

**Вишковская В. Б., Кушнирук С. А. К проблеме формирования профессиональной компетентности учителя Новой украинской школы**

*В статье исследуется проблема формирования профессиональной компетентности будущих учителей, готовых работать в условиях быстрых информационно-технологических изменений, путем проектирования студентами индивидуальных образовательных траекторий; выясняется сущность категорий "готовность", "профессиональная компетентность", "индивидуальная образовательная траектория", анализируются основные элементы образовательной парадигмы (ценности, мотивы, нормы, цели, позиции участников учебного процесса, формы и методы, средства, контроль и оценка), которые должны быть учтены при ее построении. Актуализируются ведущие тенденции развития профессиональной подготовки будущих учителей на этапе развития Новой украинской школы. Отмечается перспективность обоснованной И. Зязюном логики становления учителя-профессионала и исключительная значимость мысли о том, что смыслом педагогической профессии является ориентация на человека как высшую общественную ценность.*

**Ключевые слова:** профессиональная готовность, компетентность, профессиональная деятельность, индивидуальная образовательная траектория, Новая украинская школа, самоподготовка, самореализация.

Vyshkivska V. A., Kushniruk S. A. The problem of forming the professional competence of the teacher of the New Ukrainian School

The article is researched the problem of forming the professional competence of future teachers, who are ready to work in the conditions of rapid information and technological changes, by designing students individual educational trajectories; the essence of the categories "readiness", "professional competence", "individual educational trajectory" is analyzed, the main elements of the educational paradigm are analyzed (values, motives, norms, goals, positions of participants in the educational process, forms and methods, tools, monitoring and evaluation) The leading trends in the development of professional training for future teachers are being updated at the stage of development of the New Ukrainian School. The perspective of the reasoned logic of I. Zazun of the formation of a professional teacher and the exceptional importance of the idea, that the meaning of the pedagogical profession is the orientation toward man as the highest social value is noted.

Key words: professional readiness, competence, professional activity, individual educational trajectory, New Ukrainian school, self-training, self-realization.

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## STAGES OF DISTANCE EDUCATION

Distance education has always offered much more opportunities for learning than formal educational systems. In modern higher institutions, the students in obtaining professional knowledge and skills tend to use a wide range of modern technological devices, which provide possibilities for studying interactively and independently. The task of distance education is to organize the effective studying process with the minimal teacher's interference.

The paper is devoted to the outlining of distance education main integrated stages. A brief overview of the distance education is given as a structured set of informational resources, organizational and methodological techniques, special computer programs, and as an independent didactic system including a number of important components. The main types of the distance education process in a knowledge-intensive educational environment of the traditional organization of the educational process were analyzed according to their potential for practical implementation of distance education system.

Key words: distance education, distance learning system, higher education, integrated stages, knowledge-intensive educational environment, types of distance education.

Distance education is an important component of the modern education system and has been playing a vital role in teaching modern university students. A successful implementation in a system of continuing higher education it possible either as a blend of traditional teaching with modern information technologies and specially tailored distance courses or their elements or as an independent set of courses aimed at teaching correspondence students with minimal teacher's mediation. Distance learning effectiveness is highly dependent on the balanced of traditional university training and optimal use of computer resources for distance learning.

The successful implementation of the distance education is possible on conditions of the development of training techniques and components of the educational process, the provision of a unified structure of educational and methodological conditions, and the support of the participants' internal and external communication in the distance education system.

In the context of our research distance learning stages were discussed in a range of publications. The problem of logical implementation of distance learning techniques in modern universities described in the works of R. Delling, D. Keegan, M. Simmons, A. Clark, M. Tompson, E. Polat and others.

