuous improvement of knowledge.

During the experimental study, employability competencies were singled out, that is, general competencies, which include:

- the ability to perform specific tasks,
- skill to work in a group,
- equal of self-organization,
- knowledge of information technologies
- communication skills and literacy, etc.

A study was led by European proprietors, which proved that a specialist's gaining a proper place in the labor market depends on:

- services that show the level of suitability for employment – 78%;

- positive attitude to the profession and work – 72%;
- production practice, relevant practical experience – 54%;
- directly acquired qualification or education – 41%;
- success rate in the organization of higher education – 28%;
- standing of the graduated institution – 8%.

Similar studies of the effectiveness of professional training of personnel in the educational space of higher education institutions and the determination of suitability for employment in EU countries were conducted within the framework of the European HEGESCO project.

Respondents named the following factors that increase the chances of employment:

- availability and experience of contacts with the professional environment – 25%;
- intellectual capital of the individual – 16%;
- grade level (the average grade was over 4.0 on a five-point scale) – 13%;
- the equal of human social growth – 13%;
- readiness of higher education in the individual – 11%;
- the specialist has a driver's license – 11%;
- practice of a person in skilled work – 9%.

Thanks to the Bologna process, an alternative method – "output orientation" – is widely promoted in the European educational space and implemented. That is, the starting point and the basis of the process of training specialists and creating an educational program is the model of a specialist who will be needed in the labor market, a professional in his field, which should ensure his high suitability for employment. At the initial stage of acquiring a profession, under this approach, employers, stakeholders, professional organizations, graduates, etc., and not higher education institutions, should play the main role. The paradigm of student-centered learning contributes to increasing the transparency of educational programs, and their comprehensibility and is aimed at increasing the chances of graduates to get a job, which in the European area of higher education is one of the main goals of creating innovative development of the world.

Nowadays, every person senses an absence of certain skills and information and needs to update them regularly. In EU countries, the principle of "lifelong education" applies. Not only

professionally successful specialists, but also unemployed people, who have become unemployed due to the lack of necessary qualifications or the impossibility of employment, seek professional retraining for effective professional training and professional development. Studies conducted by sociologists show that in modern conditions, the number of specialists who acquire new professions and qualifications for them and continue their education is increasing. Let's name the multifaceted reasons:

- professional knowledge acquired by a person quickly becomes obsolete;
- once popular professions are now becoming undemanding;
- a person loses interest in the chosen profession;
- a specialist seeks to build a career and improve professional knowledge;
- a person, with the help of obtaining an additional qualification or specialty, increases his competitiveness.

European researchers, studying the experience of implementing the concept of "Learning during life", concluded: that it is impossible to form an agreed single universal definition of this concept, which would include conceptual and operational components. The meaning of this term may change over time. Taking this into account, international organizations have developed different approaches to the definition of "lifelong learning" by the goals of their activities and direction. For example, "Learning throughout life" is considered a key factor in preparing employees for the conditions of competition in the global economy, according to experts of the World Bank. "Lifelong learning" contributes to greater social unity, more equitable distribution of income, reduced crime, and increased people's ability to function fully as members of society.

The concept of "lifelong learning" has acquired a similar vision in the documents of the OECD – Organization for International Cooperation and Development, which emphasizes the need to find ways to develop economic potential through the increase of human capital, which should contribute to strengthening democracy in society and raising the standard of living. The OECD has the following main task: "determines the search for practical solutions to expand the educational opportunities of all people". The analyzed international organizations to the interpretation of the concept of "lifelong learning" formulated an approach characterized by researchers as "pragmatic" or "instrumental", which

emphasizes the role of education in the acquisition of results, for an individual and for society in general, which has an economic expression.

8. An experimental study of the effectiveness of professional training in the educational space of higher education institutions and continuous professional training at the workplace in the EU countries.

