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USE OF ELECTRONIC RESOURCES AND WEB SERVICES IN TEACHING FOREIGN LANGUAGES

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The article raises the question of the need to use network electronic resources and web services in teaching professionally oriented foreign language communication in non-linguistic institutions of higher education. The need to use a communicative approach is noted, as the introduction of new technologies involves active communication with foreign colleagues. That is why foreign language teaching in a non-linguistic educational institution is considered as an integral part of professional training for a specialist. It is noted that information and communication technologies provide information content for communication. Various Internet applications, network resources, platforms that help in foreign language learning are described in detail. The benefits of each network resource and program are revealed. It is emphasized that the application of modern computer technologies in the learning process is considered as one of the main tasks of increasing the educational efficiency at the university. It has been proven that information and communication technologies can be applied in different types of educational activities: independent information search, self-education, in classes, in extracurricular/extramural time, in distance courses. The need to create a catalog of educational resources of the Internet is considered, which introduces teachers to the possibilities of using information technologies in professional activities. The author emphasizes that the use of Internet applications, electronic and technical means stimulates language activity, communicative readiness and creativity, which is especially important when teaching professionally oriented foreign language communication. It is emphasized that Internet resources can include reference literature, educational, scientific, methodological, historical, cultural and technical information as well.

Keywords: *information and communication technologies, Internet resources, web technologies, electronic educational resources, applications, foreign language teaching.*

ВИКОРИСТАННЯ ЕЛЕКТРОННИХ РЕСУРСІВ І ВЕБ-СЕРВІСІВ У НАВЧАННІ ІНОЗЕМНИХ МОВ

O. E. Можаровська

Стаття піднімає питання про необхідність використання мережевих електронних ресурсів і веб сервісів у навчанні професійно орієнтованого іноземного спілкування в немовних закладах вищої освіти. Наголошується на необхідності використання комунікативного підходу, оскільки впровадження нових технологій передбачає активне спілкування із

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зарубіжними колегами. Ось чому іншомовне навчання в немовному навчальному закладі розглядається як невід'ємна частина професійної підготовки фахівця. Зазначається, що інформаційно-комунікаційні технології забезпечують інформаційний контент для комунікації. Детально описуються різні інтернет-додатки, мережеві ресурси, платформи, які допомагають у навчанні професійно орієнтованої іноземної мови. Розкриваються переваги кожного мережевого ресурсу та програми. Акцентовано увагу на тому, що застосування в процесі навчання сучасних комп'ютерних технологій розглядається як одне з головних завдань підвищення ефективності освіти в університеті. Доведено, що інформаційно-комунікаційні технології можуть застосовуватися в різних видах освітньої діяльності: самостійний пошук інформації, самоосвіта, на заняттях, у позаурочний/позааудиторний час, на дистанційних курсах. Розглядається необхідність створення каталогу освітніх ресурсів мережі інтернет, який ознайомлює викладачів із можливостями використання інформаційно-комунікаційних технологій у професійній діяльності. Автор робить акцент на тому, що застосування інтернет-додатків, електронних і технічних засобів, стимулює мовну активність, комунікативну готовність і творчий підхід, що особливо важливо при навчанні професійно орієнтованого іншомовного спілкування. Підкреслюється, що Інтернет-ресурси можуть включати навчальну, науково-методичну, історико-культурологічну, технічну інформацію, а також різноманітну довідкову літературу.

Ключові слова: інформаційно-комунікаційні технології, інтернет-ресурси, веб-технології, електронні освітні ресурси, додатки, викладання іноземних мов

Introduction of the issue. Today's world requires modern approaches to the learning process, and the practice of foreign languages is unthinkable without the introduction of the latest technologies. The current reforms in higher education have a significant impact on the educational process, establishing a new requirement for the preparation of a qualified specialist. The priority competences are mobility, non-standard professional thinking, responsibility for the result of learning activities, and a propensity for self-development. Modernization of education and use of new pedagogical technologies in training should be considered first of all as the most important condition for creative development of a student. Unlocking the creative potential of a future specialist requires the creation of conditions for active research activities and learning foreign languages. Since the introduction of new technologies implies active communication with foreign colleagues, foreign language learning in a non-linguistic educational institution is regarded as an integral part of a specialist's professional training. The changing position of our country on the international stage, expressed even in the expansion and strengthening of international relations in the fields of

economics, politics, education and culture, required a fundamental revision of the principles of foreign language prevention in non-linguistic universities. Mass distribution of information media has caused the active introduction and use of information and communication technologies (ICT) in the education system.

