UDC 378.014.5.018.43(485)

AGEICHEVA ANNA, KOMAROVA OLEKSANDRA, BABASH LARYSA

DISTANCE LEARNING REFORMING SWEDISH EXPERIENCE IMPLEMENTATION INTO UKRAINIAN HIGHER EDUCATION SYSTEM

The article deals with the conceptual ideas of distance education in the European Higher Education Area and future prospects definition in distance learning implementation into higher education system of Ukraine. Development system of higher education and distance learning development stages are analyzed. The main goal of creating distance education in Ukraine is to increase the level of education of the society and the quality of education, as well as the formation of a single educational space. It is necessary to address such major challenges as the formation of legal, organizational, teaching, information and telecommunications, logistics, personnel, economic and financial support. The development of distance education will not only provide our population access to quality education, but also provide an opportunity to take a place on the global education market.

Keywords: distance learning, higher education, information and communication technology, reforming trends

А. А. АГЕЙЧЕВА, О. І. КОМАРОВА, Л. В. БАБАШ реформування шведського досвіду дистанційного навчання в украинську систему вищої освіти

Стаття присвячена дослідженню концептуальних ідей дистанційної освіти в Європейському просторі вищої освіти та визначенню подальших перспектив розвитку вітчизняної практики впровадження дистанційного навчання в систему вищої освіти України. Проаналізовано систему розвитку вищої освіти та етапи розвитку дистанційного навчання

Ключові слова : дистанційне навчання, вища освіта, інформаційно-комунікаційні технології, дистанційна освіта

А. А. АГЕЙЧЕВА, О. І. КОМАРОВА, Л. В. БАБАШ реформирование шведского опыта дистанционного обучение в украинскую систему высшего образования

Статья посвящена исследованию концептуальных идей дистанционного образования в Европейском пространстве высшего образования и определению дальнейших перспектив развития отечественной практики внедрения дистанционного обучения в систему высшего образования и украины. Проанализировано систему развития высшего образования и этапы развития дистанционного обучения.

Ключевые слова: дистанционное обучение, высшее образование, информационно-коммуникационные технологии, тенденции реформирования

Introduction.

Every year, distance learning Swedish experience is becoming increasingly relevant to higher education institutions in Ukraine.

Existing practices and methods systematization and analysis of for ensuring distance learning quality provide the necessary background for scientific research.

The difference between the distance education of Ukraine and Sweden is that in Ukraine it is at the development stage. Developing distance learning process in Ukraine is constrained by several reasons:

- Insufficient legal and normative provision of the distance learning process;

- Limited participants amount in the experiment on distance learning system introduction;

- Lack of unified approaches while creating electronic teaching and learning complexes;

- Lack of electronic teaching and learning complexes in foreign languages development;

- Lack of special programs for socially vulnerable groups of people and persons with disabilities distance learning;

- Insufficient financing of the distance learning system of Ukraine at the expense of budget funds;

- Master distance learning process problems.

Problem research. Pedagogical literature analysis enables to trace some general tendency in approaches to the allocation of didactic principles and their classification by different researchers. R. Tostein [1] in Swedish distance education studies emphasizes the importance of continuous innovation. B. Holmberg [2] notes the need to use the most advanced methods in the process of distance learning. The purpose of the paper is to form a pedagogical community positive outlook regarding the feasibility and necessity to introduce remote technology in the higher education system.

Main material. Sweden is far ahead of Ukraine in implementing information communication and technologies. The comparative analysis is based on sources of information collected and analyzed using Swedish standards for monitoring colleges and universities. Swedish researchers and scientists work to improve the distance education system. It is necessary to note the practical contribution of L. Alekson into distance higher education development. Scientific works by C. Nilsson are of great practical importance for countries that take Swedish distance learning experience [3]. According to the Swedish National Agency for Higher Education, the process of integration into the European space is quite successful. An important role is played by the Swedish student's fluency in English.