European statistics on professional training of personnel in the conditions of integration into the world educational space take into account several terms: learning by doing, off-the-job training, on-the-job training, formal learning, informal learning, teacher in VET; trainer, open learning, profession development, etc. In recent years, the concept of "professional development" has been an important component in the professional training of personnel in the educational space of higher education institutions in EU countries and is interpreted as "actions aimed at improving professional activity." Professional development refers to special/special skills and general skills (team management or time management, negotiation skills, conflict management, communication, etc.). Professional development can take the form of self-study, formal education, consulting, conferences, coaching or mentoring, community practice, or technical assistance." (Stratan-Artyshkova et al., 2022).

The European Center for the Development of Vocational Education and Training conducted a study using CVTS4 data. One of them – "Learning at the workplace, in the process of work: successful stories of learning in Europe" – is aimed at revealing key achievements in professional training of personnel at the workplace, innovations, and areas, and successful solutions that require further development. All partners – governments, employers, social partners, public and professional organizations, education and training providers, and employees – must realize the responsibility for achieving "new skills for new jobs".

We were interested in the question "What forms of obtaining higher education in institutions of higher education and in-company training are used in EU countries?" Data from the Department for Business, Innovation, and Skills, CVTS4 are interesting.

On-the-job training is defined as professional training that is carried out in a normal work situation. It can be the only form of professional

training of personnel in the educational space of higher education institutions in the EU countries, or it can be combined with training outside the workplace.

A characteristic feature of continuous professional education in Europe is that: 62% of all production personnel in the EU countries are trained according to this indicator at the workplace.

This indicator was specified by the research data: the level of coverage of training at the workplace in medium and large organizations is significantly higher, making up 75% and 82%, respectively.

Analysis of studies by sector showed a similar picture: in the manufacturing sector, this indicator reaches 64%, and in the sector of on-the-job training services it is 61%.

In the EU countries, in the structure of continuous professional education, the transfer of professional knowledge is connected to the workplace, supplemented by a wide range of different forms in modern conditions:

- attending lectures, seminars, conferences, and trade fairs (51%);
- self-study (electronic) (30%);
- participation in quality and training cycles (18%);
- exchange, work rotation, study visits (18%), etc.

Effective forms of the effectiveness of professional training of personnel in the educational space of higher education institutions in EU countries and continuous professional training at the workplace are:

- rotation model, when an unemployed person replaces the workplace of an employee who is absent due to training,
- exchange programs with other enterprises for employees in conditions of a different corporate culture to gain work experience;
- independent training of employees.

European educational organizations and enterprises practice various forms of independent learning, which depends on the size of the organizations and enterprises themselves. The results of the effectiveness of professional training of personnel in the educational space of higher education institutions and continuous

professional training at the workplace in the EU countries are interesting.

- at small firms, and enterprises (10-49 employees) only 28% of employees use various forms of self-education;
- at large firms, and enterprises, the total number of workers included in self-education is increasing – 68% of respondents and more use various forms of self-education.

The obvious question, which is important for researching the effectiveness of professional training and continuous professional training at the workplace in the EU countries, was the following: vocational training at the workplace in the EU countries and which of them are priorities?"

The countdown to the formation of modern approaches to competencies, and personal skills during the effectiveness of professional training of personnel in the educational space of higher education institutions and continuous professional training at the workplace in the EU countries must be started in the field of European integration policy with an important event – the adoption in 2000 of the Memorandum, which included new basic skills among the priority tasks and approaches for all EU citizens, which constitutes a new educational paradigm, one of its central provisions.

As a result, the concept of new basic skills was formed, which reflects the completion of the stage of development of approaches to qualifications, competencies, and skills. As the researchers note, the new concept emphasizes an interdisciplinary approach and a wider application of knowledge and competencies in the educational space.

Such key competencies as:

- the ability to effectively use the potential of e-learning and information and communication technologies;
- ability to learn;
- entrepreneurial skills;
- communication in foreign languages;
- digital literacy, etc.

We will show Eurostat data to confirm this provision regarding the effectiveness of professional training of personnel in the educational space of higher education institutions and continuous professional training at the

workplace in the EU countries in terms of competencies and skills for the development of which various types and forms of on-the-job training are directed.

