

**Liakh Tetiana**

Ph.D., Associate Professor of Social Education and Social Work  
Institute of Human Science Borys Grinchenko Kyiv University, Kyiv, Ukraine  
*t.liakh@kubg.edu.ua*  
ORCID: 0000-0002-8807-0497

**Spirina Tetiana**

Ph.D., Associate Professor of Social Education and Social Work  
Institute of Human Science Borys Grinchenko Kyiv University, Kyiv, Ukraine  
*t.spirina@kubg.edu.ua*  
ORCID: 0000-0003-0287-7343

**Popova Alona**

graduate student  
Department of Social Education and Social Work  
Institute of Human Science Borys Grinchenko Kyiv University, Kyiv, Ukraine  
*a.popova@kubg.edu.ua*  
ORCID: 0000-0002-3814-0354

**INFORMATION AND COMMUNICATION TECHNOLOGIES IN THE  
TRAINING OF FUTURE SPECIALISTS OF SOCIAL SPHERE**

**Abstract:** Joining of Ukrainian educators to the European educational space requires from the higher educational establishments of Ukraine rapid achievement of a qualitatively new level of teaching disciplines for the professional and humanitarian direction. As well as ensuring the intellectual, material, psychological and moral readiness of future specialists to work in a fast-moving world in which a modern specialist faces the need to process large arrays of information and constantly update their knowledge, skills, abilities. The authors analyze the peculiarities of students' preparation for work with information and communication technologies in the USA. Significant increase for material that today is required to process a modern student and the reduction of the time allocated for his assimilation increases the importance of independent forms of learning. Under such conditions, for today's professional training the use of the latest information technologies in the educational process becomes of special significance. The problem of introducing into the Ukrainian educational information technology space has a wide range of aspects: the use of the Internet for professional counseling for youth, the use of information technology in vocational schools, the development of distance courses, the formation of information culture, etc. The article analyzes the problem of the readiness of students of different specialties to use information and communication technologies in the educational process of a higher educational institution. Particular attention paid to modern processes of globalization and informatization of higher education as the priority trends of the development of modern Ukrainian society. Informatization of the educational process is one of the main priorities in the development of higher education, a qualitatively new stage for the whole system of higher education, a promising direction for increasing the efficiency of the process of studying at a higher educational institution.

**Keywords:** informatization, information and communication pedagogical environment, information and communication technologies, higher education, social sphere, educational process in higher educational institution.

**Relevance and expediency of research.** The globalization of world economic and business processes is also an impetus for the globalization of higher education. Among the world's higher education institutions, the struggle for influence on the educational markets of other countries is under way. The globalization of education has become possible thanks to the development of innovative educational technologies, and therefore information technologies become the main strategic resource of a higher educational institution. An educational institution that can create the best conditions and resources for learning by means of information technologies goes to a qualitatively new level of the modern world university.

Thus, the requirements for education in Ukraine should focus on balance, on the one hand, – the ability of an educational institution to have the appropriate strategic resources, on the other, – the readiness of students to use them. The rapid pace of information technologies development for industry characterizes the system of interaction strategic resources of a higher educational institution and the students' readiness to use these resources as a dynamic system. The development of information technologies and the globalization of education create a new educational competitive environment, the feature of which is information and communication technologies and student mobility. In order to ensure high competitiveness in the market of educational services, educational institutions must have innovative learning technologies better than their competitors.

**Analysis of recent publications.** Informatization in practically all spheres of human activity is a global trend of world development. The problem of comprehensive provision of information technology in the educational process in the university has always been and is at the center of attention of research-educators. At the same time, the analysis of scientific publications over the past two decades leads to the conclusion that the only scientific approaches adopted by all scholars to the disclosure of the essence this phenomenon.

Didactic problems and perspectives using of information technologies in the study were researched by V. Bykov, R. Gurevich, T. Ilyin, V. Krasnopol'sky, I. Robert, T. Sergeev, V. Sholokhovich.