The Swedish National Agency for Higher Education (Högskoleverket) is the central body dealing with issues dealing higher education institutions. The Swedish National Higher Education Agency (Högskoleverket) is responsible for conducting various quality assurance tests for higher education as well as for monitoring, reviewing and analyzing the entire system. The agency also evaluates the various qualifications awarded abroad, focuses on innovation and development,

© Агейчева А. О., Комарова О. І., Бабаш Л. В., 2018

Вісник Національного Технічного Університету «ХПІ». Серія: Інноваційні дослідження у наукових роботах студентів, 2018. № 18 (1294)

and also serves as an information agency when it comes to educational issues. It is the main center for recruiting students.

The organization is structured as follows: university - chancellor - person responsible for higher education issues. In addition to the chancellor, there are eleven other board members. All these persons are appointed by the government. The government issues instructions to the agency regarding the status of the various tasks that will be investigated and how to organize the joint work of the higher education system.

Each year the government sends a directive to the agency. The directive contains provisions for the general financing of the agency from the Swedish government. In addition, the directive defines a goal in various areas of activity. The Swedish National Agency for Higher Education (Högskoleverket) has six different tasks that are presented as follows:

1. Verification of Higher Education: Audit of Higher Educational Institutions.

2. Higher educational institutions leadership examination and programs monitoring. It is done by checking educational institutions legal issues.

3. Higher education system review and analysis. The purpose of this task is to provide feedback and advice to the government on improving higher education standards.

4. Assessment of qualifications awarded abroad. Higher educational programs abroad are rated in comparison with the Swedish higher education system and are awarded the appropriate degrees.

5. Swedish higher education system continuous updating and development. Swedish government is responsible for that process.

6. Information on student training and promotion programs. Providing information on higher education programs and encouraging distance learning students. It should be emphasized that all studies in Sweden are free [4]. The only thing that students pay for is residence and textbooks. Therefore, distance learning has unquestionable advantages.

Conducting distance learning comparative analysis in Sweden and Ukraine, the importance of Scandinavian experience for the domestic education system should be highlighted. Online learning, curriculum and courses have the same structure of overseeing management and organization as the programs and courses offered in the traditional lecture format. However, due to the welldeveloped technological infrastructure in Sweden, programs and courses using the Internet are developing much faster than in Ukraine. The technical infrastructure in Sweden is so well developed that the Economist Intelligence Unit marks Sweden as the first of the twenty countries to be the most ready to introduce online teaching and learning. The report of the Swedish government promulgated by the Swedish National Agency for Higher Education focused on answering the question "What is the quality of online learning?" There are many details outlined and discussed in the report. The report states that there is no clearly defined online

teaching model for teaching in Sweden. Academic programs are distinguished between institutions and academic disciplines.

Distance learning in Ukraine and Sweden comparison will not be completed without a picture of the prospects of the Swedish education system. Sweden aims to develop distance learning to improve the student's qualification. Significant efforts are being made on the development of technical infrastructure, as well as efforts to organize administrative departments, and a policy of quality improvement is being implemented, which confirms the need for the development of a distant educational area. In general, Ukraine and Sweden are very similar, despite the differences in history, governance, administration and the ability to implement innovative distance learning courses and programs. At the same time, in both countries, representatives of higher educational institutions are associated with a common educational goal.

Solving the new tasks set by the processes of state formation in the system of education of Ukraine, radical changes in the socio-political life, requires the development of an adequate organizational structure of the education system, which would ensure the transition to the principle of "education throughout life." A solution to this problem can be found through the well-known worldwide distance learning system.

In the course of the study, elements of the positive experience of organizing distance learning in the system of higher education in Sweden have been identified, the implementation of which will contribute to the effective development of distance learning in Ukrainian higher education:

- Development and implementation of the state strategy for the development of distance learning;

- Provision of targeted state financial support to universities that provide educational services through distance education;

- Simplification of certification of educational services related to distance learning;

- Creation of a wide network of access points for distance courses;

- Regulation of distance learning and systematic monitoring of its quality;

- Integration of the library network into the educational space, which contributes to the effective functioning of distance learning centers;

- Creation of a unified network of educational and methodological documentation that facilitates the mobility of university studies.