The problems of successful realization of distance education were also studied by the Ukrainian scientists in the following aspects: conceptual pedagogical provisions on distance learning (O. Andreev, V. Kukharenko, V. Lugovoi, S. Sysoeva, B. Shunevich, etc.); methodological foundations of electronic pedagogical and didactic principles of

creating an electronic textbook (V. Adruschenko, V. Antonov, etc.); distance learning principles and organization (O. Minzov, O. Okolepov, E. Skybitsky, D. Khutorsky, etc.), pedagogical approaches to the information technology application in the educational process (B. Gershunsky, Y. Mashbits, I. Podlasy, etc.); didactic principles of distance learning communication (O. Rybalko, O. Sobaeva, etc.) and others.

However, in spite of a number of recent scientific studies, the problem of precise definition of distance education stages and types of professional training in modern universities has not been studied sufficiently. As the researchers point out, the distance education system needs to reconsider traditional forms of teaching concerning new approaches to the training of future professionals ready to work in digital society being able to focus on the main and important information; use high-level information technologies in knowledge-intensive scientific environment [7, p. 63].

Objectives – the purpose of this paper is to identify the essential stages of distance education in a knowledge-intensive scientific educational environment and suggest the modes of professional training realization through the basic organizational forms of pedagogical activities.

The basic pedagogical condition of a successful teaching in a knowledge-intensive educational environment is the development of an educational system, where the distance education is also viewed as a structured set of informational resources, media for data transmission, interconnection between organizational and methodological techniques and hardware-software programs, and as an independent didactic system including such component as setting goals and objectives, developing content, forms, methods and means of teaching, regarding regulatory, legal, financial, economic and marketing bases.

The pedagogical model of a distance education system in a knowledge-intensive educational environment includes a range of integrated but relative independent stages [3, p. 11; 8, p. 52]:

- the pedagogical distance education model designing, this means identification of the social and pedagogical factors of student training in a knowledge-intensive educational environment through the distance education system;
- the pedagogical characteristics development of distance education examination;
- the defining of criteria apparatus for evaluating the educational system effectiveness;
- the stage of the distance education functioning, which consists of refinement and result correction phases.

The successful implementation of the last stage is possible on conditions of the information technology support and technologies provision for the educational process, the development of training forms and directions, the components of educational process, the provision of a unified structure of educational and methodological conditions, and the support of the participants' internal and external communication in the distance education system;

On the stage of introduction of the distance learning technologies into the students' learning environment, the employment of modern reliable communication systems for the participants' interaction in distance education should take place in the educational process which is vital for the students' competences development.

The next important step is the development of the educational content system through the design of educational and methodological courses for the distance learning system in accordance with the students training structure, the creation of workshops, the equipping the electronic library with bibliographic catalogs, the reliable communication systems for business and scientific contacts; providing innovative research activities, the definition of the roles of participants in the distance education system, considering the distribution of students in universities, faculties, courses, and groups.

The stage of the distance learning results evaluation and particularly the assessment of the distance education system functionality is important for the professional competences development monitoring in the knowledge-intensive educational environment, leading to the clarification and correction of the results of distance education functionality.

Until now, it was believed that communicative goals and objectives can be achieved only within the framework of the constant and compulsory interaction of the participants in the educational process, provided that the interactive forms of instruction are used full-time. The widespread implementation of the Internet, as well as information and communication technologies raised the issue of distance student training. Consequently, a pedagogical model of distance learning of technical university students in a knowledge-intensive educational environment based on a distance-communication learning environment was developed [4, p. 189]. It includes a range of subsystems: administrative, educational, cognitive, evaluation and self-evaluation, communicational, project and business activities, electronic library.

Traditional training sessions are usually conducted in the form of lectures, consultations, workshops, practical lessons, various tests and independent works, colloquiums, etc. The technologies for conducting training sessions are determined by many factors. From the point of view of the management of the educational process, the choice of technologies is determined by the university teacher. Nevertheless, a set of didactic means chosen to achieve the educational goal largely depends on the type of training.

The distance educational process in a knowledge-intensive educational environment includes all the main types of the traditional organization of the educational process: lectures, workshops, and practical lessons, independent practical work, testing and a system of assessment, students' research and independent work. All these types of the educational process organization make it possible to implement practically a flexible combination of the students' independent cognitive activities with various sources of information, and whenever necessary prompt and systematic interaction with the leading course teacher and communication with other students.