86% of respondents (the largest percentage of respondents) noted that priority is given to specific, practical, technical skills related to specific professional operations. A large discrepancy was found when comparing the data on the direction of training on specific competencies and skills between large, medium, and small firms or enterprises. In particular, it is:

- work with clients: 36% – in the production sector and 62% – in the service sector;
- teamwork (joint work, business relations with colleagues, etc.): 49% – in the production sector and 62% – in the service sector;
- management skills (planning of personnel activities, leadership and management of personnel, etc.): 86% – in large firms or enterprises and 48% – in small ones;
- office management skills (invoicing skills, time management, etc.): 58% – at large firms and enterprises and 28% – at small ones;
- general skills in the field of information technologies (processing of collected data, use of a computer, the Internet, an electronic magazine, etc.): 60% – at large enterprises with 500 or more employees and 29% – at small firms, enterprises with 10– 49 employees;
- professional skills in the field of information technologies (special understanding or knowledge about the development of complex programs, web pages, etc.): 42% – in large enterprises and 11% – in small enterprises.

The results are interesting from the perspective of the effectiveness of professional training in the educational space and continuous professional training at the workplace in EU countries.

Respondents distribute the importance of professional categories in this way:

- teamwork – 83%;
- specific, practical, technical competencies, skills – 81%;
- work with clients – 80%;
- solving problems – 72%;
- management – 71%;
- General level IT – 63%, etc.

The significant percentage increase of all indicators attracts attention. Thus, the indicators from the point of view of organizational development of personality differ almost twofold concerning prospective and current general informational competencies and skills.

For categories of workers with low qualifications, mastering information technologies expands access to training. This is important when the minimum level of qualifications demanded in the labor market of employees has risen to the average level of a specialist, and then many workers are in a vulnerable position, especially older age groups because the low level of qualifications prevents them from participating in in-company training programs, which are designed for high starting the level of participants in the educational process (Pukhovska et al., 2015).

9. Recommendations for the effectiveness of professional training of personnel in the educational space of higher education institutions and continuous professional training at the workplace in EU countries.

Valuable recommendations for the effectiveness of professional training and continuous professional training at the workplace in the EU countries contain the Recommendations of the International Labor Organization, according to which the optimal educational policy should include such main elements as:

- high-quality and up-to-date professional training of personnel in the educational space;
- participation and interaction with social partners;
- branch approaches;
- forecasting the demand for professional skills;
- availability of information on the functioning of employment services and the labor market;
- funding of professional education and training;
- expanded access to professional training;
- assessment of the effectiveness of the implemented measures (Costa & Santana, 2021).

Analysis of the experience of forecasting the effectiveness of professional training in the educational space of higher education institutions and continuous professional training at the workplace in EU countries shows that it is worth focusing efforts on the ability to learn, and the

development of adaptive basic and end-to-end competencies.

There is a growing demand for atypical competencies and personal skills of an analytical nature, in particular, communication, focus on solving problems, the ability to work in a team, creativity, as well as entrepreneurial competencies that help companies to respond quickly to changing conditions, and employees to remain in demand. The demand for standardized skills is falling, this is due to the automation of all branches of production, etc. (Pukhovska et al., 2015).

10. Strategic tasks of EU member states in the field of professional training of personnel in the educational space of higher education institutions.

The European Union has defined the following as the strategic central tasks of the activities of the EU countries in the field of professional training of personnel in the educational space of higher education institutions (Khoruzhyi, 2016):

- 1) support of higher education institutions regarding the mobility of higher education seekers and professors and teaching staff, to systematically include in curricula measures that inhibit exchange and international cooperation, and to eliminate unnecessary barriers that do not bring benefits to the professional training of personnel in the educational space of higher education institutions education;
- 2) combination of qualifications with the European qualification framework;
- 3) recognition of supplements to diplomas of higher education institutions obtained abroad and re-enrollment of ECTS credits;
- 4) improvement for researchers, teachers, students, access, chances, and employment conditions for careers from other countries, for example, facilitation of obtaining Schengen visas, etc.
- 5) use of knowledge, including in the interests of excellence and regional development, a combination of research, higher education, and economics. The transition to innovation led to new forms of cooperation between research institutes, enterprises, and institutions of higher education, and contributed to the strengthening of knowledge flows. However, the ability of higher education institutions to integrate the results of innovation and research into education remains low;

- 6) overcoming existing barriers between the economy, research, and education, requires intensive interaction between the participants of this process and entrepreneurial skills.

