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ELECTRONIC CONFERENCES AS A MEANS OF MODERN SPECIALISTS' PROFESSIONAL COMPETENCE

The paper deals with the highlighting of the formation of modern specialists' professional competence in the aspect of the usage of such Internet technology as electronic conference in the educational process. Furthermore, the benefits of using electronic conferences in the educational process are defined. The typology of electronic conferences is offered, depending on the technology of their distribution in the Internet. Simultaneously specific features of each of the singled out types of electronic conferences are described. The way of organization of electronic conferences is characterized. The list of worked out special

programs for managing electronic conferences, which are held within the educational process, is offered. Besides, a number of actions of managers of electronic conferences that determine the success of these conferences is singled out. The sphere of usage of electronic conferences in the educational process is defined.

Keywords: Internet technology; electronic conference; professional competence; teaching process; educational process.

Formulation of the problem. In modern society there is a significant impact on it of information-and-communication technologies (ICT) that are used in all areas of human activity. They contribute to the spread of information flows in society, which has resulted in the formation of a global information space. Computerization of education is an integral and important part of these processes.

A range of computer use in the educational process is very broad and covers those areas that are directly related to training. It varies from student testing, recording their performance, driving characteristics up to the game. In the educational process computer can be a subject of study and a learning tool, so two areas of computerization of education are possible. In the first case learning, formation of skills promotes awareness of capabilities of the computer and its use in solving various problems, in other words, it leads to mastering computer literacy. In the second case the computer is a powerful tool for improving the efficiency of learning. These two areas also form the basis of computerization of education as a social process [1, p. 9].

Analysis of studies and publications. The analysis of scientific literature indicates that there are practically no studies in domestic pedagogy that revealed the potential of ICT use as a means of formation of professional competence of a specialist. The undoubted value to determine the nature and content of ICT competence are the works of domestic (G. M. Alexeyeva, L. P. Burkot, G. A. Degtyaryova, O. V. Tutova, etc.) and foreign (V. A. Adolf, O. B. Zaitseva, I. F. Isayev, I. V. Sklyarova, etc.) researchers. Analysis of theoretical research and practical experience of modern pedagogical activity shows that, despite of the close attention to improving the quality of training students, the problem of of ICT use as a means of formation of professional competence of specialists remains understudied.

The essence of the process of information that is widespread in education and greatly affects the dynamics of modern society, is revealed in the works of both domestic (R. S. Gurevich, K. I. Delehey, N. V. Zharkova, I. G. Sosyuk, etc.) and foreign scientists (D. Bell, A. A. Verbytskyi, T. P. Voronina, K. K. Kolin, A. Toffler, etc.). However the didactic potential of Internet technologies is highlighted in a number of domestic dissertations (V. M. Andriyevska, A. M. Kolomiyets, K. R. Kolos, A. V. Sukhovirskyi, etc.) and foreign (N. I. Arshynova, M. B. Betuhanova, Yu. M. Veryovkina-Rakhalska, A. D. Hartsov, etc.) researchers.

The purpose of the article is to investigate how the learning process in the formation of modern specialists' professional competence by using Internet technologies such as electronic conference is realized.

Results of the research. Electronic conferences represent asynchronous communication such as e-mail and can be used for the fruitful cooperation of students and teachers. Electronic means of communication are also here an e-mail or a structured forum in the relevant sections of which one can put in writing his views, ask questions and read the remarks of other participants. Participation in thematic electronic conferences on the Internet is extremely beneficial for teachers' and students' self-education.

In the electronic way of conferencing we single out the following advantages:

- 1) materials of an electronic conference (and they are laid out on site or on another authoritative source) can be read by a large number of interested people. This increases the efficiency of a report, as in the standard version of the magazine its availability is much lower;
- 2) electronic publication of a report itself takes a few minutes. Time of its inspection by experts is not taken into account, but the time is also reduced here to a minimum. Instead, the process of preprint of the magazine variant of a conference takes from one to several months;
- 3) the amount of electronic report may be somewhat larger than the thesis, which are presented in a printed collection of conference materials. With various charts and graphs that can be included in the report, it provides greater visibility and clarity;

4) a large number of professionals have access to discussion of any report. This is important both for the speaker and for science in general.

