

**19<sup>th</sup> PCSF 2019**  
**Professional Culture of the Specialist of the Future**

**WEBQUEST IN TEACHING STUDENTS**

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*Abstract*

The aim of this article is to substantiate the expediency of using WebQuests in teaching English at universities with the help of generalizing our own experience. The article attempts to analyze a perspective trend in the methodology of teaching English in the modern computerized world, which affects the implementation of educational tasks at all levels of education and dictates the need to use Internet resources. In the context of the outlined problems, a description of the experience in compiling WebQuests can be offered. The definition of the WebQuest is given based on the structure and type of the educational activity. The authors differentiate types of WebQuests and their significance for the teaching-learning process. It is stated that the results of the web quest, depending on the material being studied, can be presented in various forms. The article tackles the basic structure of the web quest. The attention to the teacher role in the process of work is attracted, as his focus on the tasks that he sets for himself and on the individual characteristics of his students is essential. The procedure of creating a template for a quest is described with certain details. It is mentioned how to assess the results of the quest. The article estimates the role of WebQuests in the process of teaching English.

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**Keywords:** WebQuest, communicative language teaching, modern educational technologies.



## 1. Introduction

Our world is changing rapidly, the requirements for future professionals are changing along with them. The role of rapid retraining from one profession to another is increasing. Scientific subjects no longer have clear boundaries. It is assumed that during his life a person will change his occupation several times. Even now “competitive specialist should possess not only technical knowledge (hard skills), but also a set of humanitarian qualities and competences such as ability to work in a multidisciplinary team, possession of effective argumentation and communicative competence in general (soft skills)” (Burenko, Sidelnik, & Melnik, 2016, p. 513). The speed of obtaining information has increased greatly. This means that the graduate must take out of university not only a certain amount of knowledge, but also the skill of life-long learning. In addition, he must master certain abilities – the abilities of collecting, processing and analyzing information. The projective technique allows to solve these problems.

The focus of teaching a foreign language at the present stage is using a communicative approach in teaching – “the process of learning a foreign language by studying this language and inculturation, i.e. adaptation to cultural norms” (Sidelnik, Melnik, & Lutsenko, 2018, p.654). As more students gain access to the Internet, there is growing pressure on teachers to help their students use this valuable resource as an effective study tool. This article is aimed to describe a particular kind of projective technology that has become an integral part of higher education instruction.

### 1.1. Definition, general description, and types of tasks of a web quest

There are various definitions of WebQuests. The first to develop the definition and structure of this type of educational activity was Bernie Dodge, professor of educational technology from San-Diego State University. Dodge (1995a) defined WebQuest as “an inquiry-oriented activity in which some or all of the information that learners interact with comes from resources on the Internet...” (p. 10). Barguzina (2011) believes that “the WebQuest is an informational and virtual educational platform for applying various methods and techniques of teaching English” (p. 81), especially those that have constructive problem-search nature.

The generalized definition of a WebQuest used in Internet resources is that it is an inquiry-oriented lesson format in which most or all the information that learners work with comes from the various web sites. A web project can be created by using various programs, including a simple word processing document that includes links to websites, collecting materials on the Internet for a particular topic, to solve any problem using these materials.

The works of Galustyan (2015), Mezentseva (2017), Renau and Pesudo (2016) are devoted to the use of the web quest as a promising technology of teaching a foreign language of a professional orientation. The authors come to a consensus that the WebQuest has a great didactic potential in the development of both language and professional, as well as information competencies of students.

WebQuest creator Bernie Dodge (1995b) particularizes a WebQuest as “built around an engaging and doable task that elicits higher order thinking of some kind. It's about doing something with information. The thinking can be creative or critical, and involve problem solving, judgment, analysis, or synthesis. The

task has to be more than simply answering questions or regurgitating what's on the screen” (p. 10). According to the structure suggested by Bernie Dodge (1995a), WebQuests can be divided into:

1. Introduction
2. Task
3. Process
4. Evaluation
5. Conclusion
6. Credits
7. Teacher Page (Comments for the teacher).

This generalized structure can be used as base for a teacher that can be adjusted to the needs of the students.