Considering the basic organizational forms of pedagogical activities, used for the realization of joint educational distance learning programs, the first type we should mention is a lecture. Throughout the history of higher education, the leading organizational format of education is a lecture. It is the first type of lesson, which makes the student acquainted with the academic discipline and lays the foundation of scientific knowledge. By their structure lectures can be different depending on the educational material content. But there is a common structural feature: a lecture has a plan that must be strictly followed. The lecture, as a rule, begins with a brief reminder of the previous lecture contents, in order to link it with new material. At the end of the lecture, there is a summary of all conducted activities.

The main purpose of the lecture is to provide a theoretical basis for professional training, to motivate for learning and create a specific academic atmosphere, to guide students in their independent work on the course. The lecture is efficient only when the teacher takes into account the students' psychological conditions, perceptive abilities, motivation, emotional state, and many other factors. The detailed organization providing lectures in real time mode are conducted according to many educational standards. The process of teaching a lecture is defined as a logically completed, scientifically substantiated presentation of a specific scientific or scientific-methodological issue using visual aids and demonstrating experiments.

In the distance learning, it could be realized in synchronous or asynchronous mode, where the first one is usually combined with online communication (forum, emailing, and chat) and provided either as an online video lecture, traditional lecture with the use of distance technologies or offline video recording. For evaluation, a set of practical tasks, tests, and questionnaires is developed. Asynchronous teaching is conducted as a distance course with the developed system of special home tasks and tests. Material provided for conducting a lecture gradually changed from printed materials to text electronic files, later electronic teaching aids, audio and video materials, multimedia and distance lectures with the application of cloud technologies.

Practical lessons are designed for deeper theoretical material comprehension, developing an ability to expressing own ideas, and professional skills acquisition. In the distance learning, it could be organized in the online mode as a distance course with specially developed means including online teaching materials, video conferences, e-library, and professional glossaries. In off line mode, it is organized as a set of virtual practical tasks, specially developed interactive applications, social networks recourses used for professional competences training.

Practical work makes it possible to combine the theoretical knowledge and practical skills. This type of educational activities in the distance education system assumes the more important role of the teacher in consulting and supporting students learning, as well as increasing the students' independence in working with educational materials. Practical work is specifically vital for various professional training and academic disciplines, therefore special recommendations must be developed for specific professional training activities for different specialties. The practical works integrate presentation with software implementation tools. It could be conducted in online mode (chat, social network, distance video lessons) or offline (email, forums etc.)

One of the most widespread forms of practical work is a workshop, which is appropriate for practical research activities and study of the professional and scientific material. The main purpose of the workshops is to discuss the most complex theoretical issues and support them with practical examples and experiment. The effectiveness of network workshops is determined by the conditions and technologies of their realization, which are more complicated than traditional classroom workshops. The main stage of the distance learning workshop includes direct online communication between the students and the teacher. The online workshops also could be conducted in online and offline mode.

Distance teaching process involves an increasing amount of the students' independent work, which brings to the necessity of continuous support from the teachers. In the distance learning system, online consultations conducted by the course instructor in real by videoconferences, audio communication, chats and offline consultations conducted by email, forums or individual messages or can be organized.

The basis of the educational process in the distance education is the students' controlled independent activities during the distance course training. A process monitoring presupposes the acquired knowledge and skills assessment, which is important for the successful implementation of the vocational training. The issues of the ensuring of the training quality through the distance educational technologies are relevant at the present stage of the higher education system development. It developed from the question-answer tests to special testing systems and interactive tests as a part of a special evaluation system.

Students' ability to work independently is carried out without the direct teacher's participation, just following the provided instructions. The students try to achieve the set goal independently through the conscious mental or physical efforts [5, p. 58]. Correctly organized learning process requires active students' participation. A high degree of activity is achieved in the organized independent students' work. Modern information technologies make it possible to use not only printed materials but also electronic publications, Internet resources, databases, catalogs, and e-libraries as a basis for independent work.