Issues of the using the information and communication technologies in the system of vocational training of future teachers are covered in the scientific works of R. Gurin, N. Zavienne, O. Zanchenko, L. Morskoy, P. Serdyukov, S. Yashanov. The work of I. Bogdanova, I. Gavrish, I. Dichkiv'ska, T. Demidenko is devoted to the analysis of innovative processes in modern education and the preparation of future teachers for the use of innovative pedagogical technologies. The organizations of employments using information and communication technologies paid attention to such scientists as: R. Gurevich, V. Kukharenko, P. Stefanenko, T. Poyasok. The use of ICT to increase the efficiency of independent work of students is devoted to the study of A. Bayrakov'sky and N. Boyko. In particular, the problem of the introduction of information and communication technologies into the educational process was investigated in the works of M. Zhaldak, Y. Zhuk, V. Klochka, A. Kuznetsova, V. Monakhova, T. Oliynyk, Y. Ramsky, V. Shavalova. Definition of the functions of information technologies in the educational process was considered by G. Ball, T. Gergy, V. Monakhov, I. Podlasy. M. Dyachenko, Z. Yesariyev, L. Kandybovich, O. Moroz, L. Romanyshyn, V. Yakunin highlighted the problem of vocational training and organization of studies in higher educational institutions.

**Formulating the goals of the article.** The purpose of the article is to study and analyze the problem of the readiness of students of different fields and specialties to use information technologies in the educational process, as well as to identify effective ways of creating an informational and communication pedagogical environment in a higher education institution.

**Presentation of the main research material.** In the psychological and pedagogical literature of the last decade, devoted to the informatization of education, there is also the term "informational and educational environment", which marks the new essence of the integration of educational and informational environments.

The introduction of information technology in various fields of modern education system is becoming more and more comprehensive and complex. It is important to understand that informatization of education ensures achievement of two strategic goals. The first of these is to increase the efficiency of all types of educational activities using information and telecommunication technologies. The second - in improving the quality of training specialists with a new type of thinking, the relevant requirements of the Information Society (Morse N.V., Protsenko G. A., 2013).

In the process of informatization under the information, technologies understand in the broad sense of the word the branch of didactics, engaged in studying the educational process with the use of information and communication tools. In the narrow sense - a set of methods and software, integrated to collect, organize, store, process, transmit and submit educational information. Informatization of education, providing integration tendencies of knowledge of the laws of development of subject areas, actualizes the development of modern theories of learning, based on the effective use of the potential of computer technology (Sevage D., 2006, pp. 6-10).

The notion of informatization of education is much broader concept of computer learning. In addition to the latter, the means of informatization of education include various computer information and information management organizational activities of educational institutions, means of methodological and control and measuring purposes, the means of information support outside the educational and research activities, tools.

Historically, informatization of education carried out in two main directions: managed and unmanaged. Managed informatization of education has the character of an organized process and supported by material resources. It based on well-founded, universally accepted concepts and programs.

A particular problem of informatization of higher education is the training and retraining of scientific and pedagogical workers for the use of new information technologies in the educational process.

The main objectives of the training of teachers in the field of informatization of education are: formation of ideas about the role of computerization of higher education, types of information technologies and methods of their application; familiarization with positive and negative aspects of the use of information and communication technologies in education; studying the experience of applying information technologies in the educational process of higher educational institutions; the development of personal organizational and information culture (Morse N.V., Protsenko G. A., 2013).

Based on the analysis of literature, it argued that timely and correct use of innovative educational means in the educational process. The constant interaction of the student and the teacher in the information and communication pedagogical environment will increase the level of preparedness of students to study, improve the quality of educational services provided by higher educational institutions (Robert I. V., 2004).

Conducting research on this issue determines the use of both theoretical and empirical research methods. Thus, studying the students' readiness to use information technology in the learning process is impossible without analyzing, comparing and synthesizing, an abstract approach to determining the basic laws of the use of information technologies, a logical approach to describing their possible implementation of innovative educational methods.

In our study, we conducted a socio-pedagogical study on the readiness of students to use information technology in the educational process in a higher education institution. The main means of obtaining results are conducting questionnaires and analysis of indicators of readiness among students of specialties "Social pedagogy", "Social work", "Psychology", "Practical psychology" of the Borys Grinchenko Kyiv University to use information technologies in the educational process, a total of 120 people.

