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## Innovative development of the education industry in the European higher education area

### Інноваційний розвиток освітньої галузі у європейському просторі вищої освіти

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#### Abstract

The article identifies positive changes and suggests trends in the innovative development of the educational sector in the European area of higher education. The goal is determined, and the functions of the European area of higher education are considered. It has been proven that two trends, which are analyzed in the article, prevail in the structure of world higher education: unitary (single), a system manifested in higher education and provided by universities; binary (dual), a system with a traditional education sector based on the Humboldt University concept and a separate non-university sector of higher education. The main principles regulating aspects of educational activity are revealed. Considered is a very important and necessary distance form in the educational space, related to the introduction of information and communication technologies into the educational process, which is being updated and developed to improve an open and widely accessible education system, aimed at training a qualified competitive specialist.

#### Анотація

У статті визначено позитивні зміни та запропоновано тенденції інноваційного розвитку освітньої галузі у європейському просторі вищої освіти. Визначено мету, розглянуто функції європейського простору вищої освіти. Доведено, що у структурі світової вищої освіти переважають дві тенденції, що проаналізовані у статті: унітарна (єдина), система, що проявляється у вищій освіті та забезпечується університетами; бінарна (подвійна), система з традиційним освітнім сектором, що спирається на концепцію Humboldt університету та на окремий неуніверситетський сектор вищої освіти. Розкрито основні принципи, що регулюють аспекти освітньої діяльності. Розглянуто дуже важливу і необхідну зараз в освітньому просторі дистанційну форму, пов'язану з впровадженням в освітній процес інформаційно-комунікаційних технологій, яка оновлюється, розробляється з метою удосконалення відкритої та широкодоступної системи освіти, спрямована на підготовку

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**Keywords:** innovative development, educational sector, European space, higher education, competitive qualified specialist.

## Introduction

The education system and its innovative development are unique phenomena that are more important and complex than systems such as transport, security, and communication. This is because the educational sector is closely connected to various aspects of a person's life, including material and spiritual dimensions, both in the past and in modern times. Each country has its own characteristics, particularly in relation to its education system. Priorities, opportunities, and innovative systems in education and upbringing are the key drivers of changes in the education system, and their impact on a global scale depends on a country's involvement in the progressive movement of world society. These changes are influenced by shifts in culture, production, individual behavior within society, and their contributions to education.

Therefore, in higher education reform, it is essential to consider not only the preservation of cultural aspects in human development and national educational systems but also the enhancement of international mobility, cooperation, and the employment opportunities for young professionals within the European or international context. It is crucial to take into account the unique characteristics of higher education institutions and their international competitiveness (Dyman et al., 2017).

The advancements in high technologies provide opportunities for the development of an innovative education system. This enables deeper integration between education, production, and science, facilitating the expansion of applied and fundamental research. It also allows for the modernization of educational content and pedagogical technologies, the updating of the educational environment, and the provision of quality and innovative training for personnel. By adopting this approach, it becomes possible to implement innovative organizational changes and improvements in the education system, as well as innovative renewal in the management of educational activities. However, it is crucial to ensure sufficient, targeted, and timely funding to support these innovative changes.

кваліфікованого конкурентоспроможного фахівця.

**Ключові слова:** інноваційний розвиток, освітня галузь, європейський простір, вища освіта, конкурентоспроможний кваліфікований фахівець.

The innovative transformations in the educational landscape are built upon the achievements of scientific and technological progress, as well as advancements in psychological and pedagogical sciences. The implementation of scientific discoveries in educational practices and the continuous professional development of teachers are vital in driving these changes. Furthermore, the successful implementation of innovative developments in education relies on the active participation of society members. These innovative advancements play a significant role in the socio-economic development of a country (Bykov, 2012).

The purpose of the article. To study the positive trends of innovative development of the educational sector in the European area of higher education.

## Literature Review

A. Sbruyeva (2019) highlighted the principles of innovative development of the educational sector in the European area of higher education in the context of the internationalization of the educational area.

T. Dyman et al. (2017) conducted an analysis of higher education systems in European countries, revealed the features of the innovative development of the educational sector in the European area of higher education, conducted an analysis of the documents of the Bologna process, drew conclusions from international summits on the problems of the development of higher education regarding the possibilities of innovative development of the educational sector in the European space of higher education.

