

# *Advantages of WEB resources use in learning process*

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**Abstract**—The article deals with the issues of using Web resources in the learning process. They represent basic information about the possibility to create comfortable environments for learning processes by creating information and communication learning environments. The tasks that inspired genuine collaborative learning were characterized by a certain complexity in terms of multimodality and technology, or professional knowledge combining academic and practical experience. The authors stress the main advantages of use of Web resources in the learning process and describe various computer software used by students along with Web resources. The article is meant for public reading and for those, who are interested in creating comfortable environment during the learning process.

**Keywords**— *learning process; the Internet; web quests; multimedia; high-quality language education; Web resources.*

## I. INTRODUCTION

Rapid changes in the modern world require new approaches to achieve new quality of education, ensure a process of holistic personal development. The graduates have to meet the requirements of modern society to their education and overall development, effective digestion of learning program. It is therefore necessary to teach each student to obtain, process, evaluate and use a large amount of information in independent and practical activities.

A promising direction to develop modern education is the possibility to create comfortable environments for learning processes by creating information and communication learning environments.

The main components of this environment are high quality of education according to educational standards of new generation and teaching capabilities of information and communication technologies (ICT) and Web technologies.

The challenge to create learning environments, engaging the sensibilities of learners who are increasingly immersed in digital and global lifestyles, is equally important – from the

entertainment sources, learners choose to the way they work and learn. [7].

## II. USE OF WEB RESOURCES IN THE LEARNING PROCESS

The rapid development of computer and Web technologies will definitely result in the use of these technologies in all kinds of educational activities and will create information and educational space.

The introduction and use of teaching capabilities of the Internet, Web technologies (Web services, educational Web resources, network), software (Microsoft Word, Microsoft Internet Explorer, Microsoft Power Point, Windows Movie Maker, on-line resource Prezi) in the educational process of higher education are priority to develop the information and educational space.

It will allow organizing the learning process so that students would work actively, with interest and enthusiasm not only in the classroom, but also would study on their own, could see the results of their work and were able to evaluate them. The combination of traditional teaching methods and multimedia, including computer and using Web resources can help to solve this problem. Computer use in the classroom allows one to make the learning process more mobile, strictly differentiated, individual and interactive.

A modern computer today is a universal tool. It is able to simulate various language situations, quickly and efficiently respond to actions and requests of the student.

This method of teaching is also attractive to lecturers. It helps to better assess the skills and knowledge of students, encourages the search for new, innovative forms and methods of teaching, gives props for creativity. As the Internet grows explosively, search engines play a more and more important role for users in accessing effectively online information. Recently, it has been recognized that a query is often triggered by a search task that the user wants to accomplish. Similarly, many web pages are specifically designed to help accomplish a certain task. Therefore, learning hidden tasks behind queries and web pages can help search engines to return the most useful web pages to users by task matching [11].

However the computer only complements the learning process playing the role of a tool, which being used properly greatly increases the effectiveness of the educational process.

But the use of the Internet in the classroom should not be an end in itself as the scholarly literature contains a great number of dramatic samples of the wrong and methodologically incorrect use of web resources resulted in false stereotyping and sometimes even in racism and xenophobia [13].

To properly define the place and role of the Internet in language teaching, one first needs to find clear answers to the questions: for whom, for what purpose, when, and to what extent it should be used". [2].

All these questions need to be answered when preparing for classes.

The use of Web resources can significantly improve the efficiency of learning a foreign language. In particular, it enables students to form and develop linguistic and communicative skills, taking into consideration their personal needs and characteristics, and successfully implements the ideology of education centered on the individual.

Web resources are an invaluable base to create the information and subject environment, education and self-education for students, meet their personal and professional interests and needs. However, the mere access to Web resources does not guarantee fast and high-quality language education. These resources should form and develop:

- Communicative competence (linguistic, sociolinguistic, socio-cultural, strategic, discourse, learning and cognitive);
- Communicative and cognitive abilities to carry out search and selection, to generalize, classify, analyze and synthesize the information received;
- Communication skills to present and discuss the results of the work done using the Internet;
- Skills to use Web resources for self-education to explore knowledge in the field of the cultural and historical heritage of different countries and peoples, as well as to act as a representative of the native culture, country, city;
- Ability to use Web resources to satisfy their informational and educational interests and needs.