The questionnaire for assessing students and students' readiness to learn in the information and communication pedagogical environment. It include quantitative and qualitative indicators. The questionnaire developed by us for assessing the students' and teachers' readiness for students' readiness to study in the information and communication pedagogical environment included 11 questions. The indicators of the questionnaire corresponded to certain indicators:

– quantitative indicators of information and communication use technologies by students in the learning process (Microsoft Office Word, Excel, Outlook, PowerPoint, Access, Google Docs, Google Disk, Facebook);

– qualitative indicators of a sufficient level of students' knowledge of the use of information and communication technologies in the learning process (formatting documents, in particular, creating their own styles, templates, merging documents, importing and exporting data, using smart objects, using the main functions of Excel, loading, storing and editing required files on Google Drive).

Therefore, analyzing the use of information and communication technologies by students in the educational process, we found that only 8% of respondents consider knowledge of this discipline unnecessary in their further professional activities. As to the question, "What factors affect your professional level?" most students positively evaluate the introduction of information technology in the educational process. To the question "Identify the difficulties encountered in your student life," most students answered that they needed help in preparing for classes by group members, teachers. This is due, in the first place to the fact, that this form of knowledge acquisition is new and unusual for most students. Studying with the help of information and communication technologies requires self-discipline and responsible attitude of students.

Qualitative indicators of a sufficient level of students' knowledge of the use of information and communication technologies in the educational process, then on the question "Is there mutual assistance in the group?" Almost all students indicated that they always help each other in the group, and only one respondent noted that the group only helps then when asked for it. In our opinion, this is a very good indicator, since cohesiveness and mutual assistance in the group positively contribute to the process of adaptation of students.

To the question, "What do you think prevents you from learning?" Half of the respondents indicated that there was not enough time for self-training, a quarter said that they were not interested in studying individual disciplines, even a smaller proportion of those polled indicated laziness, and only one respondent reported that difficulties in the training arise in connection with the language barrier. Analyzing the question "What is missing in the learning process?" We concluded that most students lack their own knowledge on the use of information and communication technologies. To the question "What will promote successful adaptation in an educational institution?" Students noted the need to implement a number of activities that would promote the development of communicative interaction between students and teachers, educational and explanatory consultations on work with the e-learning system. It is also necessary to increase the role of methodical materials on the official website of the university, to replenish the amount of information resources, and to promote the usefulness of these materials among students.

According to the results of the questionnaire, we found that the greatest difficulty faced by students is the lack of time for homework, the inability searching for the necessary information and the difficulty of mastering the e-learning system. Here they need help and support of teachers and specialists of the training department.

Therefore, one of our proposals to overcome these difficulties is the creation of a separate information resource web page on the official website of the University for students of correspondence. The filling of this page will help the student to orientate more quickly in an array of scientific sources, to understand the principle of the work of the e-learning system Moodle; Users will also find useful links and tips for effective learning, which in turn will help adapt students to the conditions of study at a higher education institution.

It is worth noting that only work with Microsoft Office to students each specialty begins with the first class, while the level of data technology and training of ICT use do not meet the

necessary requirements. For example, only 60% of students have a sufficient level of Microsoft Office, and the teaching of IT courses starts in most of them only in 3-6 academic semesters.

Information technologies have become an integral part of social and personal life of people. The main and most important means of information exchange today is the global Internet network, which is constantly modernizing, expanding its spaces, offering many new services, services and ways of obtaining information. These services have a variety of social networks and computer communication, which presently have a significant impact on the students.

Social media include websites that allow you to find business contacts, friends and partners. There are also programs that provide the exchange of text, voice information and support video sharing over the Internet between computers. The dominant features of social networks are connection without cash costs; a large number of users; contingent of like-minded users (in the circle of the group); many auxiliary services, with the help of which each user receives its various conditional space.

