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**WORLD EXPERIENCE OF DISTANCE LEARNING
AS A INNOVATIVE FORM
OF PROFESSIONAL EDUCATION**

Iryna Dobroskok,

Doctor of Pedagogy, Professor,
Head of the Professional Education Department,
SHEI «Pereiaslav-Khmelnyskyi Hryhoriy Skovoroda
State Pedagogical University»,
Pereyaslav-Khmelnyskyi, Ukraine

Stefaniya Dobroskok,

Lecturer of the Professional Education Department,
SHEI «Pereyaslav-Khmelnyskyi Hryhoriy Skovoroda
State Pedagogical University»,
Pereyaslav-Khmelnyskyi, Ukraine

Within the basic principles of any public policy on higher education, it is noteworthy to underline that the promotion of the stable social growth may be provided by preparing competitive human resources and creating conditions for lifelong learning, accessibility of higher education and international integration, as well as integrating higher education system into international space, preparing competitive human capital for the country's high-tech and innovative development. It is also possible if people realize their potential, the needs of society are being satisfied, and there are available vacancies for qualified specialists at the labour market. It was the realization of these priorities that requires substantial modernization of the

educational system and highlights the use of distance learning technologies in educational process.

The **aim** of investigating the mentioned scientific issues is to describe distance learning in the international education space.

Scope of the scientific investigation of the problem.

The issue of distance learning was investigated by such Ukrainian and foreign scientist, as A. Andreeva, V. Gornieva, N. Drozdovych, V. Vadaska, V. Kineleva, V. Kolmogorova, V. Lazarieva, V. Lukianenko, A. Mogyleva, V. Ovsiannikova, O. Okolelova, R. Bell, J. Blumstuk, J. Keegan, J. Coumi, A. Petrova, A. Tishchenko, A. Khutorskoi, V. Shadrykova, V. Shapovalova and others. Their works reflected a wide range of ideas about the nature and content of distance education and particular features of such an educational process. In Ukrainian scientific literature, a range of studies on this issue that concerne the practice of major foreign centres of distance learning, the experience of its implementation, courseware of distance education were presented by V. Oliynyk, V. Sheiko, H. Kozlakova, B. Shunevych, etc.

It is noteworthy that these issues on implementing distance learning are quite controversial, especially when the national educational system is being reformed. Therefore, the principle **objective** of this article is to define the main priorities of this innovative form of education and analyse the use of distance learning in the world.

Summary of the key ideas. Today, information revolution is one of the main determinants of civilizational change that contributes to the increasing demand for distance learning based on Internet technologies (e-learning), especially in higher and further education. Moreover, the proactive or belated development of distance learning technologies is supposed to be an objective parameter of the development level of appropriate

infrastructures (informational, organizational, market, etc.), and it also shows how much government and education authorities are interested and understand the concept of modernisation. Distance education has become a global phenomenon of educational and informational culture over the past two decades, by changing the nature of education in many countries (Fig. 1).

DIDACTIC PRINCIPLES		
Classical	Specific for distance learning	
<ul style="list-style-type: none"> - Natural conformity. - Scientific character and accessibility. - Illustrative material. - Conscious and active ways learning. - Consistency. - Systematisation and coherence. - Combining theory with Practice. 	<ul style="list-style-type: none"> - Interactivity. - Adaptability. - Humaneness. 	<ul style="list-style-type: none"> - Information protection. - Basic level of education. - Relevance of technologies.

Figure 1. Principles of Distance Learning

Development of distance education is considered to be one the key orientation of basic educational programmes. Distance learning process represents an individual training in the computer-based educational environment, a way of distance learning by using audio, video, Internet and satellite channels. Information technologies of distance education are technologies of creation, delivery and preservation of teaching materials, organisation and support of the educational process of distance learning via telecommunication network (Fig. 2).