N. Avshenyuk et al. (2014) analyzed the trends of innovative development of the educational sector in the European area of higher education, suggested the possibility of implementing a competency-based approach to education in foreign countries; presented his vision of the concept regarding the formation of professional standards of pedagogical education based on

competences, as well as the development of civic competence of future teachers in the conditions of innovative development of the educational field in the European area of higher education; effective methods of forming professional standards based on the competence approach are proposed, which involves the development of modular programs based on the technologies of innovative development of the educational sector in the European area of higher education, as well as the assessment of professional competence according to modular programs.

O. Chubukova, & I. Ponomarenko (2018) carried out a comprehensive analysis of the features of the innovative development of the educational sector in the European area of higher education and described the possibilities and advantages of augmented reality technology in the innovative development of the educational sector. Attention was paid to the study of the peculiarities of the technology of innovative development of the educational sector in the European area of higher education in the teaching of disciplines for students.

### Methodology

To implement the research goal and set tasks, a system of interconnected and complementary methods was used: theoretical, in particular, general scientific (analysis, synthesis, comparison, comparison, generalization, systematization), which made it possible to find out the peculiarities of the development of theoretical approaches laid as a basis development of the studied phenomenon, and analyze legislative and regulatory documents, works of domestic and foreign scientists; specifically scientific – the method of content analysis, which made it possible to characterize the state of development of the investigated problem in the domestic scientific opinion, the method of terminological analysis, which was used to characterize the basic concepts of the study; methods of chronological, genetic and diachronic-comparative analysis, which made it possible to distinguish the stages of development of European cooperation in the field of development of the educational sector in the European space of higher education and contributed to the identification of trends in the development of the studied phenomenon in today's conditions; methods of structural-logical and synchronous-comparative analysis of the activity of collective subjects, which made it possible to outline the theoretical, normative, organizational, and content-procedural foundations of the phenomenon under study;

methods of system-structural and structural-functional analysis, which made it possible to determine trends regarding the further development of the internationalization of quality assurance of higher education; empirical – analysis of documents of international projects on a specific problem.

The leading idea of the study is the provisions on education, its positive trends of innovative development in the European area of higher education as a complete pedagogical system, structural elements (tasks, goals, content of education, methods, means and organizational forms of the educational process, theoretical foundations and organizational and pedagogical conditions for the implementation of innovative development of the educational sector in the European area of higher education).

The development of innovative development of the educational field in the European space of higher education is determined by external social factors of the pedagogical process (economic, cultural, political, scientific, and pedagogical) and internal factors (changes in the pedagogical discourse and scientific paradigm). Constructive analysis of determining factors, contradictions, and the genesis of innovative development of the educational sector in the European space of higher education provides an opportunity to update the ways of ensuring the effectiveness of the educational process and, as a result, contribute to the improvement of the quality of the educational sector and highlight the prospects for constructive changes in the education of the 21st century.

The research concept contains three interconnected concepts and contributes to the realization of the research goal at the methodological, theoretical, and technological levels.

The methodological concept encompasses the utilization of fundamental philosophical ideas, principles such as objectivity, historicism, and multifacetedness, as well as scientific principles derived from the philosophy of education. It also incorporates leading ideas from psychology and pedagogy, highlighting the interplay and interrelationships between specific scientific and general scientific methodologies in addressing the research problem. In particular, the following methodological approaches are employed:

- Acmeological: Provides an opportunity to investigate pathways towards achieving professionalism.

- **Systemic:** Contributes to establishing connections between the content of education, its developmental directions, and changes in educational objectives across different periods and stages of development. It outlines promising directions for enhancing educational activities in contemporary conditions.
- **Synergistic:** Considers positive trends in the innovative development of the educational sector in the European space of higher education, aligning with the overall trends in the formation and development of education and its internal laws.
- **Holistic:** Emphasizes the synergy at various levels and guides research towards forming a comprehensive understanding of the world.
- **Operational:** Optimizes activities to address important priority research problems related to the innovative development of the educational sector in the European higher education area. It considers the practical aspects of educational activities and contributes to the development of a competency framework.
- **Competence-based:** Analyzes the components of competence, enabling the identification of specific and general competencies.
- **Paradigmatic:** Contributes to defining the theoretical and methodological foundations of the innovative development of the educational field in the European higher education area across different periods, considering changes in scientific paradigms.
- **Dialectical:** Facilitates the resolution of identified pedagogical contradictions and examines pedagogical phenomena from the perspective of innovative development in the European higher education space. It substantiates the ways in which they emerge, evolve, and develop, ensuring the objectivity of the obtained results.
- **Axiological:** Aims to delineate the professional, educational, universal, and worldview values associated with the innovative development of the educational sector in the European higher education area.