And they should also be analyzed by the lecturer, because most of them are not education - aimed. It is possible to analyze such resources on the basis of:

- relevance of the information;
- the linguistic complexity of the material;
- source of information (credibility, reliability, validity, etc.);
- the historical complexity of the text (references to historical facts, which affect understanding the text);

- psycho-physiological characteristics of the information (matching the age and psychological characteristics , importance for education and development).

Didactically the Internet includes two main components: forms of telecommunications and information resources.

The most common forms of communications (i.e., communication through Internet technologies) are e-mail, chat, forum, ICQ, video , web conferencing etc. that can be used for mastering writing skills. For example, today with the help of the Internet it becomes possible to correspond on-line in writing, creating an authentic dialogical communication.

In addition, the Internet provides the possibility to implement a communicative approach to teaching writing.

Due to the fact that messages on the Internet become potentially available to all users, it increases the responsibility in a foreign language use (e.g., Chat, Instagram, WhatsApp, Skype).

Originally they were created for people located at a distance from each other to really communicate. Now they are used for educational purposes in teaching foreign languages.

Textual, audio and visual materials on various subject matters in different languages are available in Web resources. Educational Web resources (IR) are created exclusively for educational purposes as a means of getting information and access to knowledge.

Search engines "WWW" allow lecturers to use authentic audio, video and text materials, introduce works of outstanding authors from the country of the target language, experience the cultures, etc.

There are five types of Web resources that can be used by students to self-educate. The Internet can help to write web quests, which can be used for individual or group work in the classroom:

1. Hotlist is a list of sites with text material on the subject matter. To create it, one needs to enter a key word into a search engine.

For example:

**Topic:** «Christmas traditions in Canada»

**Hotlist:**

<http://www.crewsnest.vispa.com/journeyusa.htm>

<http://www.christmasintheusa.com/>

<http://www.theholidayspot.com/christmas/worldxmas/canada.htm>

2. Multimedia scrapbook (multimedia draft) is a collection of multimedia resources. In contrast to hotlist, scrapbook contains photos, audio and video clips, graphics, animation, virtual tours. These files can be easily downloaded by students and used as an informative or illustrative material to study a particular subject matter.

For example:

**Topic:** «Christmas traditions in Canada»

**Websites of multimedia of a scrapbook**

**Text fails:**

<https://www.whychristmas.com/cultures/canada.shtml>  
<http://www.reindeerland.org/christmas-traditions/christmas-traditions-in-canada.htm>

<https://www.timeanddate.com/holidays/canada/christmas>

**Audio programs:**

<https://www.youtube.com/watch?v=6R-8mkXz1Co>

[https://www.youtube.com/watch?v=ySa\\_mh3zsDY](https://www.youtube.com/watch?v=ySa_mh3zsDY)

**Pictures:**

<http://www.theholidayspot.com/christmas/worldxmas/imagines/christmas-in-canada.jpg>  
<http://radio.weblogs.com/0104723/My%20Pictures/Christmas%20Stockings%20hung%20with%20care.jpg> (Christmas stockings)

3. Treasure hunt, in addition to links to various sites on the subject matter, contains questions on the content of each site. Through these questions, the lecturer can guide the search and cognitive activity of students. Finally, one essay question is asked. A detailed answer includes the answers to more detailed questions on each of the sites.

For example:

**Hunt for Canada Geography**

**Introduction**

For this class, it is required to learn about the Geographical Background of Canada:

geographical position, rivers and lakes, mineral resources, relief, climate and weather.

The Web allows you to discover much more than you may have ever thought possible and is a great complement to the materials found in the library. Below there is a list of questions about the topic of the seminar. Surf the links on this page to find answers to the questions

**Questions**

- 1) Where is Canada located? What countries does Canada border on?
- 2) What climatic zones can be found in Canada?
- 3) How does Canada relief affect the climate in the country?

**The Internet Resources**

<http://en.wikipedia.org/wiki/Canada#Geography> (Canada Geography)

<http://www.southtravels.com/canada/weather.html> (Climate)

<http://www.cdc.noaa.gov/canadaclimate/states.fast.html> (Climate Map)

**The Big Question**

Now that you have learned all this information about Geographical background of Canada, try to explain the reasons of the different population density in various parts of Canada. Why?

4. Subject sampler is the next complexity stage compared to treasure hunt. It also includes links to text and multimedia materials on the Internet.

Students must not only understand the material but also express and justify their opinions on the subject matter.