Introducing distance learning in the process of specialists' training and upgrade training within the educational system in

METHODOLOGICAL FRAMEWORK OF DISTANCE LEARNING

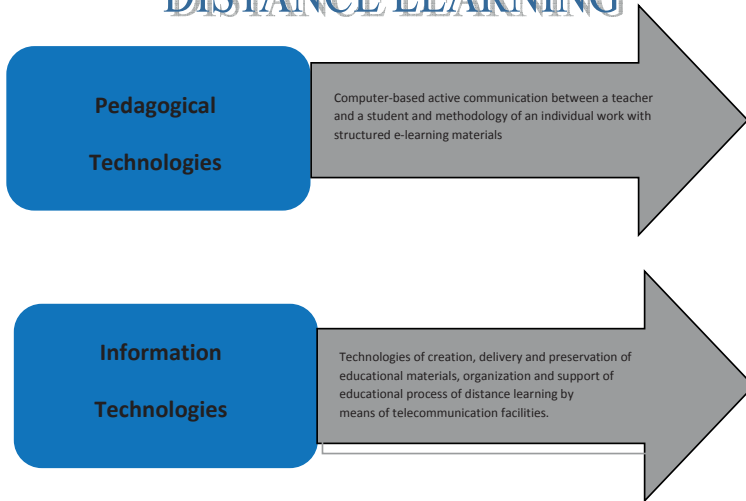


Figure 2. Distance Learning Technologies

different countries is becoming more urgent because of the need to solve the following problems:

1) Slow mutual integration and implementation of European and international standards in educational sphere.

2) As the development of science becomes more intense, professional skills of employees of different specialties should be constantly improved.

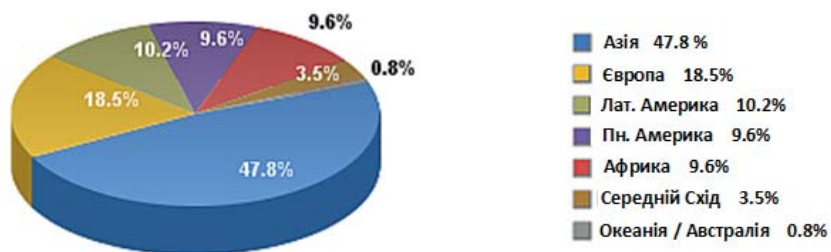
3) The technologies only enable to provide the timely correction of courseware by updating knowledge in high-informational and educational space.

4) High cost-effectiveness of distance learning;

5) Increasing social and professional mobility of students, their social activity, level of consciousness [3, p. 234].

Distance learning serves an integral part of a global computer network of education and science. Based on the use of traditional and innovative teaching methods and tools that are grounded on information and communication technologies, distance learning provides interactive participants of learning process with direct intercommunication.

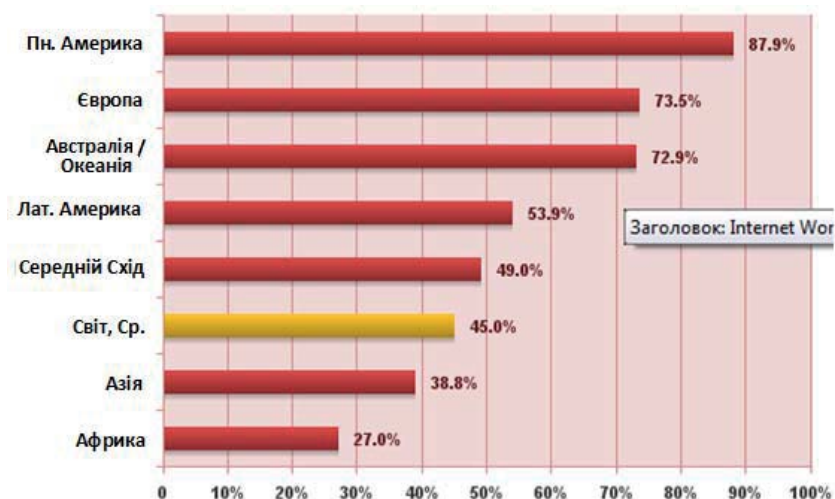
Distance learning is firmly connected with innovative technologies, computer-based learning and digital technologies. The computer programs of learning, computer telecommunication networks are the important tools of distance education. Digital technologies of distance learning include hypermedia applications which control the procedure for learning information blocks, as well as databases available via the Internet and other networks, and even integrated databases. However, it is noteworthy that the degree of Internet penetration in the education systems of different countries around the world is not uniform (Fig. 3).