The main advantage of using information technologies in teaching is the shift of emphasis from traditional verbal methods of information transfer to audiovisual methods, which present information in the most optimal mode for assimilation and evaluation. Up to 80% of information about the world around us is received through vision, so a fundamental feature of teaching with the help of information and communication technologies is the use of information visualization (graphics, images, tables, video clips).

As we can see, the Internet fulfils two main functions: informational and communicative, due to which information and communication technologies can be used as a means of providing communication, as a resource for obtaining necessary information; and as an environment, i.e. for communication and obtaining necessary information. In the teaching process, these functions are

most often harmonized: information and communication technologies provide an information content for communication.

Modern tendencies in the development and reform of foreign-language education are the determining dominants in the increasing role of foreign languages in the general professional training of specialists. The change of conceptual approaches, goal orientations, content and variety of forms and methods of teaching a foreign language is realized systematically. Wide introduction of information and communication technologies into the process of teaching a foreign language accompanies its optimization, creates additional opportunities for searching for professionally oriented materials and integrating them into the educational process. In addition to the above-mentioned prospects, information and communication technologies make it possible to qualitatively improve the implementation of control at different stages of skills formation and abilities development of various types of speech foreign language activities.

Current state of the issue. The issues of using electronic resources in foreign language training in their works were raised by S.V. Antoshchuk, T.O. Harasym, M.Yu. Kademina, O.V. Kornilov, O.V. Ladyka, Y.M. Provorova, O.O. Rohulska, V.A. Shepitchak, O.V. Tarasova, N.S. Voronova, A.R. Zubryk. The importance of information and communication technologies and global networks for a productive educational process has been considered by such foreign researchers as H. Dompsele, M. Lebrun, M. Lynch, T. O'Reilly, M.R. Urazova, M. Wit.

Aim of research is to introduce new opportunities for using modern electronic resources and web services in teaching professionally oriented foreign language communication in higher education. To disclose this purpose, the following tasks were set: 1) to highlight the benefits of using computer technology in foreign language classes; 2) review existing network electronic resources and web services; 3) to form the goals and possibilities of using the Internet in

foreign language learning; 4) show the efficiency of using computer technologies in foreign language lessons.

Results and discussion. Modern society requires new approaches in the development of education, so the use of information and communication technologies (as it seems) is the most promising way to activate cognitive activity in higher education. Formation of systematic scientific thinking, information culture, creative activity in future specialists is the task of higher school, which can be successfully solved if the teaching of all disciplines will be organized with consideration and on the basis of the latest achievements of information and communication technologies and teaching methods. Teachers widely use the possibilities of modern computers and telecommunications directly in their academic work when teaching foreign language in classes. In recent years, the educational, laboratory and didactic training base has been significantly modernized at Vinnytsia National Agrarian University, the educational and methodological fund is constantly being updated (literature has been transferred to electronic media), and the teaching methodology is being improved.

We consider the application of modern computer technologies in the teaching process as one of the main tasks to improve the efficiency of education at the university. Computer tests are widely used at the Foreign Languages Department to control students' knowledge. Knowledge control should become one of the ways to increase motivation for learning a foreign language, and should help to establish the true state of knowledge, skills and abilities of foreign language competence. There are intermediate tests, which carry out intermediate control of knowledge, and final tests, which are carried out at the end of the academic year or semester. Such tests are means of assessing students' achievements in foreign language proficiency.

The prospect of mass computerization of the teaching process necessitates a lot

of targeted work in this area. Thus, at Vinnytsia National Agrarian University, many classrooms are equipped with the Internet system, and at each lesson, the teacher has the opportunity to use different programs depending on the goals set. It should be noted that nowadays the number of computer programs for vocabulary acquisition has increased significantly. These programs are interesting because their content is not limited to simple text presentation. They make extensive use of video clips in which the action mainly takes place within a given situation. In this case, the combination of visual and audio forms of presentation, as well as the presence of printed material, is the best way to enrich students' vocabulary.