Taking into account the relevance of the research, the perspective directions of the introduction of the positive experience of Sweden's distance learning in Ukraine's higher educational institutions are: the formation of a positive outlook of the pedagogical community regarding the feasibility, necessity and possibility of introducing remote technologies in the higher education system; training of pedagogical staff for distance learning; creation of centers of distance education in higher educational establishments;

Вісник Національного Технічного Університету «ХПІ». Серія: Інноваційні дослідження у наукових роботах студентів, 2018. № 18 (1294) development of teaching-methodical complexes of distance learning; creation of a local telecommunication network with access to the Internet; formation of experimental training groups for the adaptation of Swedish standards for distance learning.

E-learning in Ukraine is implemented through the system of distance learning, which is part of the education system of Ukraine, with the regulatory legal structure of the organization, staffing, system engineering, technical and financial support.

The positive tendency of modern educational processes is their orientation to the integration of cultures, the introduction and use of modern educational technologies, the expansion of opportunities for personal development of a person, which led to the development of distance learning. Today, distance education is a widespread phenomenon in many countries around the world, and every year its popularity is increasing. There is no single definition for distance learning. Rather, there are many approaches to understanding this term. It should also be noted that along with the term "distance education" there are concepts such as distance learning, home education, self-study, open learning, independent study, external studies, distance learning, etc.

All of them belong to one problem area, but they have different shades of values. In the 80 years of the twentieth century. The term "distance education" has spread, the main characteristic of which is the separation of a teacher from a student, and this is precisely the difference between distance education and traditional education. Distance education contains 2 subsystems: distance learning and distance learning. This type of training allows you to get education for all categories of the population. Distance learning provides an opportunity to apply the acquired knowledge immediately in practice.

With the help of distance learning, it is possible to strike a balance between the public demand for education and its offer.

All educational institutions that use information and communication technologies are in fact out of the legal field. It should be noted that today for the development of the system of distance education practically there is no regulatory and legal basis.

In universities and other organizations, electronic textbooks and libraries of them, information and educational environments are gradually being created, but there are no legal bases for using these materials placed on the network. For the effective work of educational institutions using remote learning technologies, coordination of their activities is necessary, as well as the creation of a relevant regulatory framework and the provision of distance learning for official status.

The regulatory framework of distance education should be formed in the form of a package of national acts on the organization of legal regulation of relations between objects and subjects in the field of distance education, taking into account the uniform requirements defined by the Ministry of Education and Science. The basis should be the following principles: account of constitutional norms, openness and availability of information, protection of intellectual property rights, information security, harmonization of norms with acts of other branches of legislation, as well as with international law. If the distance education system has a regulatory framework, it will become one of the official forms of education. The lack of a legal framework for distance learning not only holds back the economic development of the country, but also forces Ukrainians to apply for the relevant services to educational institutions in Sweden and other countries [5–9].

However, it should be acknowledged that already in Ukraine there is a well-grounded and well-reasoned regulatory framework that contributes to the intensive development of remote educational technologies. To create a legal and regulatory framework for distance learning, it is necessary to:

- To organize the legal service of distance education with the corresponding legal support;

- To determine the rights, duties of students and the rules of work of the teaching staff;

- To develop requirements for the organization of units of the national structure of distance education and regulatory documents on licensing, certification and accreditation;

- To create an informational and educational environment and distance learning tools for different levels;

- To determine the requirements for the operation of telecommunication networks of distance education;

- To ensure the recognition of documents of distance education;

- To develop the requirements and conditions for international activities in the field of distance education.

