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## APPLICATION OF WEB-TECHNOLOGIES IN THE EDUCATIONAL PROCESS OF HIGHER EDUCATIONAL INSTITUTIONS OF UKRAINE

Olga Potapchuk

Ternopil Volodymyr Hnatyuk National Pedagogical University

Ph.D.(Pedagogy), assistant

of the Computer Technologies Department

### Abstract

In the article actuality and features of the use of Web-technologies are exposed in the educational process of higher educational institutions of Ukraine, basic functions that have an influence on forming of professional competence of future specialists are distinguished. The analysis of advantages and lacks of application of Web-technologies is conducted in an educational process. Problems that arise up on the way of informatization of education in Ukraine are reflected. It is marked that the uses of all modern technologies are effective in combination with the traditional form of studies and assist the quality forming of professional competence of future specialists.

**Keywords: Web-technology, an educational process, education, informatization, professional competence.**

## **ЗАСТОСУВАННЯ WEB-ТЕХНОЛОГІЙ У НАВЧАЛЬНОМУ ПРОЦЕСІ ВНЗ УКРАЇНИ**

**Ольга Ігорівна Потапчук**

**Анотація.** У статті розкрито актуальність та особливості використання Web-технологій в навчальному процесі ВНЗ України та виділено основні функції, які мають вплив на формування професійних компетентностей майбутніх фахівців. Проведено аналіз переваг і недоліків застосування Web-технологій в навчальному процесі. Висвітлено проблеми, які виникають на шляху інформатизації освіти в Україні. Зазначено, що використання усіх сучасних технологій є ефективними в поєднанні з традиційною формою навчання та сприяють якісному формуванню професійних компетентностей майбутніх фахівців.

**Ключові слова:** Web-технології, навчальний процес, освіта, інформатизація, професійні компетентності.

### **Применение Web-технологий в учебном процессе ВУЗов Украины**

**Ольга Игоревна Потапчук**

**Аннотация.** В статье раскрыты актуальность и особенности использования Web-технологий в учебном процессе ВУЗов Украины и выделены основные функции, которые влияют на формирование профессиональных компетенций будущих специалистов. Проведен анализ преимуществ и недостатков применения Web-технологий в учебном процессе. Освещены проблемы, которые возникают на пути информатизации образования в Украине. Отмечено, что использование всех современных технологий эффективно в сочетании с традиционной формой обучения и способствуют качественному формированию профессиональных компетенций будущих специалистов.

**Ключевые слова:** Web-технологии, учебный процесс, образование, информатизация, профессиональные компетентности.

**Raising of problem.** On the modern stage of development of scientific and technical progress and informatizations of society, that predetermine development of the informative

providing in all spheres of activity of humanity, education in Ukraine develops very headily. Every day educational technologies acquire new forms and methods of studies, one of that there is introduction in the educational process of Web-technologies that open new possibilities in presentation to the students of educational materials and provide availability and efficiency of receipt of necessary information.

However, ground of necessity of application of Web-technologies in the educational process of university of Ukraine, and also state support of their introduction in industry of education are at low level and assists not enough professional preparation of future specialists in accordance with the modern requirements of society.

**The analysis of the last researches and publications** showed that questions is constrained with the use of Web-technologies in an educational process had studied: М. Бухаркіна, Н. of Бєляєва, Ю. Бріскін, Н. Ладиженська, Є.Полат, А. Петров, О. Собаєва and other

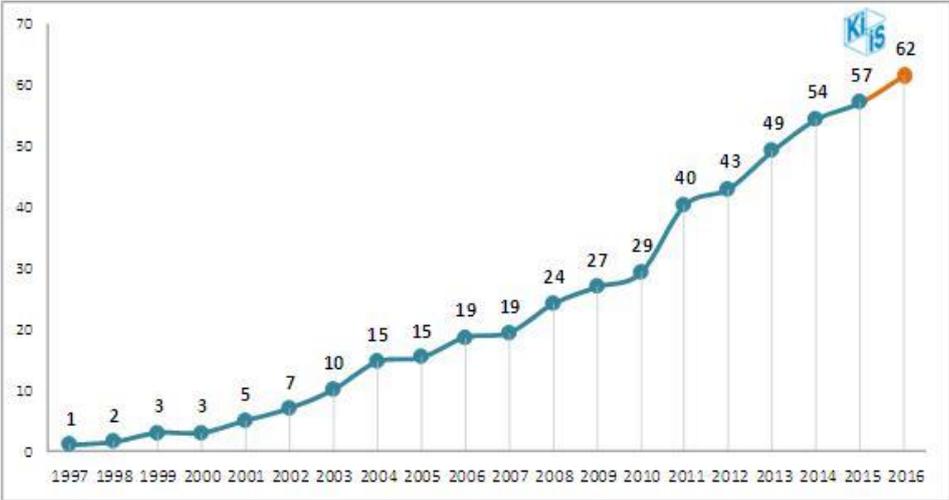
On the basis of analysis of scientific literature assert that problem of the use of network the Internet and technologies that provide work with her, in educational space of higher school is actual, as forming of readiness of future specialists to professional activity in university of all directions of preparation can not come true without the use of modern of informatively-communication technologies, but graduating students of university must be competent in this industry and able effectively to use possibilities of facilities of informatively-communication technologies in the professional activity.