The theoretical concept defines the main concepts, pedagogical ideas and concepts, and the essence of the initial categories of innovative development of the educational sector in the European area of higher education, according to which the research is conducted on the problem of clarifying positive trends in the innovative

development of the educational sector in the European area of higher education.

The technological concept involves the creative use of the acquired experience of innovative development of the educational sector in the European space of higher education in today's conditions.

## Results and Discussion

The development of the European educational space and, above all, such a component of it as the innovative development of the educational sector in the European space of higher education has become one of the most important educational projects for the entire period of the existence of the European Union. In the European Higher Education Area, educational policies and goals are agreed at the European level and, as a result, are improved and implemented in higher education institutions and national education systems. In the educational space, the landscape of higher education is being formed together with the government, institutions of higher education and stakeholders, and there is a presentation of the possibilities of achieving innovative development of the educational sector in the European space of higher education and with the help of a constant dialogue between the sphere of higher education and governments. In the European space of higher education, student mobility is necessary for the possibility of comparing educational systems, highlighting progressive ideas, presenting the transparency of higher education systems, and improving their quality. The European area of higher education promotes mutual understanding and trust in the innovative development of the educational sector and strengthens the cooperation of different countries between higher education systems (Paris Communiqué, 2018).

The long period of formation and innovative development of the educational field caused significant changes in the activities of European higher schools. Such changes are related to ensuring the quality of education. Universities include the following components in the concept of "higher education quality":

- input parameters of activity and innovative development of the educational sector (finances, material base, resources, quality of training of future specialists, teachers, managers, etc.);
- characteristics of innovative development of the educational sector (teaching activities,

- educational programs, development of participants in the educational process, etc.);
- initial parameters (results and monitoring of students' educational activities for innovative development of the educational sector).

Students associate the quality of higher education with the image of the higher education institution in which they study, the educational program of the innovative development of the educational field in the European area of higher education, which they entered, with the final result of the educational process and employment prospects. Employers evaluate the quality of higher education of the institution based on the competencies of its specialists (Sbruyeva, 2019).

At the Conference of Ministers of the Bologna Process Countries in Budapest and Vienna in March 2010, the intergovernmental cooperation structure of the European Higher Education Area was founded, the purpose of which is the innovative development of the educational sector in the European Higher Education Area, which:

- is based on institutional autonomy, academic freedom, and participation in the management of higher education of students and teachers;
- ensures the quality of education, economic development of countries and promotes social cohesion of its members;
- promotes the professional mobility of students and teachers;
- is based on the application of innovations in the field of education in the European area of higher education, taking into account its social dimension;
- promotes lifelong learning of specialists and provides employment opportunities for graduates in any country;
- unites members of the academic community, where students and employees are active participants;
- is an open environment for cooperation with higher education in all parts of the world (Shchyrbul et al., 2022).

Let us consider the functions of the European area of higher education, which consist in the coordination of structural reforms between the governments of different countries, in particular:

- introduction of the system of degrees (three-cycle system of bachelor's, master's, and doctor of philosophy (Ph.D.);
- ensuring the transparency of the innovative development of the educational sector in the

European space of higher education using the accumulation of credits of the European transfer system and the supplement to the diploma;

- recognition of study periods, and degree qualifications;
- creation of general European monitoring of education quality assurance;
- introduction of the Qualifications Framework in higher education, which has eight advisory members: The European Association for Quality Assurance in Higher Education (ENQA); Council of Europe (CoE); Business Europe (Business Europe); Education International (EI); European University Association (EUA); European Students Union (ESU), European Association of Institutions of Higher Education (EURASHE); UNESCO (UNESCO).

Let's consider two trends in the innovative development of the educational industry that dominate the structure of world higher education:

1. Unitary, or single, system, when the innovative development of the educational field in the European area of higher education is provided by institutions of higher education that offer: professional, oriented educational programs of different levels and different duration, provide general academic degrees. This single system of higher education practically includes only universities. Such is the education in Austria, Italy, Spain, Sweden, and Finland. Integrated universities create a separate group, which is an association of countries that included specialized secondary and higher education institutions (Sweden and Spain) and countries that belonged to the socialist camp.
2. The binary or dual system of innovative development of the educational sector in the European space of higher education with the traditional university sector is based on the concept of Humboldt University and the non-university sector of higher education. This system of innovative development of the educational field in the European space of higher education is used in developed countries of the world (Belgium, Great Britain, Denmark, Greece, Ireland, Norway, the Netherlands, Germany, Switzerland, France, etc.). Here, along with the university sector, specialized institutions have been created, in which many children and young people study (Dyman et al., 2017).