The organization of students' participation in the scientific works, related to the scientific research conducted by the universities, is vital for enhancing scientific knowledge and testing new hypotheses, developing scientific generalizations and substantiation in a knowledge-intensive educational environment. The distance education system assumes the use of various pedagogical technologies, which permit the realization of creative project activities as the basis for the students' scientific work.

Project work is an important element of the distance education in a knowledge-intensive educational environment. Project work allows future professionals to work in a group, the size of which depends on the project complexity and the time for its implementation. Creative projects assume the highest level of the students' independence.

The organization of the students' scientific work is characterized by the well-defined structure and objectives, the implementation of scientific methods in the process of the research conducting and results in the recording. The subject of the scientific work should reflect the most relevant problems of modern science significant for the development of students' research skills.

Conclusions. Thus, during the period of its development distance education technologies has gone through several stages. The content and means of each of them as a whole are successfully realized in a variety of learning activities. The educational process at an advanced knowledge-intensive educational environment includes the main activities of the traditional educational process: lectures, workshops, and practical lessons, practical exercises, evaluation system, independent project work, participation in the scientific research. All these organizational types of the educational process make it possible to implement practically a flexible involvement in the professional training of various pedagogical techniques and sources of information, systematic interaction with the course teacher, students' mutual work. The next stages of distance education system development are the organization of student-teacher communication, the process of students' work assessment, evaluation of the professional training results. All these stages are interrelated and implemented as the vital elements of the distance learning.

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#### **Гавриленко К. М. Етапи дистанційної освіти**

*Дистанційне навчання завжди пропонує набагато більше можливостей для сучасної освіти, ніж традиційна освіта. У сучасних вищих навчальних закладах студенти зі здобуттям професійних знань і навичок прагнуть використовувати широкий спектр новітніх технологічних пристроїв, які надають можливості для інтерактивного і незалежного навчання. Завдання дистанційної освіти – організувати ефективний процес навчання з мінімальним втручанням викладача.*

*Стаття присвячена окресленню основних інтегрованих етапів дистанційного навчання. Подано короткий огляд дистанційної освіти як структурованого набору інформаційних ресурсів, організаційних і методологічних прийомів, спеціальних комп'ютерних програм і як самостійної дидактичної системи, що містить низку важливих компонентів. Проаналізовані основні форми дистанційного навчання, що засосовуються в умовах наукоміського освітнього середовища, відповідно до їхніх потенційних можливостей для практичного використання в системі дистанційної освіти.*

**Ключові слова:** дистанційна освіта, система дистанційного навчання, вища освіта, комплексні етапи, наукомістке освітнє середовище, види дистанційного навчання.

#### **Гавриленко Е. Н. Этапы дистанционного образования**

*Дистанционное обучение всегда предлагало гораздо больше возможностей для образования, чем традиционные образовательные системы. В современных высших учебных заведениях студенты с получением профессиональных знаний и навыков стремятся использовать широкий спектр современных технологических устройств, которые предоставляют возможности для интерактивного и независимого обучения. Задача дистанционного образования – организовать эффективный процесс обучения с минимальным вмешательством преподавателя.*

*Статья посвящена описанию основных интегрированных этапов дистанционного обучения. Дан краткий обзор дистанционного образования как структурированного набора информационных ресурсов, организационных и методологических приемов, специальных компьютерных программ и как самостоятельной дидактической системы, включающей ряд важных компонентов. Проанализированы основные формы дистанционного обучения, используемые в условиях наукоемкой образовательной среды, в соответствии с их потенциалом для практического применения в системе дистанционного образования.*

**Ключевые слова:** дистанционное образование, система дистанционного обучения, высшее образование, комплексные этапы, наукоемкая образовательная среда, виды дистанционного обучения.