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## **SOME ADVANTAGES OF INFORMATION AND COMMUNICATION TECHNOLOGIES IMPLEMENTATION IN THE TRAINING OF FUTURE PROFESSIONALS OF COMMODITY ANALYSIS AND COMMERCIAL ACTIVITY**

*The article is devoted to some advantages of introduction of information and communication technologies at preparation of future experts in commodity science and commercial activity. The necessity of using information and communication technologies for training future specialists in commodity science and commercial activity is substantiated. The essence of the concepts «pedagogical technology», «learning technology», «information and communication technologies» based on the analysis and study of the achievements of domestic and foreign scientists is revealed. The role of webinars – seminars, which are held remotely via the Internet using appropriate technical means and Zoom conferences as modern information and communication technologies, is analyzed. The main advantages and disadvantages of using Zoom technologies in the training of future professionals in higher education are described.*

**Key words:** *pedagogical technology, studying technology, information and communication technologies, future commodity analysis and commercial activity professionals, higher education, classification.*

**The formulation of the problem.** In recent years the Internet and information and communication technologies have quickly come into our lives and progressively completed all areas of human activity including teaching process. Global information networks are so spontaneously intertwined with the life of modern civilization that it is impossible to do without them nowadays. It is necessary to mention that in the era of information technologies commodity analysis and commercial activity professionals must use them almost every day. It is because a distinctive feature of their professional activity is the presence of information environment which requires active use of information and communication technologies and gain experience in professionally oriented dialogue mediated by information and communication technologies. Professionals in commodity analysis and commercial activity can do this during their studies at university.

**The purpose of the article** is to substantiate the need for the use of information and communication technologies in the training of future commodity analysis and commercial activity professionals.

**Presentation of the material.** In order to define the essence of information and communication technologies it is necessary to consider the meaning of such terms as “pedagogical technology”, “learning technology”, “information and communication technology”.

The theory and methodology of development of pedagogical technologies, their new types and characteristics are considered in the works of V. Bepalko, L. Matrosov, E. Polat, S. Sysoeva and others.

In the scientific literature we can distinguish different approaches to the definition of the term “pedagogical technology”: “a set of psychological and pedagogical settings that define a special set and layout of forms, methods, methods, methods of teaching, educational tools; it is an organizational and methodological tool for the pedagogical process” (B. Likhachev); “meaningful technique of realization

of educational process” (V. Bepalko); “a well-thought-out model of joint pedagogical activity on designing, organizing and conducting the educational process with unconditional provision of comfortable conditions for students and teachers” (V. Monakhov).

Thus, pedagogical technology is hugely connected with the educational process – the activity of teacher and student, its structure, means, methods and forms. It should guarantee the achievement of a certain level of education, be effective in terms of results, optimal in terms of implementation, effort and resources.

Concerning the learning technology scientists reveal the essence of this phenomenon as: “the use of techniques, tools and methods of organizing educational activities in higher education”; a set of techniques, actions of students which are performed in a certain sequence and allow to implement a particular method of teaching or a set of methods that ensure the implementation of a certain approach to learning, the implementation of a certain didactic system [3].

Consequently, researchers consider learning technology as a method or set of techniques, didactic design of information management of educational and cognitive activities of students which reflects the patterns of educational cognition.

Regarding information technology, the Law of Ukraine “On the National Informatization Program” (February 4, 1998 № 74/98-VR) defines it as a “purposeful organized set of information processes using computer technology that provides high speed data processing, fast search information, dissemination of data, access to information sources regardless of their location”.

The expression “information technology” goes back to a 1958 article published in the Harvard Business Review. The authors Harold J. Leavitt and Thomas L. Whisler defined some types of information technology such as techniques for the fast processing of information, the use of statistical and mathematical models for decision-making, the “simulation of higher-order thinking through computer programs.”

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O. Piekhota specifies pedagogical tasks for the means of modern information technologies of education: intensification of all levels of the educational process, improving its efficiency and quality; building an open education system; development of creative potential of students, his ability to communicate; formation of information culture of students [4].