However, the main advantage of such conferences is also in the fact that they do not require the presence of all participants at the same time (which is very convenient in the event that the participants are in different time zones or can not be present in front of computer for a conference). Electronic conference is convenient for those users who need more time to think of their performances, who want to further work on the answer, the problem, raised within the conference, or for whom the language spoken at the conference is not a native (usually in these cases preparation of answers or remarks takes more time).

On the Internet, these conferences are divided into two main types, depending on the technology of distribution [2, p. 164]:

- 1) mailing lists (discussion lists);
- 2) news groups, or groups USENET).

The way of organization of most electronic conferences is quite democratic, usually the organizers of the conference are regular Internet users who have urgent need to quickly share information with colleagues.

Mailing lists are a form of e-mail. They allow simultaneous sending of e-mails to several (many) recipients previously included in the address list. However mailing lists are comfortable in the organization of work of a relatively small group of users (academic groups, small groups, two or three co-authors of created articles, etc.). They can be formed both by means of traditional office software (e.g. *MS Outlook 2000*) and by means of special programs such *Listserve, Majordomo, Listproc*. Typically, these mailing lists are maintained (moderated) by an administrator (a teacher of the course, coordinator) of the server where they are created, that protects the information which circulates in them from unauthorized access.

News groups, unlike mailing lists, are created on servers of Internet providers and are public and usually non-moderated. They are designed for communication of many with many and therefore the are extremely common on the Internet. Major conferences that belong to this type are included in the community *USENET*. News groups are convenient for use as an additional source of information during international telecommunication projects, educational or distance courses focused on work with other non-adapted resources [2, p. 164–165].

To manage electronic conferences, which are held within the educational process, such special programs are developed, as: FirstClass, Lotus Notes, CoSy, etc. They can structure the feedback sent to the conference participants and conference presenters, track the progress of discussions and active participation of each student, combine common group discussions with private (closed to outsiders) dialogue, discussion within a small group. Such conferences are very comfortable in the modern distance education from economic and organizational point of view, they do not require additional costs for equipment, organization of special facilities for collecting members and others.

The success of electronic conferences is largely determined by the appropriate skills coordinator (presenter, moderator). The leader of this teleconference officially "opens" it, following a series of actions [2, p. 165]:

- a) defining the purpose, objectives, timing of the conference;
- b) having members list (mailing lists) and / or outlining target audience for this conference which appointed;
- c) establishing rules of conduct for members (who can send messages, when, in what form, what is encouraged, what is rejected and why, etc.);
- d) writing a first introductory message that summarizes all of the above and gives the tone of the entire teleconference.

To increase the activity of participants of electronic conference, as a rule, the are encouraged to publish articles in the first place, of experts in the field, "provocative" material or pre-prepared review, which will introduce participants to the course of the case.

Electronic (computer network) conferences are often called conference webcasts. They allow a user to get on computer monitor not only text messages sent by the conference participants that are at different distances from each other, but also other types of information – graphics, audio,

video, etc. the same as in the e-mail. The software depends on the mode of electronic conference usage [3, p. 113].

These conferences provide information interaction of Internet users. To do this, the user needs to access the Internet and enter the address of the conference, send a message in writing by email, read the participants' (students', teachers' or associates') message at a convenient time. Each conference has a moderator who monitors the subject of sent messages. The need of electronic conference moderation is conditioned mainly by incorrect conduct of random participants. These systems are recommended for use in high schools that do not have direct access to broadband communication systems [4, p. 43].

The Internet provides other opportunities, for example, in *USENET* – news groups. Unlike mailing lists, taken in an e-mail, news groups work in real time, participants read messages sent to a group of other members, send back in the same way their answers, discuss problems, but it is "now and immediately" without requiring time to send letters [3, p. 113].

These conferences enable multiple participants to communicate with each other via computer terminals, but not in real time. They are similar to e-mail, because incoming messages are stored in the computer and the user can read them and answer them later. Over a period of time participants send messages, read messages of other participants, send their comments [5, p. 24].

Electronic conferences can be used during teaching and research projects and to develop communication skills in a joint work of students of several universities. In addition, participation in thematic electronic conferences on the Internet is extremely beneficial for teachers' and students' self-education.