The communicative approach is increasingly used in foreign language teaching, one of the tasks of which is to develop the students' communicative abilities. The use of the Internet in the communicative approach is motivated in the best possible way: its purpose is to interest students in learning a foreign language for the purpose of real communication (correspondence, communication in virtual space, etc.). Special requirements are imposed on the communicative training of specialists, because in the conditions of market economy it is connected with negotiating, preparing analytical materials on the development and condition of markets of goods and services, stock markets, preparing business papers. The performance of these functions is connected with the development of communicative skills: to conduct a dialogue, to defend one's point of view in a discussion, to be able to persuade, to prepare analytical reports and deliver them to an audience. At the same time, heads of enterprises, top managers note that graduates are not sufficiently prepared to perform such activities in a foreign language. The use of the Internet helps to solve this problem.

The Internet information system offers its users a variety of information and resources. A basic set of services may include e-mail, teleconferencing (Usenet),

video conferencing, and the possibility of publishing your own information, creating your own homepage and placing it on a web server. These resources can be actively used in the classroom.

Today's information and communication technologies empower teachers and educators, facilitate their work and the selection of lesson materials, optimize the learning process and help to engage students. Researcher Malika Urazova believes that "modern pedagogical technologies, such as training in collaboration, a project methodology, the use of new information technologies and Internet resources help to implement a personality-oriented approach to learning, provide individualization and differentiation of training, taking into account students' abilities, their level of training, inclinations, etc." [9: 30]. Information and communication technologies can be applied in various types of educational activities: independent information search and self-education, in classes and in extracurricular/out-of-class time, in distance courses. In this regard, full integration of Internet resources and web-service into the educational process is a matter of time. Unequivocally, "electronic resources are a promising tool for the modernization of higher education in Ukraine" [2: 10].

It can be said that electronic resources are electronic data, electronic programs or a combination of these types in one resource. Depending on the mode of access, electronic resources are divided into local access resources (with information fixed on a separate physical medium that must be placed by the user in the computer) and remote access (for example, information materials published on a particular Internet site). Web services are programs that are accessed via the Web (i.e. the HTTP protocol) and data is exchanged in XML or JSON format using one of the three most common architectural styles of application design: RPC, SOAP or REST. The user has access to the latest version of the data, as the web service resides on the servers of the company that created it, and does not

have to think about updates and the computing power required to perform the operation. There is another concept of "Web 2.0", the meaning of which is still the subject of much debate. Many researchers mean by "Web 2.0" an integrated approach to organizing, implementing and maintaining web resources. According to the definition of Tim O'Reilly [8], who in his article tried to explain the general trend of development, it is an approach built on the basis of the "Web 2.0" concept, implying the activity of users, oriented to active participation in the creation of the content of the resource. In the process of service development, both experience and opinion about the service are taken into account, which, thanks to their active participation, simultaneously improve resources, making them much more interactive (blogs, wiki, LiveJournal, social networks, etc.), and "Web 2.0" resources, in turn, give users the freedom of self-expression. Web applications as part of the "Web 2.0" concept are also worth mentioning. More and more applications are getting their web analogues, saving users from the need to install software on a local computer, which is cheaper than buying such programs.

What Internet resources can be of particular interest to teachers and students of both: language and non-language higher education establishments? Firstly, the actual educational information itself, presented by leading universities and specialists, namely tasks and tests, curricula, seminar plans, electronic textbooks, lectures. Secondly, scientific and methodological information: scientific articles and reviews, scientific books, methodological developments and manuals, catalogues and bibliographies, materials of conferences and forums. Third, historical and cultural information: mass media (newspapers, magazines, television channels, radio), government and tourism websites. Fourth, reference literature: dictionaries, reference books, encyclopedias. Fifth, technical information for creating their own web publications (templates for assignments,

HTML and VRML language, graphics and video, structure, navigation, etc.), for the effective use of various IT programs and services for educational purposes.