We assume that the effective use of ICT in the educational process is possible only when the relevant technologies are not a superstructure to the existing learning system but reasonably and harmoniously integrated into this process, providing new opportunities for both teachers and students.

According to the results of scientific work of specialists who studied the means of modern information technology, we can identify the following ways to use them to organize the learning process:

- computer support for the organization of the educational process where the computer acts as a means of providing individual work of students;

- demonstration of educational information for group work under the guidance of a teacher. The computer is used as a source of structured information or as a means of organizing group learning under the guidance of a teacher;

- processing and storage of information. This way of using a computer should be used to create a variety of databases such as specialized or additional dictionaries, etc.;

- exchange of messages in order to organize communication at the international level through a telecommunications network. In this way there is a practical application of knowledge of a foreign language in the process of working on joint international projects.

In connection with the above, the study of information and communication technologies as a means of organizing professional dialogue is of fundamental importance.

Thus, R. Gurevich, T. Kolomiets note that the use of information and communication technologies contributes to the solution of the following didactic tasks: mastering the basic and systematization of acquired knowledge in the professional discipline; formation of communicative, in particular dialogic skills, self-control skills; providing educational and methodological assistance to future professionals in independent work.

S. Dysheva emphasizes the following features of the pedagogical process with the use of information and communication technologies: interactivity and dialogic nature of learning; optimal combination of individual and group work; maintaining students' sense of psychological comfort in organizing a dialogue with the computer; unlimited training [1].

Traditionally, among information and communication technologies, technologies of synchronous (online) (chat and ICQ) and asynchronous (offline) communication (e-mail, teleconference) are distinguished.

I. Rosina distinguishes four types of network technologies: the same time and the same location: local network programs, chats; same time and different location (synchronous technologies): programs for instant collaboration on a computer network, Internet paging and ICQ, Internet telephony, computer audio and video conferencing; different times and the same location (interactive technologies): web forums, discussion lists, guest books of the questionnaire-form; different time and different location (asynchronous technologies): e-mail, mailing lists, teleconferences [5, p.185].

We share the views of O. Kushchenko, who presented the classification of the main types of information and

communication technologies: the technology of implementation (mail, chat, forums, live magazines, audio-video, instant messaging); in the direction of communication (interpersonal, organizational, communication in small groups, etc.); indirect (television, radio, press, etc.); on-line implementation time: chat, instant mail service, web chat, video conferencing or audio conference whiteboard, Internet telephony, MUD / MOO environment) or off-line: e-mail, teleconferencing, file servers, own information resources, chats, forums, web conferences, virtual clubs, communication programs, role-playing games, message boards, Wap-communications, IP-telephony, Wi-Fi) [2, p.210-217].

It is necessary to highlight that distance education has recently become increasingly important for the people of our country. Using modern information and communication technologies people can study or participate in conferences without leaving home. This is possible due to webinar technology.

Webinars are seminars or conferences that are held remotely over the Internet using appropriate technical means. You need to have headphones, a microphone and a webcam, as well as software for webinars.

Here are the main features that webinars provide to users: slide presentations; real time video (usually via webcam); real time audio communication using headphones and a microphone; recording for further viewing and listening; text chat for real time question and answer sessions; voting and sample polls; remote desktop and application sharing.

There are several advantages of using webinars: independence of students from the territorial remoteness of the place of study; reduction of financial costs for rent, coffee breaks, printing materials.

All webinars are recorded on electronic media which allows further use of training materials. The main disadvantage of webinars is the limited feedback for participants. Currently, active research is underway to address this issue.

At present, the most convenient service as a learning tool is the Zoom program. Zoom is considered to be a service for online conferences, trainings and webinars. Zoom is a video conferencing tool that provides teachers and students with a way to synchronously meet online on a personal PC / laptop or mobile phone with or without video. Thanks to Zoom, teachers have the opportunity to conduct online classes on high-quality video and the ability to participate more than 15 users [2].