For example:

**Topic:** Formation of Canada

**Resources:**

[https://en.wikipedia.org/wiki/History\\_of\\_Canada](https://en.wikipedia.org/wiki/History_of_Canada)

<https://prezi.com/ksnapt77ur78/formation-of-canada/>

<http://www.123independenceday.com/canada/national-symbols.html>

**Questions:**

- 1.
- 2...

5. WebQuest is the most complex type of educational Web resources. This is the plan of project activities on any subject matter using Web resources. It includes all four components of the above materials and assumes carrying out the project.

For example:

**Mass Media in Canada WebQuest**

**Introduction**

This webquest is devoted to Mass Media in Canada. The media in Canada consists of several different types of communication media: television, radio, newspapers, magazines, and Internet-based Web sites.

**Task**

What types of Mass media are there in Canada? To answer this question you will need to work in small groups and complete tasks and assignments designed by your instructor.

**Process**

For the seminar on Mass media in Canada, the whole class will be divided into several groups. Each group will get one aspect of Canada Mass Media. Your task will include the following:

- study Web-based materials using links suggested;
- do additional Internet search for information on the target issue, if necessary;

- answer the questions;
- (equally) divide the material between all team members for presentation in class;
- prepare your presentations (reports).
- report to the whole class what you have learned on the topic.

### **Phase 1 – Background Information.**

For this seminar, the mass media of Canada was divided into three parts. Each group will need to study only one part and inform the whole class about its major features and subjects.

**Phase 2 – Roles.** You will be working in teams. It will be up to you to divide roles in each team. For efficiency, there should be a team leader, who will organize the work and divide the issues within each topic to make sure everything is covered and there is no overlap.

However, all team members are responsible for presenting information in class, regardless their role in pre-class preparation process.

### **Phase 3 – Reaching Consensus.**

The most difficult problem is to decide whether the mass media affects badly or not on young generation. The question of ranking the mass media as one of the source of getting knowledge is one of them.

Work in your groups. Discuss the questions and be ready to participate in the whole class discussion. You may need to do independent Internet search, if necessary.

#### **Group 1: Television in Canada:**

[http://en.wikipedia.org/wiki/Television\\_in\\_Canada](http://en.wikipedia.org/wiki/Television_in_Canada)

<http://www.museum.tv/archives/etv/.htm>

[http://www.fcc.gov/Bureaus/Mass\\_Media/Factsheets/factvchip.html](http://www.fcc.gov/Bureaus/Mass_Media/Factsheets/factvchip.html)

#### **Group 2: Radio in Canada:**

[http://en.wikipedia.org/wiki/Radio\\_in\\_Canada](http://en.wikipedia.org/wiki/Radio_in_Canada)

[http://www.psu.edu/dept/inart10\\_110/inart10/radio.html](http://www.psu.edu/dept/inart10_110/inart10/radio.html)

[http://en.wikipedia.org/wiki/FM\\_broadcasting\\_in\\_Canada](http://en.wikipedia.org/wiki/FM_broadcasting_in_Canada)

#### **Group 3: Newspapers in Canada:**

[http://en.wikipedia.org/wiki/Newspapers\\_in\\_Canada](http://en.wikipedia.org/wiki/Newspapers_in_Canada)

<http://www.theworldpress.com/press/unitedstatesofamericapress.htm>

<http://www.today.com/>

<http://www.news.com/>

### **Conclusion.**

Now that you have learned about the mass media, what seemed the most interesting for you? Support your argument

Each of the five types of educational Web resources derives from the preceding one, gradually getting more complex and thereby allowing one to accomplish more complex learning tasks. The result of the research is a presentation.

Using Internet in the learning process, lecturers need to determine whether these resources are appropriate, and decide which goals can be achieved by use of a particular resource.

Educational Web resources can be used in various types of learning processes such as use of authentic Web resources for classes, independent work of students to find the necessary information on the subject matter when making a presentation of the selected material.

Furthermore, when students tell how they have worked on assignments, they at the same time explain how their knowledge is designed through social and textual practices. Reflections on these practices are relevant to developing their awareness of didactic design in their future profession. [8]

However, the technical means are not the key factor for the learning process. They are only an effective means of teaching a foreign language. Therefore, there can be a highlighted number of didactic tasks in teaching foreign languages. These tasks can be accomplished by independent and practical work using information technologies:

- improvement of reading, writing, speaking, listening skills;
- enriching active and passive vocabulary;
- getting cultural knowledge;
- creating a culture of communication;
- creating elements of global thinking;
- creating the sustained motivation of cognitive activity,
- needs to use the foreign language for genuine communication;
- creating team-building skills.[15]

### **III. USE OF SOFTWARE IN RESEARCH PROJECTS**

To accomplish these tasks, various computer software are used along with Web resources. Learning designs can be created by teachers or negotiated with learners .... [5]. These computer programs are Microsoft Power Point, Windows Movie Maker, on-line resource Prezi [12], computer-based training program.