At the recently held meeting of the Ukrainian and Foreign Languages Department of Vinnytsia National Agrarian University, foreign language teachers had an active discussion of pressing problems. Everyone unanimously came to the conclusion that it is necessary to provide access to a larger volume of electronic educational and methodological resources for the maximum possible number of users from among foreign language teachers. In our opinion, such access can be provided by creating an appropriate Catalogue of Educational Resources on the Internet, which introduces teachers to the possibilities of using information and communication technologies in their professional activities. It should contain links to educational sites, information and educational portals, educational media sites, electronic versions of encyclopedias, dictionaries and reference books, tools for developing electronic educational resources and supporting distance learning, resources for applicants, as well as methodological recommendations for working with the Catalogue. The systematization of links to educational resources available on the Internet helps to improve the efficiency of organizational, teaching, and learning activities. The Catalogue should also contain electronic versions of textbooks, manuals, encyclopedias, dictionaries and reference books, tools for the development of electronic educational resources and support for distance learning, classified by major scientific disciplines. For humanities disciplines (e.g. foreign languages), the catalogue may contain a description of the main teaching modules. It may include information resources, resources for learning foreign languages, resources for preparation for international examinations, resources for foreign language teachers, Internet communities for professional interaction of teachers on the network. It is also necessary to have sections devoted to the

technologies of searching for electronic resources on the Internet, review of search engines, collections of electronic educational resources and search for learning tools with their help. To date, much has been done in this direction, but still not enough.

Mostly, as we can see, these catalogues contain information about resources for general secondary education. The question arises: what should we, teachers of higher education, do? We agree that some resources may be partially suitable for us, but only partially. Of course, professionals – specialists in the field of creating such learning tools, should do the development of such resources. At the same time, no such resource can be developed without the involvement of teachers. Who better than they know what, how best to present the material and in what sequence. Experience shows that, in spite of everything, teachers are engaged in creativity, which results in the creation of electronic resources that are in demand by other colleagues. The issue of electronic resources for foreign language is particularly important, but the situation is changing for the better every day. More and more teachers start to involve various web-services and Internet resources in their work, as their use helps to diversify classes, to interest students, to increase their attendance, to facilitate their learning, to combine proven traditional methods and techniques of work with a set of interactive and multimedia features. This allows implementing the principles of differentiated and individual approach to learning and thus contributing to the development of personality in the process of their own activities. They are oriented to the development of students' research skills and effectively influence the increase in the level of success in mastering a foreign language. Let us take a closer look at several types of Internet resources and web-services that teachers can use in their work.

One useful resource-intensive online application is Present.Me (<http://present.me>). The Present.Me software environment is ideal for both

students who want to keep up with the times and creative teachers who do not want to fall behind, as it includes all the necessary elements. There are many applications that allow you to create both videos and presentations. However, Present.Me is the only application that allows the user to use both video and presentation at the same time. The potential of this software environment is limitless. Present.Me hosts user information in remote data repositories, allowing students and instructors to upload Word documents, Google Docs, PDF files or PowerPoint slides (ppt, pptx), with simultaneous audio or video recording, which can then be embedded in a blog or webpage. The instructor can create content such as lectures, mini-presentations, various learning material to be learnt, choose how to save their recording, via Facebook, Twitter, LinkedIn or email the material to students. For example, when students need to repeat a particular grammar material or a passed topic, the instructor can use this software environment to give a visual explanation, saving it on the server for students to freely access their content. The PowerPoint slides will then be listed on the left and the video with the explanation on the right. In turn, students also have the option of preparing a PowerPoint presentation with a simultaneous video of their explanation. In this application, it is also available to view other users' presentations made with Present.Me, e.g., http://present.me/view/1655_66-google-chrome.

The Present.Me application is indispensable in preparing students for both: 1) conference presentations (for example, the annual conference of young scientists, postgraduates, undergraduate and graduate students in English held at Vinnytsia National Agrarian University); 2) the oral part of the exam (the presence of a webcam allows them to work in pairs, when one of the students takes on the role of an interviewer and the other, in turn, answers). The algorithm of user actions with this resource is presented at <http://www.teachertrainingvideos.com/presentme/index.html>.