The introduction of electronic, informational or distance educational technologies should not mean the elimination of classical educational technologies. The strategic goal of distance education is the free access to the possibility of obtaining education of any level at the place of residence or professional activity. The achievement of this goal is achieved through the dissemination of knowledge through information technology. The analysis of the experience of developing distance learning models in Sweden allows us to identify their characteristic features related to national traditions, educational policy and to conclude that it is impossible to directly copy these models to Ukraine. The great and incomprehensible experience of domestic pedagogy makes it possible to build distance learning, taking into account the Swedish progressive experience. In general, the development of distance learning in Ukraine contains all the achievements and principles of both modern and foreign pedagogy.

The state of development of distance education in Ukraine does not fully meet the requirements of the information society, as Ukraine lags behind Sweden in introducing distance learning information technology. In addition, there is a significant backlog of telecommunication data networks characterized by lack of bandwidth, reliability of communication and its low quality. Implementation of distance learning technologies in institutions with scientific and methodological, personnel and production potential, information resources and technologies, telecommunication infrastructure intensifies the implementation process.

Improvement of the qualitative level of education at the expense of more active use of scientific and educational potential of leading universities, academies, institutes, branch centers of training and retraining of personnel, institutes of advanced training, other educational institutions; the opportunity to receive both basic and additional education in parallel with the main activity. Expansion of the educational environment in Ukraine for the most complete satisfaction of needs and human rights in the field of education; integration and improvement of the education system. Creating continuing conditions for education provides fundamentally new level of educational accessibility while preserving its quality.

Distance learning should contribute to solving such socially important tasks as: raising the level of education of the society and the quality of education; realization of the needs of the population in educational services; satisfaction of the needs of the country in well-trained specialists; increase of social and professional mobility of the population, its entrepreneurial and social activity, level of self-awareness, expansion of the horizons; Preservation and increase of knowledge, personnel and material potential accumulated by the Ukrainian high school; the development of a single educational space within the framework of the international community, which implies the possibility of obtaining education at any point in the educational space; solution of geopolitical tasks.

The benefits of distance education are becoming evident, and the development of distance learning is of particular relevance to the educational system of Ukraine under the influence of the following processes:

- Continuation of economic reforms that put forward new requirements for education;

- Formation of new needs of the population in the new content and technologies of education;

- Political changes that contribute to the growth of international relations, including in the field of education;

- The emergence and rapid development of qualitatively new technical means of information exchange between participants in the educational process;

- Growth of international integration in education with increasing competition in world markets for educational services;

- Adequate and flexible response to the needs of society;

- Implementation of the constitutional right to education of every citizen of the country.

- Satisfaction of the population demand for educational services of the higher school on disciplines unsafe by traditional systems of studying;

- New types of educational institutions based on distance education.

The technologies used today by distance education can be divided into three broad categories:

- Non-interactive (printed materials, audio, video);

- Means of computer training (electronic textbooks, computer testing and knowledge control, advanced multimedia);

- Videoconferences - developed telecommunication facilities through audio channels, video channels and computer networks.

Means of operative access to information from computer networks have added qualitatively new possibilities of distance learning. In Ukrainian high school, they are actively developing in the form of the use of electronic textbooks and technology for the exchange of text information using asynchronous e-mail.

Developed telecommunication facilities, the use of satellite communication channels, the transfer of video images from computer networks only recently began to be applied in the practice of distance education. This is due to the lack of developed communications infrastructure, the high cost of communication channels used. E-mail economically and technologically is the most effective technology that can be used in the learning process to deliver a substantial part of the training courses and provide feedback from the student with the teacher. At the same time, it has a limited pedagogical effect because of the impossibility of implementing a "dialogue" between the teacher and the students. However, if students have permanent access to a personal computer with a modem and a telephone channel, e-mail allows for a flexible and intensive consultation process.

Operational access to information resources allows you to get interactive access to remote databases, information reference systems, and libraries when studying a specific discipline. This access mode ON-LINE allows for a few seconds to transfer the necessary training material, computer programs using computer systems from major scientific and educational centers, and from local nodes Internet. As the first factor (integrated characteristics) of the university distance learning, the type of information technology used in the educational process is considered. An important integral factor of the typology of remote universities is a set of pedagogical methods and techniques.