Thus, users of social networks make their own convenient conditional space, which spend a lot of free time. For example, at Oxford University, ICT is a key part of the student's learning process. The main social networks used at the University of Oxford are Facebook, YouTube, Tumblr, Google+, LinkedIn, and Goodreads. Oxford University offers a number of training courses on the use of social networks and digital technology. The purpose of the university is to use social networks and to direct them to the effective use and development of informational competence of future graduates. At Harvard, social networks are a powerful tool through which the university can distribute the necessary news. In addition, Harvard University has legal responsibilities for the application of social networks, and these principles have their own consistent policies (Sevage D., 2006, pp. 6-10).

An analysis of the use of social networks in the educational process makes it possible to say that the theory of social learning is becoming more relevant abroad, which includes the assumption that students learn more effectively while interacting with other students within a topic or project. Students studying once a week show better results in training than students studying outside the group.

The results of the study show an increase in the use of social networking, e-mail and other communication tools for educational purposes. By using the appropriate tools, both students and teachers can create information and education pages and groups; provide the necessary learning resources and files for sharing, and so on. The popularity of the respective networks leads to a higher percentage of student attendance offered by the resource teacher, the possibility of real-time communication, and the creation of a prototype of account-oriented educational services.

As the experience of the development of higher education institutions in the world shows, the effectiveness of the training of future specialists lies in the dialectical unity of the process of education and education, ensuring a close relationship of professional training with practice. From these positions, the problem of theoretical substantiation and experimental approbation of the corresponding pedagogical technologies concerning the organization of the educational process becomes a special role (Morse N.V., Protsenko G. A., 2013).

Accordingly, monitoring of the dynamics of the use of modern information technologies and their impact on the quality of educational services is important. As this is how we get an opportunity to analyze the state of functioning of the educational system as a whole, determine the prospects for its development, which took into account in the process of formation of the state policy in the field of education.

To determine the dynamics of the use of information technology tools by the participants in the educational process, we divide the interviewed participants into 3 communication groups:

Student-student, Teacher-student, and Teacher-teacher (Petukhova L. E., Spivakovskiy O. V., Voropay N. A., 2011, pp. 401-405).

According to the survey results, for example, Skype often used by communicative groups such as student-student (80%) and teacher-teacher (68%), and has a low level of use in the communicative group «teacher-student» (10%).

The most used means of communication in the "Teacher-student" group are e-mail, which certified by 98% of respondents, and the least used – social networks – 2%.

Thus, we can say that, in particular, Skype used by students in their own communication circles and is the standard of use in their future professional activities, which implies the need to increase the level of use of computer communications in the training of future professionals. Balanced use of computer communications will reduce the amount of time to prepare, improve the quality of the expected result from training.

However, the availability of their own workplace, accounts in social networks and distance education systems at a higher education institution, e-mail, and Skype account will not provide the expected results from their use, provided students have access to appropriate resources only in educational buildings and classrooms. Accordingly, it is also important to monitor the provision of students with resources such as connecting to the global Internet network and the university's local network.

The conducted research made it possible to reveal a number of contradictions in pedagogical, methodological, and scientific character in the context of higher education informatization. Thus, there is a contradiction between the orientation of pedagogical practice to the intensive process of informatization of higher education (computerization, the introduction of information and communication technologies in the educational process, the formation of organizational and information culture of the individual). The lack of established generally accepted methodological and theoretical foundations of the process of information, its strategic development prospects.

Another contradiction is between the active saturation of the educational system by computer and the lack of the desired result of the quality of training specialists, between the introduction of new information and communication technologies in the pedagogical process and the unpreparedness of teaching staff and students to master them. In this case, the developing and educating potentials of these technologies and far from perfect training of the personnel, intended to carry out the informatization of higher education remain unrealized.

There is also a contradiction between the need to form an organizational and informational culture of a person irrespective of the direction of the higher educational institution (technical or humanitarian) and the realities of modern practice. In the environment of scientific and pedagogical staff, there is an insufficient development of information culture of teachers, their reluctance to apply information technologies and underestimation of the possibilities of the computer training, especially in the humanities.

Computer technologies are developing rapidly; the pace of their comprehension by teachers-methodologists lags behind the theoretical developments. This leads to a new contradiction - between the availability of updated and improved technical means of training and the development of a methodology for their introduction into higher education.