We cannot ignore the fact that recently great importance has been given to reflexion, i.e. looking at oneself from the outside. In modern psychology, this term refers to any reflection of a person, which is aimed at analyzing. This can be an assessment of one's state or actions, as well as reflection on some events. The problem is that it takes a lot of time, and students do not always see the point in it. They do not like the fact that self-reflection mostly needs to be recorded in writing, which is extra work. This raises the question: why not do the reflection orally? With Present.Me, students can give feedback on the session, explaining what was useful for them in the session and what they learnt.

In the classroom, we also suggest practicing the use of the Wallwisher Internet application, the "Interactive Announcement Wall" or the Padlet service, which gives the possibility of creating virtual whiteboards, which becomes especially important during distance learning. The Padlet wall is like a sheet of blank paper on our computer, on which we can place everything we need. The clear advantage is that you can create as many walls as you need, easily change and modify the page without having to think about saving it thanks to automatic saving. Instant reconciliation is also one of the advantages, as the instructor can see each student's activity on the wall if working remotely. Padlet works on all devices, this app has no compatibility issues. The only downside, if you create a wall without registering, you will not be able to edit the wall after 24 hours. You will still be able to make entries on it, but you will not be able to change the name, settings, etc. The navigation system is also notable for this wall. To view an expanded version of a post or attached media, using the left and right arrow keys, you can easily jump from post to post. To add a post, you can simply drag and drop a file from your computer. When using a touch screen device (such as an interactive whiteboard), you must press and hold for a second before dragging. This is to prevent accidental dragging. To add advanced text formatting (bold, italic,

quote, code, lists), you should select the words to be "finalized" and the toolbar will display the necessary actions. You may use the following keyboard shortcuts: bold – Ctrl+b, italic – Ctrl+I, numbered list – Ctrl+k, bulleted list – Ctrl+j, upper index – Ctrl+l, lower index – Ctrl+h, cancel – Ctrl+z, restore – Ctrl+Shift+z, increase indent – Tab, decrease – Shift+Tab, clear formatting – Ctrl+m. If you want, you can add any file, link to videos, images, documents using the "Add link", "Upload file" or "Take a picture with webcam" option at the bottom of the post. If necessary, you can easily resize the file on non-touch devices by dragging it to the bottom right corner, on touch devices by bringing two fingers together. As for editing, only the author and the wall owner can edit or delete a post. To control posts that require your control, there is a confirmation window. Each wall has a unique URL that you can share with students. You can also embed a wall in a blog (interactive online diaries) and on other sites, subscribe using RSS, a simple and effective hypertext export technology used to create news feeds. RSS, like other Web2.0 technologies, is based on XML (eXtended Markup Language). You can use the Publish option in the taskbar to retrieve the URL, installed code, and other accessibility settings. You can make the wall available to students and even allow them to make changes to your entry. A great interface, interesting backgrounds, bright colours will give a fresh and lively perception. WordPress is currently available, which is an ideal publishing platform focused on maintaining standards and usability with blogging software. The platform is free and free to use. Information that is more complete is available at <http://wordpress.org/>.

Because of working with the wall, such projects as "How the travel and tourist industry boost economy", "Guide-book for users surfing the Internet", etc. were developed. Working in co-operation groups, students selected interesting articles, videos, pictures and links adding them to the electronic corkboard to defend the group project. In accordance with the rules of design of the interactive

"wall of announcements", it was evaluated by such criteria as ergonomics, quality of the content of the submitted texts, originality and critical approach to the articles. According to the definition of the Belgian specialist in the field of information and communication technologies integration Marcel Lebrun in the process of learning French as a foreign language allocates two categories of interactivity [6]: functional interactivity – interaction "man-machine" and relational – interaction "man-environment" (joint activity of students working on one project in virtual space). Therefore, attention was paid to both functional and relational interactivity (typing on the computer, formatting text, attaching photos, hyperlinks). This project also made it possible to fully realize the individual approach in learning, when each student received the necessary help, advice, comments. It cannot be denied that it also develops the ability to work in a team: mutual support, mutual respect, the formation of a culture of communication, the opportunity to express themselves to all students, regardless of their level of proficiency in a foreign language. For reflection, the instructor posted a list of questions for reflection, which the students had to answer after the lesson. The students, in turn, having recorded video responses, sent links to the instructor so that he or she could listen to and watch their responses. As a result, the "oral" reflection was more detailed than the previously used "written" reflection.