**The aim of the article** is to expose features and necessity of introduction of Web-technologies in an educational process in accordance with advantages and lacks of their use and search of ways of decision of basic problems on the way of informatization of education in Ukraine.

**Exposition of basic material.** Swift development of informatively-communication technologies (ICT) assisted activation of communicative aspects of educational activity of students. Today the present row of technologies by means of that a communication comes true between the participants of educational process comes true exchange experience and information. That's why, humanity all anymore deepens in an informative epoch, where became basis of process of creation, distribution, maintenance and management information exactly Web- resources.

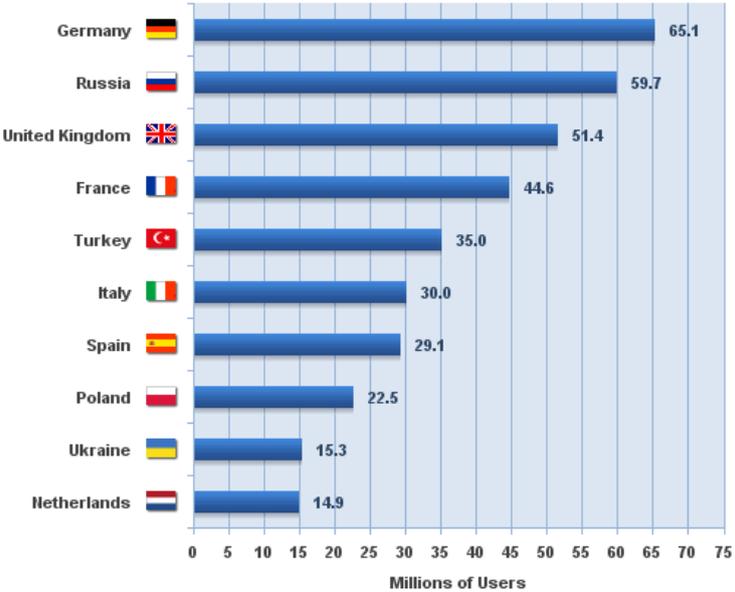
During February, 2017 the Kyiv international institute of sociology (KIIS) undertook an allukrainian study in relation to the use of Web-resources the adult population of Ukraine. According to given of research in 2016 of 61.6% adult population of Ukraine to the use of

Web-resources, however the amount of users continues headily to grow. A growth rate during 2015 - 2016 laid down 8% for period from 2014 - 2016 the amount of users grew on 7 percent points, and a growth rate presented 13 (pic. 1).



Picture 1 is the Use of Web- of resources to the adult populations of Ukraine.

Comparatively with other countries of the world after the breadth of distribution of Web-technologies Ukraine is included in the first ten of countries of Europe after the amount of his users(rice. 2).



Picture 2 is the Use of Web- of technologies in the countries of Europe.

In the same time availability of Web-technologies spreads in educational industry of society. Such technologies give possibility to the students in the choice of the individual

going near an educational process and research activity. Advantage of Web-technology is possibility of individualization of educational process by the stowage of tasks and expansion of range of knowledge from speciality and general development of personality.

Today all more educational establishments of Ukraine support the idea of introduction and development of the controlled from distance studies. From one side, educational establishment satisfies the necessity of bringing in to informative open-space, from other - provides possibility for realization of educational aims and tasks [4].

Usually the use of Web-technologies in an educational process is limited to only the information retrieval and providing of rapid connection of objects of educational process. However, an application of Web-technologies domain in university has considerably wider. Foremost, she must be sent to forming of high level of informative culture of future specialists, grant to them of practical skills not only from a search, storage and treatment of information but also from ability of choice of optimal forms of her presentation and acceptance on her basis of effective decisions.

Researches testify that the use of such technologies assists to development of thinking, gives new facilities for the decision of creative tasks, changes style of intellection [3].