Conclusions

The most relevant and important for the development of world society ways of professional training of personnel in the EU countries have been revealed.

The principles on which the reform of higher education is based are described, and the main trends of the structure of world higher education are clarified.

The main tasks of the organization of educational institutions of the world are outlined. The significance of the development of educational information networks in the professional training of personnel in the educational space of higher education institutions in the EU countries is shown.

The importance and necessity for the educational space of The Educational Information Network in the European Community – one of the most famous international educational networks is shown.

For strengthening the professional training of personnel in higher education in the EU, we have analyzed various aspects of the research issues: the principles on which the reform of higher education; the main trends in the structure of world higher education; the main tasks of the organization of educational institutions of higher education in the countries of the world; development of educational information networks in the professional training of personnel in the educational space of higher education institutions in EU countries; main substructures of the UNICEF information network; the educational information network in the European community is one of the most famous international educational networks.

Experimentally verified the effectiveness of professional training of personnel in the educational space of higher education institutions and determination of suitability for employment in EU countries.

Submitted recommendations for the effectiveness of professional training of

personnel in the educational space of higher education institutions and continuous professional training at the workplace in EU countries.

Based on the study of the problem of strengthening the professional training of personnel in higher education in the EU, we highlighted valuable recommendations regarding the effectiveness of professional training in the educational space of universities and continuous professional training at work in the EU countries: creating high-quality and modern professional training of personnel in the educational space; participation and interaction of social partners; branch approaches; forecasting the demand for professional skills; availability of information on the functioning of the employment service and the labor market; financing of professional education and training; expanded access to professional training.

The strategic tasks of EU member states in the field of professional training of personnel in the educational space of higher education institutions are outlined.

Further research will be aimed at developing adaptive basic and end-to-end competencies of future specialists.