In terms of the variety of resources provided by the Internet for discussing ideas and developing students' critical thinking, we recommend using the "Solvr" website (<http://a.freshbrain.com/solvr/>); for teaching young students, <http://voicethread.com/>, where they can upload pictures and comment on them. The site can also be useful for working with students, as it provides a bridge between live discussions and standard video collections or presentations. Using <http://www2.shidonna.com>, students can create feed and dress animals. Moreover, the site will be useful for teachers of

English as well as German, French, Spanish, Italian, Chinese. With the help of <http://www.huddle.com/>, it is possible to work in real time in different co-operation groups with Internet users. By working with <http://www.toondoo.com/>, students will not only learn how to create comics, but can also improve their language skills and their reading, writing, speaking skills. To create subtitles for YouTube videos, we suggest using <http://ww2.subyo.com/>. There is an archive of all kinds of accents at <http://accent.gmu.edu/>. Native and non-native speakers read a short passage, which is immediately given in transcription. It can be used to compare and analyze the accents of people from English-speaking countries and to improve listening skills.

There is an interesting service created especially for educators and students – Edcanvas. Since 2013 the service has been called Blendspace, and the Blendspace application can be added to Edmodo. The service allows you to organize (collect into a single whole) materials for a lesson: documents, videos, photos, comments and so on. And this, in turn, will be interesting when used in distance learning, and simply in educational and extracurricular activities. The service supports photo and video hosting, Google Drive, Drop Box and others. It is possible to upload your own content (the limit is no more than 5 Mb one file). Using Edcanvas, you can create a collection for lessons, create a class portfolio, provide learning material in various formats for study, prepare materials for a project, and so on. Working in the classroom, students can not only get acquainted with the materials proposed for study, but also act as authors of individual materials. The work can be shared on social networks, by mail, or receive a code for embedding on the pages of websites or blogs.

To work with presentations, we recommend using PREZI and EMAZE. PREZI is an online service <http://prezi.com/> for creating presentations and demonstrating them on any number of computers. In order to

start working in this service you need to register. At the same time, you have an opportunity to choose a free version and versions designed for use at the university (students, teachers, group work). A convenient and understandable interface, the ability to implement graphic objects and text documents. Instead of standard PowerPoint-style presentations, Prezi generates one giant slide that contains the entire presentation. Each element of this giant slide can be zoomed in and out individually. With this approach, tedious work with slides turns into a more dynamic process that takes place in a three-dimensional environment. Prezi Meeting is an online service for collaborative work on presentations. Up to 10 users can work on a presentation simultaneously in real time. In this service, it is convenient to create a research project, creative search work. Having prepared presentations, you can show them at any site and on any computer with an Internet connection. In addition, the presentation can be imported for offline use.

EMAZE is the new generation of online presentations. Just a couple of clicks and you'll have a presentation with stunning design and 3D animation, as if a whole team of professionals worked on it. You just need to choose a template and your own incredible presentation is created. The main advantages of the service are:

- 1) easy creation by using modern templates;
- 2) stylish design and 3D transitions between slides;
- 3) automatic translation into many languages;
- 4) the ability to create your own presentations (you can use a computer or mobile devices);
- 5) HTML 5 support;
- 6) control presentation in automatic mode or on slides with mouse or voice commands.

Practice shows that the use of learning programs and tests in English language learning gives good results. The use of such learning programs makes the learning process more exciting and diverse. Search engines are tools on the

Internet. They cover millions of pages of printed information, as well as information in other multimedia formats. Among the most popular and useful systems for both teachers and students are the following: Alta Vista (<http://www.altavista.digital.com>); Deja News (<http://www.dejanews.com>); Education Word Search Engine (www.education-world.com); WebCrawler (<http://webcrawler.com>).