Conclusions. It is important to note first of these requirements - the requirement to ensure high standards and quality of distance education through the use of advanced scientific and reasonable psycho-pedagogical and other technologies. The implementation of, in particular, promising psycho-pedagogical teaching technologies is impossible without the implementation of effective management of educational activities.

The main goal of creating distance education in Ukraine is to increase the level of education of the society and the quality of education, as well as the formation of a single educational space. It is necessary to address such major challenges as the formation of legal, organizational, teaching, information and telecommunications, logistics, personnel, economic and financial support.

Вісник Національного Технічного Університету «ХПІ». Серія: Інноваційні дослідження у наукових роботах студентів, 2018. № 18 (1294)

The development of distance education will not only provide our population access to quality education, but also provide an opportunity to take a place on the global education market. In the field of software, which is a prerequisite for distance learning, there is a gradual shift from information orientation to interactive. In multimedia educational programs the user is given an increasingly active role, implying free choice of action and obtaining individual results. The development of interactive curricula will complement the tools and capabilities of distance learning technologies, will increase the creative component of modern education. Distant forms of learning solve a significant number of problems associated with psychological student communication and allow them to be more open to

Список литературы:

- 1. Willén, B. *Distance Education at Swedish universities* / B.Willén. Uppsala : Uppsala University 2014.
- Rovai, A. P. Why some distance education programs fail while others succeed in a global environment / A. P. Rovai, J. R. Downey // Internet and Higher Education. 2010. №. 13. P. 141–147.
- 3. Roberts, C. Implementing Educational Technology in Higher Education : a Strategic Approach / C. Roberts // *The* Journal of Educators Online. 2008. № 5 (1). P. 1–16.
- HSV Frihetens pris ett gränslöst arbete. En tematisk studie av de akademiska lärarnas och institutionsledarnas arbetssituation. Högskoleverkets rapportserie, 2008. 22 p.
- arbetsstuation. Hogskoleverkets rapportsene, 2008. 22 p.
 5. Brattlund, Åsa What Role of God and National Curriculum in School life? A Comparative Study of Schools with a Muslim Profile in England and Sweden / Åsa Brattlund; IIE. – Stockholm University, 2009.
 6. Агейчева А.О., Комарова О.І., Бухкало С.І. Деякі проблеми науково-технічного перекладу для
- Агейчева А.О., Комарова О.І., Бухкало С.І. Деякі проблеми науково-технічного перекладу для інноваційних проектів студентів. XXV Межд. н-практ. конф. «Информационные технологии: наука, техника, технология, образование, здоровье» (МістоСАD-2017) 17-19 мая 2017. Х.: НТУ «ХПІ». Ч. ІІІ, с. 16.
- Агейчева А.О., Бухкало С.І. Деякі особливості розвитку дистанційної освіти Швеції. Вісник НТУ «ХПІ». – Х.: НТУ «ХПІ», 2013. Вип. 55. С. 162–168.
- A. Ageicheva, O. Komarova, S. Bukhkalo. Distance learning main trends. XXVI Межд. н-практ. конф. «Информационные технологии: наука, техника, технология, образование, здоровье» (MicroCAD-2017) 16-18 мая 2018. Х.: НТУ «ХПІ». Ч. II, с. 205.
- S. Bukhkalo, O. Aheicheva, I. Rozhenko. Distance learning investigation some aspects. XXVI Межд. н-практ. конф. «Информационные технологии: наука, техника, технология, образование, здоровье» (МістоСАD-2017) 16–18 мая 2018. Х.: НТУ «ХПІ». Ч. ІІ, с. 206.

learning. The organizational structure of distance education in Ukraine should unite all components of distance learning and be based on the following major components: organizational, managerial, legal, teaching, information and telecommunications, economic and financial. Distance learning has a number of advantages over traditional forms of knowledge acquisition. It is - to use advanced educational technology, comprehensive software methodological support, individual character studies, involving educational process eminent scientists who do not have the possibility to lecture classes, flexible Counseling, broad availability to all segments of the population, the lower the cost of education compared to similar traditional study programs.