Asia	47.8 %
Europe	18.5 %
Latin America	10.2 %
North America	9.6 %
Africa	9.6 %
Middle East	3.5 %
Oceania/Australia	0.8 %

Figure 3. Internet users in the world network – 2015 [2]

The Internet penetration in different regions may be traced on Figure 4.



North America	87.9 %
Europe	73.5 %
Australia/Oceania	72.9 %
Latin America	53.9 %
Middle East	49.0 %
World Average	45.0 %
Asia	38.8 %
Africa	27.0 %

Figure 4. World Internet Penetration (according to the regions) – 2015 [2]

Dynamic growth of Internet users by regions of the world may be seen on Table1.

The proportion of students enrolled in distance learning is another parameter of such learning (Fig. 5). As one can see, distance education as a new form of innovative learning

*Table 1***Internet users and population (30 June 2015 - six-month update) [2]**

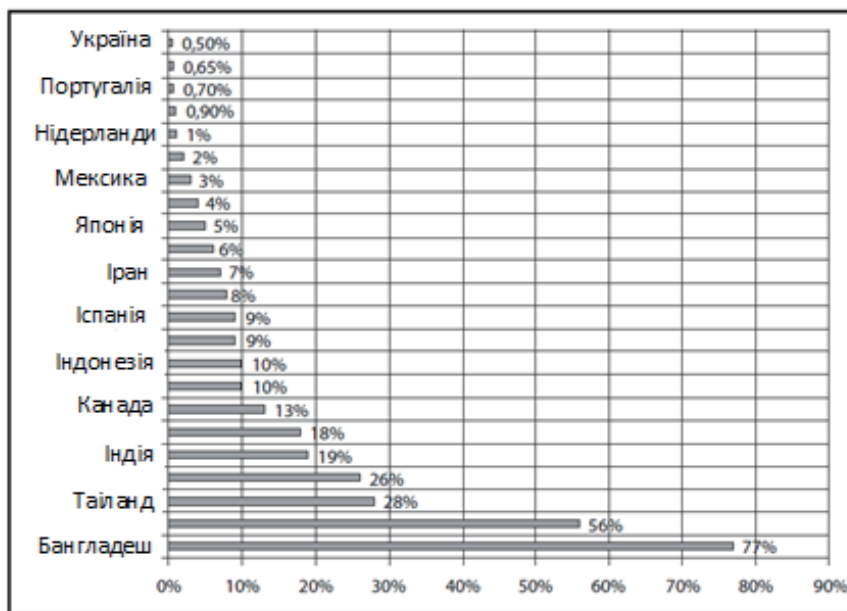
World regions	Population [2015]	Internet users 31.12.2000	Internet users - Last data	Penetration [Population %]	Internet users % from the table	Increase 2000–2015
Africa	1.158 355 663	4.514.400	313,257,074	27.0%	9.6%	6.339 1%
Asia	4.032.466.382	114,304,000	1,553,203,143	38.3%	47.8 %	1.267.6%
Europe	821.556.904	105.006.093	604,122,380	73.5 %	18.5 %	474.8%
Middle East	236.137.235	3.284.800	115,823,882	49.0 %	3.5 %	3.426.1%
North America	357.172.209	108.090,800	313,862,863	37.9 %	9.6 %	190.4%
Latin America	617.776.106	18.068.919	333,115,908	53.9%	10 2%	1.743 6%
Oceania / Australia	37,157 120	7,620.480	27,100,334	72.9%	0.8 %	255.6%
Total in the world	7,260,621.118	360,985,492	3,270,490,584	45.0%	100.0 %	806.0%

is used more and more often in the education systems of many countries, but the development of distance learning technologies through the global computer communication network happens differently in different countries. A high level of computerisation of the population, developed communication and telecommunication systems provide a solid foundation for distance learning technologies.

The study of distance education development in higher educational institutions of the world makes it possible to detect the peculiarities of how a new form of study is created abroad in order to adapt Ukrainian current education system to the requirements imposed, due to the tendencies of globalisation, democratisation and integration in educational sphere [4].