We consider computer testing as a type of technology that allows us to optimize the diagnostics and monitoring the formation of professionally directed language competence. Numerous studies reveal the advantages of computer testing, confirm its effectiveness as a technique for diagnosing the level of formation of professionally directed language competence. An effective computer-based test creates conditions for self-control, accompanies the formation of learning autonomy and is a qualitatively new diagnostic tool. These qualities can be applied to all types of testing: current, intermediate and final. Composition of a computer test and implementation of computer testing goes through several stages: 1) procedure of lexical and grammatical material selection; 2) development of test tasks and groups of questions; 3) pilot testing in experimental groups; 4) analysis of statistical data; 5) subsequent editing; 6) computer testing in all groups with repeated analysis of statistical data; 7) students' involvement in the process of test creation and editing within the framework of test tasks in the self-control mode. The most acceptable types of test tasks are "multiple choice" test questions and questions that allow "typing" answers not exceeding the total volume of up to two lexical units. The results of pilot testing, as a rule, help to reveal the quality of test tasks formulation, to determine the degree of compliance of the result obtained in the course of computer testing with the set tasks, the level of language competence formation. The analysis of statistical data already during such testing makes it possible to make further changes and adjust the tasks in

test questions, their lexical and grammatical content, to vary the level of difficulty of the proposed groups of questions. One of the significant advantages of computer-based testing over similar paper-based tests is the speed of obtaining statistical data and the possibility of timely and prompt editing. After analyzing the obtained data, the teacher has the opportunity to determine how efficiently and qualitatively the computer test was compiled, what additional language and conditional speech exercises can be proposed to study the lexical material that causes difficulties in assimilation. Having analyzed the results of the introduction of the created database of computer tests at the Vinnytsia National Agrarian University, we came to the conclusion that this form of testing offers ways to optimize the diagnosis of the forming level of professionally oriented language competence of future specialists. It has a number of advantages, namely, the

availability of the possibility to regularly replenish and modify the bank of test tasks, edit groups of test questions. In spite of the fact that at the stage of test development and approbation the teacher is required to spend a lot of time, in the process of diagnostic, intermediate and final testing the maximum time saving and quick feedback are achieved. There is a real possibility to create a large number of variants of presented tests and to study the results of their fulfilment, which helps the teacher to evaluate objectively enough the level of formation of professionally directed language competence. Students taking computer tests are given the opportunity to pass the tests in a self-checking mode in order to further study those lexical and grammatical phenomena that cause the greatest difficulty for students in their study.

After conducting semester computer tests for full-time and part-time students, we made a table of test results. The results are presented in Table 1:

Table 1

Results of semester testing of full-time and part-time students

Level	Full-time students		Part-time students	
	number of students	%	number of students	%
High	102	52,57	50	62,5
Middle	76	39	20	25
Low	16	8,24	10	12,5
Total	194	100	80	100
Average value		91,75		87,5

In total, 91.75% of full-time students and 87.5% of part-time students received high and medium levels, which indicates a high level of knowledge.

From the point of view of the quantity and quality of the tools provided to organize the work of teachers and students, the correspondence of the technologies used to the scale of the educational process, the availability of technical and consulting support from the software manufacturer (including on relevant pedagogical technologies), a developed network of users interacting with each other, it is impossible not to mention several educational platforms, such as Blackboard, Moodle, English 360, created for the provision and

management of resources and activities. The electronic format allows to use as a "textbook" not only text, but also interactive resources of any format – from a Wikipedia article to a YouTube video. All course materials are stored in the system; they can be organized using shortcuts and hypertext links. Moodle educational platform is working in Vinnytsia National Agrarian University. Moodle educational process support system with the help of information technologies provides remote interaction between teachers and students, allows teachers to organize independent work of students, pass tests and exams, and students – faster and more efficiently to obtain knowledge and check whether they are well and correctly

learned. All Moodle users can access the system from anywhere in the world via the Internet without installing additional software on their computers. Teachers can create assignments and tests with automatic scoring and analysis of work. Interactive tests, as well as tests in training programs, are good because you can find out the results immediately after answering the questions. It is also possible to share tests with other teachers. This system does not replace the traditional educational process, but significantly enriches it with additional opportunities.

An alternative for all the above-mentioned platforms can be sites created using wiki technologies, Wikis for collaborative development, storage and structuring – <http://www.wikispaces.com>.