Some authors (March, 2004; Pérez Torres, 2005) distinguish the following types of tasks for WebQuests.

- Achievement of consensus - development of a solution to an acute problem.
- Analytical task - search and systematization of information.
- Compilation - transformation of the format of information obtained from different sources: the creation of a book of recipes, a virtual exhibition, a time capsule, a culture capsule.
- Creative task - creative work in a particular genre - the creation of a play, poem, song, video.
- Detective, puzzle, mysterious story - conclusions based on conflicting facts.
- Evaluation - the rationale for a particular point of view.
- Journalistic investigation - an objective presentation of information (separation of opinions and facts).
- Persuasion - the inclination of opponents or neutral-minded persons to their side.
- Planning and design - developing a plan or project based on predetermined conditions.
- Research - the study of various phenomena, discoveries, facts based on unique online sources.
- Retelling - demonstration of understanding of the topic based on the presentation of materials from different sources in a new format: the creation of a presentation, poster, story.
- Self-knowledge - any aspect of personality research.

These tasks cover a separate problem, academic subject, topic, and may be interdisciplinary. There are two types of WebQuests: for short-term work (goal: deepening knowledge and their integration, designed for one or three classes) and long-term work (goal: deepening and transforming students' knowledge, designed for a long period - maybe for a semester or academic year). A feature of an educational WebQuest is that some or all of the information for independent or group work of students with it is on various websites. The theme of WebQuests can be very diverse, problem tasks may vary in the degree of complexity. The results of the web quest, depending on the material being studied, can be presented in the form of an oral presentation, a computer presentation, an essay, a web page, etc. The basic structure of the WebQuest includes four main sections, although there are quests consisting of six components. When composing a web quest, a teacher should first of all focus on the tasks that he sets for himself and on the individual characteristics of his students.

## **1.2. Advantages of using a WebQuest in teaching-learning process**

Information and communication technologies play a significant role in the developing a communicative competence, since they not only implement a personality-oriented approach in education of the 21st century, but also education of the 21st century is impossible without computer tools in the era of information, the widespread use of computers, and the creation of a global computer information network on the Internet. For the younger generation, the main audience of universities, called generation Y (Generation Dot-Com) and generation Z, according to many authors (Considine, Horton, & Moorman, 2009) the perception of audiovisual information is more familiar than the reading of the printed information. They are history's first "always connected" generation. Steeped in digital technology and social media, they treat their multi-tasking hand-held gadgets almost like a body part. A wide range of computer-aided educational materials makes it possible to introduce information and communication technologies into various forms of education (classroom, extracurricular, distance, blended).

However, recent research indicates that students are easily frustrated when they interact with text resulting from an Internet search because they are not instantly gratified in their rapid search for immediate answers and may adopt a "snatch and grab philosophy" (Sutherland-Smith, 2002). They often make hasty, random choices with little thought and evaluation. T. March (2008) argues that it is newly acquired information undergoes an important transformation within learners themselves.

Currently, at universities, especially technical ones, the majority of students use modern information technologies proficiently. Moreover, they like this form of work very much, they spend long hours "surfing" the network. The teacher can use this interest in teaching-learning process. This task is simplified by the Internet resources that are directly related to education.

Tasks using Internet resources can be different: Hotlist; Treasure hunt; Subject Sampler; WebQuests; Web blogs; etc. Sample tasks can be found at the following sites:

<http://webquest.org/>

<https://englishteaching101.com/category/web-quest/>

<http://www.Webquest Garden>

## **2. Problem Statement**

The aim of this article is to substantiate the expediency of using WebQuests in teaching English at universities with the help of generalizing our own experience. The main task of a modern University teacher is to keep pace with the times. That is why using everything that enables a teacher to demonstrate his efficiency to students is crucial, it can create the atmosphere of partnership and cooperation between teachers and students.

### **2.1. Stating arguments in favour of WebQuests**

In our opinion, there are three groups of arguments in favor of WebQuests as a technology that meets the spirit of our time.