The first advantage of this platform is not only the demonstration of the material on the desktop, but also the demonstration of computer sound and an interactive whiteboard during classes. In the "desktop" mode, the teacher can show students materials from his computer and the principles of working with programs and more. Whiteboard mode allows the teacher to draw and use diagrams to demonstrate certain statements and write text on the topic of the lesson. Another advantage of Zoom is the ability to schedule classes and invite participants by mail (email) and message. Moreover, teachers can record classes with students. The recording feature allows you to record online classes so that participants can, if necessary, view after completion. The last advantage is the ability to correspond with all participants or privately and pass materials to students.

However, the disadvantage of this platform can be called hacking (zoombombing). There are known cases of unwanted

third-party visitors who have access to the password and link, but if the organizer has turned off the waiting room.

Information and communication technologies open wide opportunities for intensification and improvement of the learning process [1]. Distance learning using a variety of platforms, either Zoom or Discord, encourages students to learn more effectively. Other programs that are becoming more popular every day, Google Meet, WebEx and Skype, are also available today.

It is necessary to emphasize the importance of social media as an integral part of modern society. If you want to bring the “whole world” into the learning process, consider integrating your online and offline lessons and social media resources such as Facebook, Instagram, Telegram, What’s up, Viber. The matter is that if social media is used carefully and wisely it can serve as a useful tool rather than a distraction. According to recent research published on the Edutopia website, social media is considered not only to enrich university classes with modern technologies, but also helps low-income students to overcome digital inequality. Educational sites such as Edmodo, Edublog and Kidblog provide alternative social media resources for posting a variety of information, announcements, news, blogs and microblogs that can be used in the pedagogical process.

In order to implement high technologies into educational process effectively it is possible to create a group for your students on Facebook. First of all, Facebook is known as one of the largest social networks where you can post information about yourself, update your status, post announcements, ads, photos and videos – all that in fact we definitely use in our classes. Creating a Facebook group for each of your classes at university can let you can post assignments, make announcements, and remind students of important deadlines. Moreover, the Facebook group provides students with a space where they can ask questions and get answers. Under current circumstances students often share information with group-mates, share questions, ideas and experiences with each other, receive advice or explanations of something incomprehensible that is why the group can greatly expand learning process, that is, expand discussion both in class and outside.

Other ways that offer a quick way to place your ads and reminders for the class, as well as provide real-time information about various assignments include Viber, Telegram, What’s up, Twitter. These resources also help students keep track of information on a chosen topic. For example, Twitter can provide up-to-date information, eliminating the need for a large-scale search. By following expert Twitter channels in this field or even hashtags focused on current issues, students can learn more about what is happening in the world. You can also use this information during various class discussions or research and writing student projects. In addition, Twitter is created not only for reading, but also for answers so it is recommended to invite students to use Twitter so that they can expand their circle of communication by posting their favorite quotes or facts they learned in a particular lesson. Interaction with the experts by asking them questions or leaving comments also plays a very important role.

The main communicative possibilities of mutual exchange of information between subjects, mediated by computer means of communication include: multimedia communication, which combines voice, video and text transmitted by one physical

line of communication; hypermedia systems that stimulate the internal dialogue of the user, revealing ways of thinking, helping to compare different positions, encouraging independent thinking and evaluation of hypotheses, making independent decisions; telecommunication technologies, which are based on communication, rapprochement, free exchange of thoughts, ideas, information of the participants of the joint project.

**Conclusions.** The analysis showed that the technological improvement of education is an objective, natural irreversible process and a means of improving the efficiency of teaching, education and development of students. Adequate use of ICT in the educational process is a prerequisite for improving the quality of educational services, expanding their capabilities, creative realization of the individual in educational activities. Information and communication technologies in education through their potential contribute to the implementation of the following didactic tasks: improving the quality of education based on the relationship of general didactic principles of independence, activity and regularity; expanding opportunities for continuing education based on the implementation of the principles of consistency, continuity and accessibility; ensuring an adequate level of training of teachers to work with information and communication technologies; improving the content of education, taking into account the interaction of general didactic principles, covering the principle of science, clarity, accessibility, connection of theory with practice; constant improvement of didactic support of educational process.