Entirely new principles underlie now international higher education. The main position is occupied by the so-called principle of social participation. Each consumer in education sphere has now the right to present their demands to the form and scope of the educational process, influence the choice of educational information and resources. The establishments

of higher education pay special attention to the interests of students who need a certain level of knowledge in a particular subject area. In other words, education is gradually becoming part of the economic sphere; it turns into a system which is mainly developed in accordance with the consumer's interests. Therefore, distance education is developed not only within national education systems, but also by some commercial companies that are primary focused on business education, which is a quarter of all higher education programmes.



Ukraine	0.50 %
	0.65 %
Portugal	0.70 %
	0.90 %
Netherlands	1 %
	2 %

Mexico	3 %
	4 %
Japan	5 %
	6 %
Iran	7 %
	8 %
Spain	9 %
	9 %
Indonesia	10 %
	10 %
Canada	13 %
	18 %
India	19 %
	26 %
Thailand	28 %
	56 %
Bangladesh	77 %

Figure 5. Part of distant learning students from the general number of students

American universities tend to use innovative technologies depending on the needs dictated by the industrial, economic and social development of society. These technological innovations implemented at all educational stages – from secondary school to postgraduate education. In Canada and the US there are hundreds of thousands of distance learning programmes today. They are offered both by the Ministries of Education of different states and provinces, and individual universities, colleges and companies for further training of their employees. According to the statistics of World Bank, only in the USA, there are over 3,000 schools that specialize in interactive professional training. Virtual universities were created in 33 US states. 85% of local colleges offer online/distance courses.

This fact is not surprising, because educational institutions from these countries had been computerised and they had obtained free access to the Internet much earlier than, for example, schools and universities of the CIS-countries did. In 1987, the United States Distance Learning Association (USDLA) was created, whose main purpose is to develop an overall distance education strategy and promote the creation of new distance learning technologies. The USDLA, established by the state of Oklahoma and the University of California, is a non-profit organization that maintains close relations with distance education centres in Europe and Asia. The branches of the Association's activities encompass all stages of school, higher education, professional training, training (upgrade training) of military servants and public officers. This organisation give consulting and information support service to state institutions, the Congress, companies and corporations. [8]

In Colorado, the National Technological University (NTU) was founded as a non-profit organisation in 1984. As a higher education institution, the National Technological University provides certified engineers and managers, and assigns degrees and issues graduate certificates of master's degree. Academic programmes offered by NTU are approved by more than 40 universities. NTU has a satellite network infrastructure [7]. More than 40 US universities are engaged in the academic programmes offered by the National University of Technology. Some institutions participate in developing programmes for all subjects, while others provide courses only in selected areas. [7].

The tasks of the distance education universities in **Canada** are to provide higher education to those who failed to enter traditional universities and colleges, employ and educate the unemployed, retrain service staff, ensure continuing education

and training throughout life for the whole nation, renew human resources [7].

Distance education in Europe started to be intensively developed in the early 70's of the 20th century. Nowadays, every European country has a group of education establishments that implement distance learning programmes. The National University of Distance Education (Universidad Nacional de Educacion a Distancia – UNED) in Spain can be an illustrative example. It was founded by Parliament in 1972 in order to provide higher education to all those who cannot study for various reasons within traditional universities' programmes. This university is one of the biggest education institutions in Spain. It includes 58 training situated within the country and nine abroad (Bonn, Brussels, Geneva, London, Paris, etc.). Its students also have the opportunity to study in New York and Rome. To maintain a constant dialogue with students, live meetings, passed in 50 training centres, as well as telephone interviews, are organised to discuss educational material. The total number of students that are enrolled at the university is 124,000 persons, from which 85,000 have been enrolled in order to receive a degree.

In the **United Kingdom**, over 50% of programmes for master's degree in Business management are programmes with distance learning methods. The leading European organisation in this sphere is the British Open University Business School [1]. The Open University is founded in 1969 as an independent institution for providing «second» opportunities for working adults to obtain or continue their education. The University offers three types of training: a bachelor's degree, postgraduate and continuing. Students can receive advice in 250 training centres located in many cities of the country and around the world. The Open University has gained a reputation of a world

leader in alternative education. Following the example of Open University, schools of a similar type have been opened in Canada, Austria, Spain, Pakistan, the Netherlands, Turkey, India, Israel, etc.