In the first and most important group, we would refer the arguments directly related to educational activities. Work in project groups contributes to the achievement of several goals at once:

- • increased motivation to learn;
- • development of self-education skills;
- • formation of new competencies;
- • realization of creative potential (for example, website design);
- • Development of critical thinking skills, such as comparison, classification, ability to persuade (inducing), to make a conclusion (deducing), to generalize (abstraction), to analyze mistakes, to formulate arguments. Thus, communication is the main goal of learning a foreign language.

The second group can be conditionally associated with the demands of modern society. Currently, in various areas of activity there is a shortage of specialists capable of working together in a team, assigning roles and responsibilities, solving emerging problems, and being able to adequately assess the result obtained. Therefore, the work of students in this version of the project activity, like a web quest, will diversify the learning process, make it lively and interesting. And the experience gained will show results in the future. The work on such projects develops the following competencies:

- use of IT for solving professional tasks (including for searching the necessary information, processing work results in the form of computer presentations, web sites, flash movies, databases, etc.);
- teamwork (planning, distribution of functions, mutual assistance, mutual control);
- the ability to find several ways to solve a problem situation, to determine the most rational option, to justify your choice.

The third group of arguments can be attributed to purely psychological field. It is curious that in the top 10 fears of humanity, death is in the sixth place, and the fear of public speaking is in the first place. A well-conducted WebQuest implies the obligatory pre-defense and defense stages of projects with presentations by the authors, with questions and discussions. Thus, with the help of careful preparation and repeated repetition of the selected material, which is presented first in their own small group, and then in front of the audience, the skill of public speaking, which is so often necessary for further professional activity, is gained. In addition, success in this type of work can enhance personal self-esteem.

There is a large number of ready-made educational quests on the Internet, for example, the Site of the British Council (n. d.) can provide great help in studying this issue.

## **2.2. Creation of an evaluation form**

A WebQuest is a complex task, therefore the assessment of its implementation should be based on several criteria, focused on the type of a problem assignment and the form of presentation of the result.

B. Dodge (2001) recommends using 4 to 8 criteria, which may include an assessment of:

- multimedia presentation,
- oral presentation,
- originality of work,
- quality of reasoning,
- research and creative work,
- skills in the microteam,
- written text, etc.

To create an evaluation form, you can recommend a template on the Site of the British council (n. d.). A more detailed description of the different types of tasks for WebQuests and recommendations for their development in English can be found at the Site of the Center of linguistic and methodological information resources of the Institute of distance education of Novosibirsk state technical University (n. d.).

### **3. Research Questions**

In this work we attempt to dwell on the efficacy of using WebQuests in classroom activities as a possibility to involve all students and provide them with an opportunity to work not only in class, but also at home, or at any other place available, taking into account modern requirements in teaching-learning process, that imply constant access to the resources and continuous educational activity. We are to answer the following questions:

1. whether it is a time-consuming process for a teacher – to make a WebQuest template for students, the time students spend on activity, bearing in mind that time is valuable not only for teachers, but also for students;
2. whether students' passion for fulfilment of the task is being saved during the whole process;
3. whether the results of the activity will be applicable in further teaching-learning process.

#### **3.1. The description of a quest created for the first-year students**

The quest on “How we will remember 2018” was developed for the students' focus group. The general idea was borrowed from the British Council website. Every first-year student at our universities writes a diagnostic test in English at the first lesson. The students are streamed according to their level of the language. Those who proved to have Intermediate and Upper-Intermediate, receive regular tasks in the form of preparing small news reports, watching and discussing films, reading fiction and professional resources. The above mentioned techniques can enhance students' enthusiasm in learning the language.

The motivating moment was that for students, 2018 is the year of finishing school and entering the university. It is already a landmark in their lives. The task of the quest participants to highlight the most important thing in the life of the entire planet, which will distinguish this year from others over time. They were offered to cover the following topics: Culture, Economics, Politics, Science and Sports.

5. The process of summarizing and evaluating results.

After summarizing the results of all the quest participants, you should have an events calendar of 2018. In total, twenty students of various specialties were asked to break into microteams according to their interests.