Bibliographic references

- Bergan, S. (2019). The European Higher Education Area: A Road to the Future or at Way's End?. *Tuning Journal for Higher Education*, 6(2), 23-49. [https://doi.org/10.18543/tjhe-6\(2\)-2019pp23-49](https://doi.org/10.18543/tjhe-6(2)-2019pp23-49).
- Bolaños, A. G. (2021). Variações sobre o tema Eurídice. *INTERFACES BRASIL-CANADA*, 21, e21.01. <https://doi.org/10.15210/interfaces.v21i0.20298>
- Cankaya, S., Kutlu, T., & Cebeci, E. (2015). The educational policy of European Union. *International conference on new horizons in education*, 174, 886-893. <http://doi.org/10.1016/j.sbspro.2015.01.706>
- Costa, C., & Santana, P. (2021). Trends of amenable deaths due to healthcare within the European Union countries. Exploring the association with the economic crisis and education. *SSM-Population Health*, 16, 100982. <http://doi.org/10.1016/j.ssmph.2021.100982>
- Curaj, A., Matei, L., Pricopie, R., Salmi, J., & Scott, P. (2015). *The European Higher Education Area Between Critical Reflections and Future Policies*. Springer. <https://www.springer.com/gp/book/9783319187679>
- Divinska, N., Diachenko, N., Zhabenko, O., Reheilo, I., Skyba, Yu., Chornoivan, H., & Yaroshenko, O. (2018). Theoretical foundations and technology of professional development of scientific and pedagogical workers of universities in conditions of integration of higher education and science: methodological recommendations. *Institute of Higher Education of the National Academy of Sciences of Ukraine*. <https://acortar.link/6L7eK1>
- Dzhurylo, A. (2018). Current problems of educational systems abroad: centralization and decentralization. *Ukrainian Pedagogical Journal*, 4, 170-178.
- Egido Gálvez, I. (2019). El acceso a la formación docente inicial en Europa: políticas e investigación. *Revista Española de Educación Comparada*, (35), 197-211. <https://doi.org/10.5944/reec.35.2020.24192>
- Khoruzhyi, H. F. (2016). *European policy of higher education*. Monograph. Dyvosvit. <https://knute.edu.ua/file/MjkyMQ==/01d626453878c72a91c026651e5a0735.pdf>
- Marrero-Rodríguez, J.-R., & Stendardi, D. (2023). The Implementation of Dual Vocational Education and Training in Spain: Analysis of Company Tutors in the Tourism Sector. *International Journal for Research in Vocational Education and Training*, 10(1), 90-112. <https://doi.org/10.13152/IJRVET.10.1.5>
- Morosini, M. C., Woicolesco, V. G., Marcelino, J. M., & Mentges, M. J. (2023). Internacionalización en la Educación Básica: un análisis desde la UNESCO. *Revista Iberoamericana De Educación*, 93(1), 17-31. <https://doi.org/10.35362/rie9315997>
- Moya, P. T., Arrais, L. F. L., & de Moraes, S. P. G. (2020). The number in school tasks: A proposal for the organization of education. *NUANCES-ESTUDOS SOBRE EDUCACAO*, 31(1), 439-455. <https://doi.org/10.32930/nuances.v31i0.8196>
- Piulli, E., & Sala, M. (2022). A reforma do ensino médio e as reformas empresariais na educação. *EccoS – Revista Científica*, (62), e23197. <https://doi.org/10.5585/eccos.n62.23197>
- Pukhovska, L. P., Vornachev, A. O., & Leu, S. O. (2015). Professional development of enterprise personnel in the countries of the European Union: a guide. IPTO NAPNU. <https://acortar.link/dvgEJP>



- Ricardo-Barreto, C., Jabba Molinares, D., Llinás, H, Peña Santodomingo, J., Astorga Acevedo, C., Acevedo Rodríguez, P., Baloco Navarro, C., & Villarreal Villa, S. (2020). Trends in using ICT resources by professors in HEIs (Higher Education Institutions). *Journal of Information Technology Education: Research*, 19, 395-425. <https://doi.org/10.28945/4601>
- Stratan-Artyshkova, T., Kozak, Kh., Syrotina, O., Lisnevska, N., Sichkar, S., Pertsov, O., & Kuchai, O. (2022). Formation of New Approaches to the Use of Information Technology and Search For Innovative Methods of Training Specialists within the Pan-European Educational Space. *International Journal of Computer Science and Network Security*, 22(8), 97-104. <https://doi.org/10.22937/IJCSNS.2022.22.8.13>
- Sysoieva, S. O., & Krystopchuk, T. Ye. (2012). *Educational systems of the countries of the European Union: general characteristics: study guide*. Ovid. National Academy of Pedagogical Sciences of Ukraine Borys Grinchenko Kyiv University. ISBN 966-8179-77-8; <https://elibrary.kubg.edu.ua/id/eprint/9019/1/Sysoieva%20Osvitni%20s.pdf>
- Topuzov, O., Lokshina, O., Zhurylo, A., & Shparyk, O. (2023). The European research space as a reference point for the development of education and science in Ukraine. *Ukrainian Pedagogical Journal*, 4, 5-19. <https://uej.undip.org.ua/index.php/journal/article/download/698/770>
- Zayachuk, Yu. D. (2015). Structural reforms and reforms of educational management within the framework of the modern European space of higher education. *Ukrainian Pedagogical Journal*, 4, 179-186. http://nbuv.gov.ua/UJRN/ukrpj_2015_4_23
- Zaskalieta, S. (2019). Trends of professional training of specialists in the countries of the European area: ensuring the quality of higher education. *Education*, 8, 111-116. <https://doi.org/10.28925/2226-3012.2019.8.111116>