Founded in 1939, the National Centre for Distance Learning (Centre national d'enseignement à distance – CEND, **France**) now provides distance learning for more than 35,000 users in 120 countries. Along with programmes designed for a mass audience, lectures and classes that allow students pass exams after the course, and obtain a diploma, certificate and more, have obtained a wide circulation. Television university courses of the Baltic University can serve as one of the examples of such distance learning. Founded in **Sweden**, it unites more than 50 universities in the Baltic region. While using satellite channels, students and scientists from 10 countries are able to make scientific and educational researches on topics of common interest.

Germany's distance education has its peculiar features. It began with distance training of specialists with higher professional education, which was systematically planned. The accession of the eastern lands made it possible to expand the market of distance education. The Correspondence University of Hagen (North Rhine-Westphalia) is a bright example of the institution that carries out distance specialist training. The University provides educational services to more than 60,000 students per year. However, a graduate degree is obtained by not more than 20% of the enrolled students, due to the large down selection of students who cannot withstand the high demands.

Distance education has actively been operating in **Australia** for 30 years. Open education has successfully been developed in Australia by a consortium of nine traditional universities. Studies are carried out with the use of 150 high

school disciplines, including social sciences and business. However, we have to admit that watching TV and listening to audio lectures are not mandatory as all materials are duplicated in print versions. In our opinion, it is the «dual model» of education programmes offered by various universities in Australia that has practical and scientific interest. This means that the same courses can be studied both in a stationary setting and on distance. Australians say they have a «system of three W», which allows everybody to learn What they want, Where they want and Whenever they want. A striking example can be the University of Southern Queensland (USQ), leader in distance education. The USQ is the best university in the world with two forms of education.

Analysis of the research materials has showed that Australia has many schools that offer distance education programmes for adults, namely the University of Adelaide, University of South Wales, University of Northern Territory, University of Wollongong, Deakin University, Charles Sturt University, University of Sydney and many others [6]. The great importance in Australia is given to courses with blended learning which suppose recurring face-to-face real meetings and seminars.

Recently, there has been a rapidly increasing interest in distance learning among **Pacific countries**, particularly Vietnam and Malaysia. In 1968, distance learning techniques started to be actively developed and applied in Vietnam, when the Correspondence Institute for training managers and directors of schools, colleges and universities was opened in Hanoi. In 1988, the university was turned into the Vietnam National Institute of Open Learning. It offers programmes for post-secondary, continuing studies, professional training and upgrade training of specialists in electrical engineering, metalworking, computer

engineering, economics, marketing, linguistics, etc. Then, the Vietnam National University – Ho Chi Minh City and eight other universities have received permission from the Ministry of Education and Training of Vietnam to open its distance learning courses. More than 150,000 students are currently enrolled in distance university education.

Distance learning has been recognized in the principle **South Asian countries**, such as India, Pakistan, Bangladesh and Sri Lanka, and it started functioning. Schools and universities have been opened. In India, the Indira Gandhi National Open University (IGNOU) was founded in 1985. It began teaching students within academic programmes in 1987. The total number of students that are enrolled at the university is 185,000 people. The university accepts about 80,000 students for various training programmes each year. There are the Allama Iqbal Open University in Pakistan, Open University of Sri Lanka (OUSL) in Sri Lanka, and Bangladesh Open University BOU in Bangladesh. The main objective of these universities is to improve the quality of teaching by means of communication technologies, including publications. The universities are designed to deliver educational opportunities to the wider population, including women, disabled people and those with low incomes. Thus, distance education is a powerful tool for creating human resources in poor South Asian countries.

The national network of Radio and Television Universities in China (CRTVU) was set up in 1979 to meet the growing demands for urgently needed qualified manpower, and educate adults that were not satisfied with traditional education system. CRTVU offers degree courses and those for continuing education. The studies in which the degree is granted are natural science, engineering and technology, humanities, economic management, agriculture and linguistics. There are 229 general and 18 special courses. Courses for continuing education are

new technologies, financial reform, principles and practice of China's foreign trade, accounting and audit, public transport.