Conclusions and research perspectives. Thus, the use of web-services and various Internet resources contributes to the intensification of the learning process, motivation of students for better mastering of educational material on professionally relevant topics and gaining additional knowledge. The use of such applications, electronic and technical means stimulates language activity, communicative readiness and

creativity, which is especially important when teaching professionally oriented foreign language communication. However, it should be remembered that despite the emergence of new effective teaching means and organization of pedagogical activity, there are still many problems that require close attention. First of all, it should be noted that not all teachers are ready to carry out professional activities using information and communication technologies, and the technical aspect and content of the available network electronic resources used in the education system leave much to be desired. In addition, there is no interconnection between the disparate means of informatization. The solution of these problems should be given priority attention.

We see the prospects for subsequent research in studying the further use of Internet resources for the formation of various abilities and skills of foreign language communication, which are an integral part of the educational process: mental operations, analysis, synthesis, abstraction, identification, comparison and contrast, verbal and semantic prediction.

REFERENCES (TRANSLATED AND TRANSLITERATED)

1. Antoshchuk, S.V. (2020). Internet-resursy ta vebservisy yak navchalni instrumenty pedahoha [Internet resources and web services as teaching tools for teachers]. In: *Orhanizatsiino-praktychni zasady rozvytku tsyfrovoho osvithnoho prostoru zakladu osvity – Organizational and practical basis for the development of the digital educational space of the educational institution: zb. mater. Vseukr. nauk.-prakt. internet-konf., 5-6 travnia 2020 r., DZVO "Universytet menedzhmentu osvity", m. Kyiv, Ukraina, 26-30 [in Ukrainian]*.
2. Provorova, Y.M., Harasym, T.O., Zubryk, A.R., Ladyka, O.V., & Shepitchak, V.A. (2020). Formation of foreign language professionally oriented competence of future foreign language teachers with the use of electronic educational resources. *Journal for Educators, Teachers and Trainers*, vol. 11(1), 1-12 [in English].
3. Rohulska, O.O., & Tarasova, O.V. (2019). Dotsilnist vykorystannia mobilnykh dodatkov u profesiinii pidhotovtsi maibutnykh uchyteliv inozemnykh mov [Feasibility of using mobile applications in the professional training of future foreign language teachers]. *Visnyk Natsionalnoi akademii Derzhavnoi prykordonnoi sluzhby Ukrainy – Bulletin of the National Academy of the State Border Guard Service of Ukraine. Seriya: Pedahohika*, vyp. 1. Retrieved from: http://nbuv.gov.ua/UJRN/Vnadped_2019_1_9 [in Ukrainian].
4. Voronova, N. (2019). Tsyfrovi osvithni resursy v teorii i praktytsi suchasnoi zarubizhnoi osvity [Digital educational resources in the theory and practice of modern foreign education]. *Profesionalizm pedahoha: teoretychni y metodychni aspekty – Teacher's*

professionalism: theoretical and methodological aspects, vyp. 9, 37-47. Retrieved from: http://nbuv.gov.ua/UJRN/prptma_2019_9_6 [in Ukrainian].

5. Cadre européen commun de référence pour les langues: apprendre, enseigner, évaluer. *Volume complémentaire avec de nouveaux descripteurs*. (2018). Paris. Retrieved from:

<https://savoir.cavilam.com/assets/courseware/v1/5514e28d3ec28f59e95b0d8d6d00e740/asset-v1:SELF+CR+1+type@asset+block/CECR-VC2018.pdf> [in French].

6. Lebrun, M. (2007) *Theories et methodes pedagogiques pour enseigner et apprendre*. Editions de Boeck Universite. Bruxelles [in French].

7. Lynch, M. (2018). *What is the Next Generation of Digital Learning Environments?* Retrieved from: <https://www.thetechadvocate.org/what-is-the-next-generation-of-digital-learning-environments/> [in English].

8. O'Reilly, T. (2005). *What is Web 2.0?* Retrieved from: <http://oreilly.com/web2/archive/what-is-web-2.0.html> [in English].

9. Urazova, M.R. (2020). Innovative technologies in teaching and studying English. *Austrian Journal of Humanities and Social Sciences*, No. 5-6, 28-37. DOI: <http://doi.org/10.29013/AJH-20-5.6-28-37> [in English].

10. Wit, M., & Dompsele, H. (2017). *How to create a digital learning environment consisting of various components and acting as a whole?* Retrieved from http://www.eunis.org/download/2017/EUNIS_2017_paper_16.pdf [in English].

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