The analysis of scientific literature and personal experience testify that by important functions that have an influence on forming of professional competence of future specialists is:

*Function of studies.* Exactly due to modern Web- communication of students and teachers became possible technologies in the distance. Students, not depending on the place of being, have the opportunity to get a task and methodical materials in an electronic kind. Studies in the distance got the name the controlled from distance studies, that allows to study in the most comfortable for a student time. Studying remotely students develop independence, as they seize all materials given to the study and conduct research activity independently. Choosing the controlled from distance studies a student gets possibility independently to dispose of own time and build the program of studies the most comfortable method.

Thus, organization of educational process with the use of Web-technologies has a row of advantages, in comparing to the traditional forms of studies, namely:

- it is an information generator that allows quickly and it is enough deeply to investigate necessary for a student educational and practical tasks;
- it is possibility of the autonomous working of scientific literature;
- it is possibility of interactive communication of subjects of studies.

*Function of professional communication.* One of important ways of introduction of Web-technologies in an educational process that will assist effective work of teachers and students, there is purposeful creation of the system of support of educational process by facilities of ICT. Lessons built on the basis of the system of support of modern technologies facilities, at methodical level must include such basic elements:

- theoretic-practical preparation of teacher to the use in the process of professional activity of modern Web-technologies, as Web-resources, as an instrument of activity of teacher, have a didactics value and literate organization of educational process;
- it is the use of Web-resources of global network, as an instrument of educational-methodical and organizational activity of pedagogical specialist.

A communication is in an informative environment. There are two basic types of communication facilities of Web-technologies : intellectual communication, as means of study of certain sphere of activity and actual communication (chats, conferences, forums and others like that). An intellectual communication is characterized, as an open process is unreserved the preliminary structured and objective knowledge other, but presents the active collaboration of subjects of educational process.

*Transport function.* Modern Web-technologies today are the most effective means of transmitting information, since it provides instant access to a large amount of world knowledge through a powerful search center. Let's highlight the main transport properties of Web-technologies:

- the presence of a structured center for the transfer of information through which all educational, cultural, scientific and other institutions connected to the global network can be contacted;
- the possibility of access without restriction to the information environment through the search engine;
- providing a continuous stream of necessary information that comes to the user and is based on the interaction of different users with their knowledge, interests and needs in the process of user Web-resources.

Thus, based on the analysis above, we highlight the following main advantages of using Web-technologies in the learning process:

1. possibility to receive the most up-to-date educational information on a certain subject;
2. the possibility of using the sources of information, their analysis and use of the most necessary;

3. students become subjects of study, as the learning process requires active management;

4. development of professional competencies, experimental research and cognitive activity;

5. the opportunity to go beyond the scope of the content of the educational material given to him at the lecture, the forms of study schedule, the traditional structure of the class;

6. Getting information with minimal time and energy.

However, there are a number of disadvantages of using Web-technologies in the learning process:

1. impossibility of checking the reliability of certain Web-resources;

2. information to the network may be made by unskilled professionals, uninformed in the field in which the information is provided;

3. the need for proper hardware support;

4. limitedness in direct communication between students and teachers.

Taking into account all the positive and negative aspects of the application of Web-technologies in the educational process of higher educational institutions of Ukraine, it can be argued that the use of all modern technologies is effective in combination with the traditional form of training and promotes qualitative formation of professional competences of future specialists.

Students in the leading universities of the world have free access to Web-resources. In the US, the 2000th year was the year of "universal Internetisation" of all educational institutions at the expense of state support [3]. The use of modern information and communication technologies in the educational process of higher educational institutions of Ukraine is regulated by the following documents: Laws of Ukraine "On Higher Education", "On the National Program of Informatization", Decree of the President of Ukraine "On Measures for the Development of the National Component of the Global Internet Information Network and Providing Broad Access to this network in Ukraine "[1].

Every year in Ukraine, within the framework of national programs, more institutions implement Web-technologies in the educational process. In more than 100 higher education institutions of Ukraine, distance learning is used as an educational technology. However, state support for the development of Web-technologies, their informational saturation and methodical provision is still insufficient and, accordingly, does not meet the modern requirements of society for the training of future specialists.

Conclusions and perspectives of further research. The process of introducing Web technologies into the learning process is associated with the following main problems: the need to create favorable technical conditions for ensuring wide access of students, educational institutions and scientific organizations to Web-resources; representation of objective information, the authenticity of which can be verified; development of educational and training programs on the basis of modern information and communication technologies; improvement of the relevant standards, curricula and plans, and facilitating the formation of the students knowledge, skills and abilities necessary for the use of Web-technologies.

Thus, in general, the quality functioning of modern education is impossible without the use of information and telecommunication facilities, including Web-technologies, because it is the modern technologies that provide effective conditions for the training of specialists at a level that meets the requirements of the modern labor market. Such changes in education will realize the ideas of differentiation and individualization of education, which are the main tasks of the modern system of education in Ukraine.

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