The affiliates control and manage all aspects of education, including planning of TV educational programmes. They also provide consulting services to students. The educational process is organised by tutors. The latter also register students, collect student fees and distribute course materials.

Thailand has the Sukhothai Thammathirat Open University, founded by a royal edict in 1978 as a specialized university of distance education. The University offers distance learning programmes at the levels of a certificate, bachelor's and master's degree in arts, management, law, agriculture, health, political science. From 60 to 70,000 students enter the university every year.

Conclusions. At the present moment, the world has accumulated a great experience in implementing distance education. The transfer of educational systems in developed countries to the widespread use of information technologies leads to the increased competition at the international education market. The rapid development of distance learning projects in the next few years may drive out of the education market a significant part of the traditional education institutions in many countries. The reorientation of educational space in accordance with new time challenges makes it necessary to create conditions for continuing, quick, flexible and high-quality training at the same time. Therefore, as the traditional education system is not able to meet the present needs, we need to search for alternative systems. The principle of maximum accessibility of educational resources actually becomes the standard of the world's leading universities. The use of such technology significantly reduces the distance between a consumer of educational services and higher education institution. Distance education overcomes the territorial factor of unequal access to quality higher

education, as educational resources become equally accessible to all, regardless of a consumer's geographical location. A large number of distance and virtual learning systems are being developed. Immersion into virtual subject area is one of the most progressive achievements. Corporate educational networks are widely created. Most of these distance learning systems anticipate similar traditional education systems, as both in complexity and amount (training sets, etc.).

Список використаних джерел

1. Дистанционное обучение в Европе [Електронний ресурс]. – Режим доступу: <http://www.college-training.ru/distance/22/>.
2. Internet World Stats [Електронний ресурс]. – Режим доступу: www.internetworldstats.com/stats.htm.
3. *Kavun Sergii*. Distance learning systems and their information security / Sergii Kavun // Бізнесінформ. – № 7. – 2012. – С. 234–239.
4. *Козлакова Г.* Інформаційно-програмне забезпечення дистанційної освіти: зарубіжний і вітчизняний досвід: Монографія / Г. Козлакова. – К.: ВЦ «Просвіта», 2002. – 230 с.
5. *Огієнко О.І.* Андрагогічний підхід у неперервній освіті дорослих: Метод. рекомендації / О.І. Огієнко. – К.; Суми: СумДПУ ім. А.С. Макаренка, 2007. – 40 с.
6. Open Universities Australia [Електронний ресурс]. – Режим доступу: <http://www.open.edu.au/public/courses-and-units>.
7. Офіційний сайт університету Атабаска [Електронний ресурс]. – Режим доступу: <http://www.mba.athabascau.ca>.
8. Офіційний сайт USDLA [Електронний ресурс]. – Режим доступу: <https://www.usdla.org/>.

References

1. Distantcionnoe obuchenie v Evrope [Elektronny`j resurs]. – Rezhy`m dostupu: <http://www.college-training.ru/distance/22/>.
2. Internet World Stats [Elektronny`j resurs]. – Rezhy`m dostupu: www.internetworldstats.com/stats.htm.
3. *Kavun Sergii*. Distance learning systems and their information security Sergii Kavun // *Biznesinform*. – № 7. – 2012. – S. 234–239.
4. *Kozlakova G.* Informacijno-programne zabezpechennya dy`stancijnoyi osvity`: zarubizhny`j i vitchy`znyany`j dosvid: Monografiya / G. Kozlakova. – K.: VCz «Prosvita», 2002. – 230 s.
5. *Ogiyenko O.I.* Andragogichny`j pidxid u neperervnij osviti dorosly`x: Metod. rekomendaciyi / O.I. Ogiyenko. – K.; Sumy`: SumDPU im. A.S. Makarenka, 2007. – 40 s.
6. Open Universities Australia [Elektronny`j resurs]. – Rezhy`m dostupu: <http://www.open.edu.au/public/courses-and-units>.
7. Oficijny`j sajt universy`tetu Atabaska [Elektronny`j resurs]. – Rezhy`m dostupu: <http://www.mba.athabascau.ca>.
8. Oficijny`j sajt USDLA [Elektronny`j resurs]. – Rezhy`m dostupu: <https://www.usdla.org/>.