#### Literature

1. Dyshlieva S. *Information and communication technologies (ICT) and their role in the educational process [Electronic resource] / S. Dyshlieva. – Access mode: <http://osvita.ua/school/technol/6804>.*
2. Kushchenko O.S. *Formation of culture of Internet communication of future teachers by means of information and communication technologies: dis... cand. ped. nauk / O.C. Kushchenko. – Dnepropetrovsk, 2008. – 256 p.*
3. Monakhov V.M. *The concept of creation and implementation of new information technologies of training / V.M. Monks // Design of new learning technologies. – M., 1991 – P. 4-30.*
4. *Educational technologies: educational and methodical manual / O.M. Infantry, A.Z. Kikitenko, O.M. Lyubarska and others; for general ed. OHEM. Infantry. – K.: A.C.K., 2001. – 256 p.*
5. Rosina I.N. *Pedagogical computer-mediated communication: theory and practice: a monograph / I.N. Rosina. – M.: Logos, 2005. – 439 p.*

#### References

1. Dyshlieva S. *Informatsiino-komunikatsiini tekhnologii (IKT) ta yikh rol v osvithnomu protsesi [Electronic resource] / S. Dyshlieva. – Rezhyim access: <http://osvita.ua/school/technol/6804>.*
2. Kushchenko O.S. *Formuvannia kultury Internet-komunikatsii maibutnikh uchyteliv zasobamy informatsiino-komunikatsiinykh tekhnologii: dys... cand. ped. Science / O.S. Kushchenko. – Dnepropetrovsk, 2008. – 256 s.*
3. Monakhov V.M. *Kontseptsyia sozdaniya y vnedreniya novykh ynfomatyionnykh tekhnolohiyi obucheniya / V.M. Monakhov // Proektyrovanye novykh tekhnolohiyi obucheniya. – M., 1991 – S. 4-30.*
4. *Osvitni tekhnologii: navchalno – metodychnyi posibnyk / O.M. Piekhoty, O.M. Liubarska ta in.; for zah. red. O.M. Piekhoty. – K.: A.C.K., 2001. – 256 z.*
5. Rozyna I.N. *Pedahohycheskaia kompiuterno-oposredovannaia kommunykatsyia: teoriya y praktyka: monohrafiya / I.N. Raisin. – M.: Logos, 2005. – 439 s.*

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Україна, м. Дніпро

**ДЕЯКІ ПЕРЕВАГИ ВПРОВАДЖЕННЯ ІНФОРМАЦІЙНО-КОМУНІКАЦІЙНИХ ТЕХНОЛОГІЙ  
У ПІДГОТОВЦІ МАЙБУТНІХ ФАХІВЦІВ З ТОВАРОЗНАВСТВА  
ТА КОМЕРЦІЙНОЇ ДІЯЛЬНОСТІ**

Стаття присвячена деяким перевагам впровадження інформаційно-комунікаційних технологій при підготовці майбутніх фахівців з товарознавства та комерційної діяльності. Обґрунтована необхідність використання інформаційно-комунікаційних технологій для підготовки майбутніх фахівців з товарознавства та комерційної діяльності. Розкрито сутність понять «педагогічна технологія», «технологія навчання», «інформаційно-комунікаційні технології» на основі аналізу та вивчення досягнень вітчизняних та зарубіжних науковців. Проаналізовано роль вебінарів – семінарів, які проводяться дистанційно через Інтернет із використанням відповідних технічних засобів та Zoom конференцій як сучасних інформаційно-комунікаційних технологій. Охарактеризовано основні переваги та недоліки використання Zoom технологій у підготовці майбутніх фахівців у вищих навчальних закладах.

**Ключові слова:** педагогічна технологія, технологія навчання, інформаційно-комунікаційні технології, майбутні фахівці з товарознавства та комерційної діяльності, вища освіта, класифікація.