In the modern educational system, the distribution of educational information and the interaction of students and teachers are carried out through satellite communications, computer telecommunications, broadcast and cable television, multimedia, computer-training systems.

**Conclusions and perspectives of further research.** Analysis of the use of information technology tools by students of all the specialties considered makes it possible to evaluate it as high, which indicates the need to increase the level of knowledge of information technology from high school and 1 semester of study at a higher educational institution.

One of the ways to increase the readiness of students to use information technology in the educational process is to use computer communication tools, social networks, software tools such as Microsoft Office, Google Docs, etc.

Among the possible factors that could form the basis of integration approaches for the unification of higher education informatization, one can note the implementation of a unified approach. According to which all means of informatization of education considered as educational electronic editions and resources for which a single set of quality requirements formed. Unification of the formation of the content of informatization, the development of formal methods for describing and structuring the content of educational branches; introduction of a unified system of specifications for all informatization systems; implementation of a unified examination of informatization of education; observance of a unified terminology in the development, examination and exploitation of informatization facilities of education.

Informatization of the educational process is one of the main priorities in the development of higher education, a qualitatively new stage for the whole system of higher education, a promising direction for increasing the efficiency of the process of studying at a higher educational institution.

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## **ВИКОРИСТАННЯ ІНФОРМАЦІЙНО-КОМУНІКАЦІЙНИХ ТЕХНОЛОГІЙ У НАВЧАЛЬНОМУ ПРОЦЕСІ ВИЩОГО НАВЧАЛЬНОГО ЗАКЛАДУ**

### **Лях Тетяна**

кандидат педагогічних наук, доцент кафедри соціальної педагогіки та соціальної роботи  
Інститут людини Київського університету імені Бориса Грінченка, Київ, Україна  
*t.liakh@kubg.edu.ua*  
ORCID: 0000-0002-8807-0497

### **Спіріна Тетяна**

кандидат педагогічних наук, доцент кафедри соціальної педагогіки та соціальної роботи  
Інститут людини Київського університету імені Бориса Грінченка, Київ, Україна  
*t.spirina@kubg.edu.ua*  
ORCID: 0000-0003-0287-7343

### **Попова Альона**

аспірант кафедри соціальної педагогіки та соціальної роботи  
Інститут людини Київського університету імені Бориса Грінченка, Київ, Україна  
*a.popova@kubg.edu.ua*  
ORCID: 0000-0002-3814-0354

**Анотація:** Процеси глобалізації, гуманізації, демократизації, інформатизації, становлення ринкових відносин, приєднання українських освітян до європейського освітнього простору є чинниками глибокого оновлення змісту та структури діяльності всіх соціальних інституцій, у тому числі й вищих навчальних закладів. Проблема досягнення якісно нового рівня викладання дисциплін фахового і гуманітарного напрямку, забезпечення інтелектуальної, психологічної й моральної готовності спеціалістів опрацьовувати великі масиви інформації і постійно оновлювати свої знання, уміння, навички, набуває важливого значення в системі професійної підготовки фахівців соціальної сфери.

Збільшення обсягу навчального матеріалу та скорочення часу відведеного на його засвоєння, підсилює значення самостійних форм навчання. Для сучасної професійної підготовки особливого значення набуває застосування в навчально-виховному процесі новітніх інформаційних технологій: використання мережі Інтернет для професійного консультування молоді, застосування інформаційних технологій в умовах професійно-технічних училищ, розробка дистанційних курсів, формування інформаційної культури тощо.

Якісно новим, перспективним напрямком підвищення ефективності процесу навчання у вищому навчальному закладі є інформатизація освітнього процесу. Авторами у пропонованій статті аналізується проблема готовності студентів різних спеціальностей до використання інформаційно-комунікаційних технологій у навчальному процесі вищого навчального закладу. Сучасним процесам глобалізації та інформатизації вищої освіти як пріоритетним тенденціям розвитку сучасного українського суспільства приділяється особлива увага.

**Ключові слова:** інформатизація, інформаційно-комунікаційне педагогічне середовище, інформаційно-комунікаційні технології, вища освіта, навчально-виховний процес у вищому навчальному закладі.