Bibliography (transliterated):

- Willén, B. Distance Education at Swedish universities / B.Willén. Uppsala : Uppsala University 2014.
- Rovai, A. P. Why some distance education programs fail while others succeed in a global environment / A. P. Rovai, J. R. Downey // Internet and Higher Education. 2010, no. 13. P. 141–147.
- Roberts, C. Implementing Educational Technology in Higher Education : a Strategic Approach / C. Roberts // The Journal of Educators Online. 2008. no. 5 (1). P. 1–16.
- HSV Frihetens pris ett gränslöst arbete. En tematisk studie av de akademiska lärarnas och institutionsledarnas arbetssituation. Högskoleverkets rapportserie, 2008. 22 p
- Brattlund, Åsa What Role of God and National Curriculum in School life? A Comparative Study of Schools with a Muslim Profile in England and Sweden / Åsa Brattlund ; IIE. Stockholm University, 2009.
- Agejcheva A.O., Komarova O.I., Buhkalo S.I. Dejaki problemi naukovo-tehnichnogo perekladu dlja innovacijnih proektiv studentiv. XXV Mezhd. n-prakt. konf. *«Informacionnye tehnologii: nauka, tehnika, tehnologija, obrazovanie, zdorov'e»* (MicroCAD-2017) 17–19 maja 2017. Kharkov: NTU «KhPI». Ch. III, p. 16.
- Agejcheva A.O., Buhkalo S.I. Dejaki osoblivosti rozvitku distancijnoï osviti Shveciï. Visnyk NTU "KhPI" [Bulletin of the National Technical University "KhPI"]. Kharkov, NTU "KhPI" Publ., 2013, vip. 55. P. 162 – 168.
 Agejcheva A.O., Komarova O.I., Buhkalo S.I. Distance
- Agejcheva A.O., Komarova O.I., Buhkalo S.I. Distance learning main trends. XXVI Mezhd. n-prakt. konf. *«Informacionnye tehnologii: nauka, tehnika, tehnologija, obrazovanie, zdorov'e»* (MicroCAD-2017) 16–18 maja 2018. Kharkov : NTU «KhPI». Ch. II, p. 205.
- S. Bukhkalo, O. Aheicheva, I. Rozhenko. Distance learning investigation some aspects. XXVI Mezhd. n-prakt. konf. *«Informacionnye tehnologii: nauka, tehnika, tehnologija, obrazovanie, zdorov'e»* (MicroCAD-2017) 16–18 maja 2018. Kharkov: NTU «KhPI». Ch. II, p. 206.

Поступила (received) 25.05.18

Відомості про авторів / Сведения об авторах / About the Authors

Агейчева Анна Олександрівна (Агейчева Анна Александровна, Ageicheva Anna), PhD, кандидат педагогічних наук, доцент кафедри іноземної філології та перекладу, заступник декана гуманітарного факультету з наукової та міжнародної діяльності Полтавського національного технічного університету імені Юрія Кондратюка, м. Полтава, Україна; ORCID: https://orcid.org/0000-0002-1389-, ageycheva@i.ua

Комарова Олександра Іванівна (Комарова Александра Ивановна, Коmarova Oleksandra) – викладач кафедри іноземної філології та перекладу Полтавського національного технічного університету імені Юрія Кондратюка, м. Полтава, Україна; ORCID: <u>https://orcid.org/0000-0002-1389-</u>, <u>ageycheva@i.ua</u>

Бабаш Лариса Володимірівна (Бабаш Лариса Владимировна, Babash Larysa) – викладач кафедри іноземної філології та перекладу Полтавського національного технічного університету імені Юрія Кондратюка, м. Полтава, Україна; ORCID: <u>https://orcid.org/0000-0002-1389-</u>, <u>agevcheva@i.ua</u>