Lifelong education is the main trend of innovative development of the educational sector in the European space of modern higher education of the planet (Kuzminskyi et al., 2018). The principle of "lifelong education" is widespread and necessary in all developed countries of the world. Today, humanity, in connection with the innovative progress of society, feels a lack of professional knowledge and needs constant regular updating. With the innovative development of the educational sector in the European space of higher education, the renewal of society, a new educational paradigm is formed, which has the following characteristics:

- flexibility, continuity, and adaptability of all stages of innovative development of the educational sector in the European space of higher education and the unity of all its forms;
- arming all students of education with a set of competencies that will ensure their innovative development in the European space of higher education, contribute to readiness for comprehensive functioning in the modern world, which is constantly changing, provide the opportunity to quickly respond to the demands of the times, contribute to the expansion of the opportunity for citizens to participate in the country's activities in the cultural, social and political perspective;
- the humanization of education consists in the innovative development of the educational field, the establishment of a person as the highest valuable individual, the creation of the best possible conditions for the development of intellectual and cultural development of a person, the satisfaction and disclosure of educational needs, the self-improvement of a person, the transformation of the learning process into a continuous process;
- the creative and active nature of innovative development in the European space of higher education, the formation of cooperative relations between all participants of the educational space, the development of a new innovative system of assistance and pedagogical support in the organization of individualization of educational activities (Ayzikova, 2012).

Let's consider the principles of regulation of aspects of innovative development in the European area of higher education:

- interest of employers in competitive specialists and society in high-quality innovative higher education;
- autonomy of educational institutions;
- system of external assurance of the quality of education is aimed at ensuring the goal of the educational space and innovative development in the European space of higher education, improving the work of educational institutions to fulfill the tasks.

The modern development of world society ensures the growth of the influence of ICT on the efficiency of the world economy and education. Thus, according to Eurostat, the impact of ICT on labor productivity and population employment in Europe is constantly growing: the ICT sector accounts for 5% of European GDP, which causes a 50% increase in labor productivity. Many unemployed and economically inactive people do not know how to work with a computer. We note that the application of ICT in various spheres of human activity is highly effective, but the further increase in productive work is slow due to the insufficient ICT education of employees: for members of society, the possibility of obtaining jobs is related to the level of their computer literacy. The digital inequality of countries and their economies, the lagging of the education system from the possibilities of using ICT and innovative development in the European area of higher education, and the use of the information society are observed. Such an unfavorable trend will deepen and complicate the processes of socialization and innovative development of the younger generation if the necessary measures are not taken (Bykov, 2012). From a technological point of view, innovative development in the European area of higher education is due to the emergence of new ICT-oriented educational and pedagogical technologies, the informatization of education, the latest teaching aids, the creation of a modern computer-oriented educational space, electronic informational educational resources, and network services. To carry out such work, the most modern is the use of promising forms and technologies of educational organization (Kuchai et al., 2022). These are primarily open education, electronic distance learning technologies (e-DL), and systems of electronic distance education (e-DO), which are built based on the principles of open education (Bykov, 2008). in the global educational space for achieving the set goals. This was facilitated in 2020, the year of the total coronavirus infection of COVID-19 and the threatening epidemiological situation in the world. All educational institutions have been transferred to the distance learning format. The

importance of distance learning has received a great update in connection with the state of war in the country due to the war unleashed by the Russian Federation on the territory of Ukraine. Distance learning has become the only possible and accessible form of education for all education seekers (Babushko, 2022).

Distance education is inseparable from the use of information and communication technologies, is constantly updated to create a widely accessible and open system of educational space, and aims to prepare a competitive specialist (Vasylchishen, 2022).

Relevant for innovative development in the European space of higher education is the definition of D. Keegan, who interprets distance education as one that "frees the student from the need to travel to a permanent place, at a certain time, to meet with a fixed person for learning as a result of the technological division of the teacher and student" (Marchuk & Mushenyk, 2021).

Modern society offers a transition of the educational process from traditional education to education based on computer technologies. This became possible with the development of the Internet. And now teachers have the opportunity to freely conduct discussions with other network users online, send the required amount of melons from one end of the world to another, and post information on Internet sites, making it available to everyone. With the help of modern information technologies, it becomes possible to increase and improve the educational process, and innovative development in the European space of higher education. During the reformation of the educational space, various technologies are being developed, in particular mixed learning technologies (Kuchai et al., 2021).