To analyze the use of Web resources when preparing research projects, a working group of 100 first and second year students was involved.

Working on the presentation of the subject matter, students select most interesting phenomena, events, facts. When discussing, the most urgent problems of mutual interest are identified.

When preparing presentations, the students identified the following peculiarities of their work:

1. Suitability (i.e. the suitability of thinking processes to the development level of students, their perception level, memory, attention, emotional sphere, as well as motives, interests, students' past experience are considered; organizing an appropriate teaching mode for each student; the use of various methods, forms and teaching aids, taking individual differences between students into account).

2. Activity (group work creates psychological and pedagogical environment for the students, and they can be active in creative thinking, simulation and imagination, perception and memory).

3. Voluntary participation (conscious desire of a student to achieve results, overcoming difficulties).

4. Creativity (demonstrated in the process of self-tasking, problem-solving, adjustment of activities).

5. The absence of the teacher (it can occur either in the absence of the teacher, or with minimal guidance and indirect support).

6. Willingness to communicate in a foreign language (a student, studying any learning material, not just absorbs new information, but tries to include himself in carrying out tasks).

7. Comfortable environment (a favorable emotional climate in the group).

Presentations are a powerful tool that helps to send its message in the most effective and visual way. Typically, the Power Point is used to create presentations. It is a part of the Microsoft Office applications.

Recently, however, a sufficient number of alternatives have been created, many of which provide no fewer opportunities.

One of the best examples of such tool is Prezi for interactive presentations.

When analyzing the students' presentations, it was found out that 59% of students used Prezi, 34% preferred Power Point and the rest 7 % used other software [Fig.1].

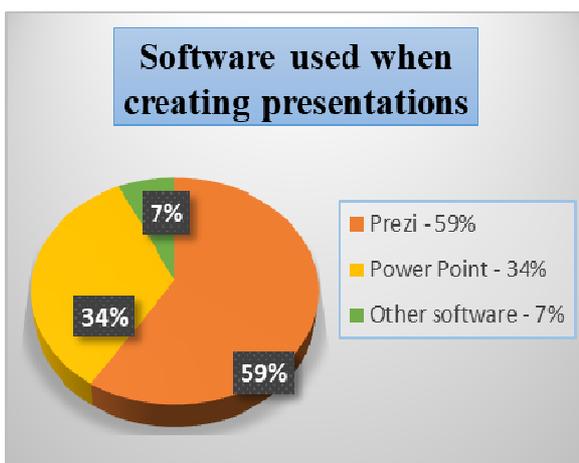


Fig. 1. Software types for presentations

The results of the questionnaire identified the following advantages of Prezi:

1. The main advantage of this web resource is the possibility to easily prepare a nonlinear, multi-level presentations, as Prezi.com is a social service.

2. Therefore they can be multi-authored, and this quality can be used when working on collaborative projects.

3. Work on the presentation in Prezi allows one to explore further the proposed subject matter, to get communicative skills on the Internet, to make some leaps of imagination and develop a creative online product.

It can be concluded that the use of the Internet has expanded the range of real communicative situations, increased motivation of students, allowed them to apply their knowledges and skills, speech skills to accomplish real-life communicative tasks more effectively.

Therefore, the relevance and necessity of using Internet in learning a foreign language is not in doubt. It contributes to the renewal of diplomas, enables an activity-based approach in learning and successfully forms communicative and information competence of students.

### Notes

Job-specific training and elective courses most fully provide the opportunities of educational Web resources. Communicative skills play a leading role in the educational process.

Additionally, the use of new information technologies in the learning process allows the lecturer to implement his/her creative teaching ideas, to exchange experiences with colleagues and to receive prompt response. And it gives students the opportunity to choose an individual plan of training: the system of training tasks and objectives depending on the language proficiency, ways of controlling and correcting knowledge.

Thus, the basic requirement of the modern education is implemented: i.e. development of self-education skills, culture of self-determination, personal development in students.

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