Ирина Ивановна Доброскок,

доктор педагогических наук, профессор,
заведующая кафедрой профессионального образования,
ДВНЗ «Переяслав-Хмельницкий государственный
педагогический университет
имени Григория Сковороды»,
г. Переяслав-Хмельницкий, Украина
E-mail: irina.dobroskok@gmail.com

Стефания Сергеевна Доброскок,
преподаватель кафедры профессионального образования,
ДВНЗ «Переяслав-Хмельницкий государственный
педагогический университет
имени Григория Сковороды»,
г. Переяслав-Хмельницкий, Украина

**Доброскок И.И., Доброскок С.С.
МИРОВОЙ ОПЫТ ИСПОЛЬЗОВАНИЯ
ДИСТАНЦИОННОГО ОБУЧЕНИЯ
КАК ИННОВАЦИОННОЙ ФОРМЫ
ПРОФЕССИОНАЛЬНОГО ОБРАЗОВАНИЯ**

Аннотация

В статье проанализирована степень распространенности дистанционного образования в мире. Предметом исследования выступает опыт дистанционного обучения в Канаде, США, странах Европы и тому подобное. Указаны причины все возрастающей популярности дистанционного образования и его преимущества перед традиционными формами обучения. В работе также приведены некоторые статистические данные о результатах применения новейших ресурсов и создание центров дистанционного обучения в учебных заведениях мира.

Цель научной проблематики заключается в определении дистанционного практики в образовательном пространстве стран мира.

Методология проведения работы. Работа выполнена по результатам исследования современных отечественных и зарубежных ученых на определение сущности дистанционного образования.

Выводы. Развитие высоких технологий во все больших масштабах повышает спрос на интеллектуальность в

образовании широких масс населения любой страны. Это кардинально меняет состояние системы образования в обществе, ее институциональный статус. Поэтому расширение использования дистанционного образования является закономерным качественно новым этапом развития и адаптации образования к современным условиям.

Ключевые слова: *дистанционное образование; дистанционное обучение; инновация; профессиональное образование; самоопределение; современные коммуникационные технологии.*

Ірина Іванівна Доброскок,

доктор педагогічних наук, професор,

завідувач кафедри професійної освіти,

ДВНЗ «Переяслав-Хмельницький державний педагогічний

університет імені Григорія Сковороди»,

м. Переяслав-Хмельницький, Україна

E-mail: irina.dobroskok@gmail.com

Стефанія Сергіївна Доброскок,

викладач кафедри професійної освіти,

ДВНЗ «Переяслав-Хмельницький державний педагогічний

університет імені Григорія Сковороди»,

м. Переяслав-Хмельницький, Україна

Доброскок І.І., Доброскок С.С.

СВІТОВИЙ ДОСВІД ВИКОРИСТАННЯ

ДИСТАНЦІЙНОГО НАВЧАННЯ ЯК ІННОВАЦІЙНОЇ

ФОРМИ ПРОФЕСІЙНОЇ ОСВІТИ

Анотація

У статті проаналізовано ступінь поширеності дистанційної освіти в світі. Предметом дослідження

виступає досвід дистанційного навчання в Канаді, США, країнах Європи тощо. Зазначено причини все зростаючої популярності дистанційної освіти та її переваги перед традиційними формами навчання. У роботі також наведені деякі статистичні дані щодо результатів застосування новітніх ресурсів та створення центрів дистанційного навчання в урядових закладах світу.

Мета наукової проблематики полягає у визначенні дистанційної практики в освітньому просторі країн світу.

Методологія проведення роботи. Робота виконана за результатами дослідження сучасних вітчизняних та зарубіжних вчених з визначення сутності дистанційної освіти.

Висновки. Розвиток високих технологій у все більших масштабах підвищує попит на інтелектуальність в освіті широких мас населення будь-якої країни. Це кардинально змінює стан системи освіти в суспільстві, її інституційний статус. Тому поява дистанційної освіти є закономірним якісно новим етапом розвитку та адаптації освіти до сучасних умов.

Ключові слова: дистанційна освіта; дистанційне навчання; інновація; професійна освіта; самовизначення; сучасні комунікаційні технології.