In institutions of higher education, the goal of using distance learning is the organization of a high-quality educational process "at a distance" with the use of the latest information and communication tools and open access to educational resources. This educational form quickly adapts to the requirements of the information society and promotes innovative development in the European space of higher education. In combination with traditional forms, distance education provides a wide range of educational services for all categories of educational space (Vasylchishen, 2022).

The modern educational space creates new

opportunities for innovative learning. In the era of computerization, the concept of netiquette appeared on the Internet. Netiquette is one of the main components of Internet communication, a self-regulator, and the law of any web community. These are the rules for communicating with each other over the Internet. Network etiquette creates the necessary conditions for comfortable communication for both experienced users and beginners. Most of the rules are a repetition of the rules of good manners that were proposed in real society (Biletska et al., 2021).

The main rule of network etiquette is the statement: "Be polite and stick to the boundaries of decency. You should try to write an electronic message in such a way that you are not ashamed of your words. It is necessary to remember that you are in a virtual space, which has its conditions. If you choose to intervene in a discussion, you may harm others. Having found yourself in a new area of virtual space, you need to study the situation, determine priorities, and only then join the conversation" (Skotynnyanska, 2022).

Technologies of virtual and augmented reality provide for the creation of visualized content written by topic, which is adapted for systematic use by the target audience for innovative development of the educational field in the European space of higher education with the help of modern electronic devices. The use of augmented reality technology during innovative development in modern institutions of higher education has a positive effect on the learning process. The implementation of augmented reality in education will make it possible to:

- to interest modern students in the field of education through the use of interactive content and to promote the innovative development of the field of education in the European space of higher education;
- to acquire competencies with the help of augmented reality technology;
- to diversify the innovative development of the educational sector in the European space of higher education with innovative forms of work with the audience;
- to increase the level of students' motivation for independent cognitive activity (game tools, competitive and cognitive stimuli) in the education process;
- the application of innovative types of educational search and cognitive tasks that ensure active educational activity of students and contribute to the innovative

development of the educational field in the space of higher education;

- to provide the educational process with such a new innovative organizational form that is attractive to students;
- to create conditions for the innovative development of the educational field in the European space of higher education, which are not inherent in the educational process, which will lead to an increase in the self-esteem of students (Chubukova & Ponomarenko, 2018).

Since the innovative development of the educational field in the European space of higher education is not reduced to the performance of the proposed role, the teacher must be able to organize this activity and effectively direct it. In addition, teachers create a learning environment that helps students acquire the necessary competence. Thus, during the implementation of the innovative development of the educational field in the European space of higher education, based on the competence approach, teachers are assigned a leading role in the formation of professional individuality and the promotion of the professional development of the individual (Shunkov et al., 2022).

Fruitful educational activities with this approach will be as informal as possible. This is achieved under the condition that teachers use different teaching methods and skillfully adjust the content and teaching methods, taking into account the wishes and capabilities of the students. With this approach, the educational space maximizes lifelong learning and practical assimilation of knowledge, and acquisition of the necessary competence (Kotiash et al., 2022).

In the process of planning the educational space for the innovative development of the educational industry, you can use the following questions:

- diversity (what is the diversity of the environment related to?);
- stimulation of activity (under what conditions does stimulation of student activity in the educational environment take place?);
- resource provision (are the resources sufficient to ensure the stimulation and variety of activities of those who are studying?);
- the possibility for students to provide support (what opportunities does the environment have for assisting those seeking education?);

- the development of independent learning (is there stimulation of the environment during independent learning?);
- the possibility of education seekers monitoring the achievement of set tasks (how does the feedback mechanism work?). Let's note the characteristics of the human potential development index. According to the human potential development index, the UN compares the level of social and economic development of countries; determines the indicator of educational activity, which is one of the three main indicators in the integrated assessment of human development (Avshenyuk et al., 2014).

### Conclusions

Since the innovative development of the educational field in the European space of higher education is not reduced to the performance of the proposed role, the teacher must be able to organize this activity and effectively direct it. In addition, teachers create a learning environment that helps students acquire the necessary competence. Thus, during the implementation of the innovative development of the educational field in the European space of higher education, based on the competence approach, teachers are assigned a leading role in the formation of professional individuality and the promotion of professional development of the individual.

The educational environment plays an important role in the innovative development of the educational sector in the European space of higher education, in the education of all categories of students. In particular, the physical environment (auditoriums, materials, equipment), emotional environment, and psychological environment are important. Therefore, the teacher responsible for the educational process and innovative development of the educational field must provide appropriate positive conditions so that students feel comfortable, freely ask about unclear educational positions, and express their ideas and opinions without being ashamed of their incompetence or the environment.

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