Namely this mode becomes the most widespread due to the fact that it does not need to involve extensive memory resources and broadband Internet access. Teachers should note that while working on the project, each participant must participate in the discussion of the studied problems, speak of controversial issues, share information resources. Communication in asynchronous mode is slower than videoconference communication. Asynchronous communications require more time for detection and correction of misunderstandings that arise [4, p. 52].

Electronic conferences are used in teaching training courses, advising students, information exchange [5, p. 24]. Such conferences can also be organized within a local network of individual schools for seminars, discussions, etc. Asynchronous mode of students' work promotes reflection and, respectively, thoughtfulness of questions and answers, and the possibility of using any file types (graphics, sound, animation) make these virtual seminars quite effective [1, p. 41].

Conclusions. Thus, electronic conferences allow a wide range of volunteers to participate in the discussion of the problems that cause their interest while providing simultaneous "presence" at several conferences without leaving their computer. In the field of education electronic conferences allow the user to not only be aware of interesting for him perspective, participate in the discussion of the problems of a particular subject area, but mostly speak on the issues directly in the information communication, find like-minded colleagues who are interested in sharing information resources.

Prospects for further research in the area of the research. Identification and description of the advantages and disadvantages of ICT using in the educational process has prospects in terms of research of using other features of Internet technologies, including blogs, wikis, podcasts, e-mail, forums, chat rooms, etc. during the formation of modern specialists' professional competence.

Список використаної літератури

- 1. Колин К. К. Информационное общество / К. К. Колин. Челябинск : ЧГАКИ, 2010. 27 с.
- 2. Развитие профессиональной компетентности в области ИКТ. Базовый учебный курс / М. В. Моисеева $[и\ др.]-M.$: Издательский дом «Обучение-Сервис», $2008.-256\ c.$
- 3. Красильникова В. А. Информационные и коммуникационные технологии в образовании В. А. Красильникова. Оренбург : ГОУ ОГУ, 2006. 235 с.
- 4. Панюкова С. В. Использование информационных и коммуникационных технологий в образовании / С. В. Панюкова. М.: Издательский центр «Академия», 2010. 224 с.
- 5. Интернет-технологии в образовании / Р. Н. Абалуев [и др.]. Тамбов : ТГТУ, 2002. Ч. 3. 114 с.
- 6. Захарова И. Г. Информационные технологии в образовании / И. Г. Захарова. М.: Издательский центр «Академия», 2003. 192 с.

References

- 1. Kolin, K. K. (2010). *Information Society*. Chelyabinsk. ChGAKI. 27. (in Rus.).
- 2. Development of Professional Competence in the Field of ICT. Basic Training Course. (2008). Moscow. Obucheniye-Servis. 256. (in Rus.).
- 3. Krasil'nikova, V. A. (2006). *Information and Communication Technologies in Education*. Orenburg. GOU OGU. 235. (in Rus.).
- 4. Panyukova, S. V. (2010). *Usage of Information and Communication Technologies in Education*. Moscow. Akademiya. 224. (in Rus.).
- 5. Internet Technologies in Education (2002). Tambov. TGTU. Part 3. 114 (in Rus.)
- 6. Zakharova, I. G. (2013) Information Technologies in Education. Moscow. Akademiya. 192. (in Rus.).

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ЕЛЕКТРОННІ КОНФЕРЕНЦІЇ ЯК ЗАСІБ ФОРМУВАННЯ ПРОФЕСІЙНОЇ КОМПЕТЕНТНОСТІ СУЧАСНИХ ФАХІВЦІВ

Анотація. Статтю присвячено висвітленню формування професійної компетентності сучасних фахівців в аспекті використання в навчальному процесі такої інтернет-технології, як електронна конференція. Крім того, визначено переваги використання електронних конференцій в навчальному процесі. Також наведено типологію електронних конференцій, залежно від технології їх поширення в Інтернеті. Водночає описано особливості кожного із виокремлених типів електронних конференцій. Схарактеризовано спосіб організації електронних конференцій. Наведено перелік розроблених спеціальних програм для керування електронними конференціями, котрі проводяться в межах освітнього процесу. Крім того, виокремлено низку дій ведучих електронних конференцій, які детермінують успіх проведення таких конференцій. Визначено сферу використання електронних конференцій у навчальному процесі.

Ключові слова: інтернет-технологія; електронна конференція; професійна компетентність; навчальний процес; освітній процес.

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