A WebQuest can be created in MS Power Point using hyperlinks, but such tasks can also be created using the school site designer, which is more preferable because with all the components of the quest will be presented in the form of a web page. For the convenience of publication, the project was converted to an MS Word document. The content of this WebQuest is offered below.

1. The introductory part (Introduction), where the topic is introduced, key words and concepts, gives an overview of the whole quest. The main requirement is clarity.

## Introduction

2018 is the most special year in your lives. It was a life-changing experience for you. You finished schools and entered our university. Many of you left your homes. You met so many wonderful people. Let us consider what was special about this year in the whole world.

2. The central task is understandable, interesting and doable. The roles of each participant and the final result of independent work are clearly defined (for example, a series of questions asked, answers to be found, a problem to be solved, a position to be protected, and other activities aimed at processing and presenting the results based on the information collected).

## Task

I would like you to produce a booklet containing information about the most memorable events of the year 2018. This booklet should be informative and brief.

To fulfil the task, you will work in groups of 4. Follow these instructions:

From the site <http://en.wikipedia.org/wiki/2018> choose each of these categories (group work):

Group 1 – Culture

Group 2 – Economics

Group 3 – Politics

Group 4 – Science

Group 5 – Sports

- Write a short summary of your part of information.
- Write short essays about your point, and include pictures (individual work).
- Edit and produce a booklet. Share your information with other groups (group work).
- Do a questionnaire with a self-evaluation of your work (individual work).

3. A guide to actions (Process) gives a step-by-step description of the procedure of work. The teacher provides a list of information resources (in electronic form - on CDs, video and audio media, in paper form, links to resources on the Internet, website addresses on the subject) necessary to complete the task. This list should be annotated.

### Process 1 – Collecting data about the year 2018

- Think about the past year. What prominent events can you recollect?

Make a list of three brightest events, and compare it with your partner. Do you have any coincidences?

- Work in groups of 4. Read the Wikipedia site with the list of events from the year of 2018.

You will notice that the information on this website is listed for each month of the year.

Pick up the events according to your topic. You can click on each story's headline to read a bit more about it.

Try to find additional information on other web sites.

### Process 2 – Information summaries to the editorial board

Tips for your summary:

- • Include at least three proper names. (Look up the words in a dictionary to make sure you pronounce them properly).
- • Don't neglect the discourse markers.
- • Include the links where you found your information.
- • Practice your presentations several times with your group, trying to make it as emotional as possible.
- • The Editorial Board may ask you questions about your presentation – be ready to say more than what you prepared.
- • A good idea is to use pictures to illustrate your presentation.
- • Your report should be brief – about 120 words.
- • Present your summaries to the Editorial Board, trying to speak rather than read.
- • The Board will decide on which presentation is best for each category, and tell you their decision at the end of the lesson.

Tips for the editorial board:

Making decisions ask yourself:

- • Is the information important?
- • Is the language used accurate enough?
- • Could the presented pictures be useful in the final booklet?

The list selected by the students in the end was somewhat different from the one given in the assignment, but it was their choice. As a result, the following sections were included in the booklet:

1. The Best Films of 2018.
2. The Best Computer Games 2018.
3. The Most Important Researches in 2018.
4. The Best Books of 2018.
5. The New Gadgets of 2018

Process 3 – Producing the booklet.

After the presentation you are going to produce *The booklet about the year of 2018*, with the most important information for each of the given categories.

As a basis for your booklet you may use your original summary, but this time you will need to include more details, so this article should be two times bigger.

Exchange your articles for proof-reading. Pay attention to the following parameters.

Structure: Is the information divided into paragraphs?

Content: Is the information clear and worthy?

Language:

- Are the tenses appropriate?
- Is the use of English as correct as possible?
- Is there a good range of vocabulary?

Correct your article if needed.

Decide on what pictures you would like to use and on their place in the booklet.

#### Process 4 – Producing the booklet

• The Editorial Board of ‘The booklet about the year of 2018’ should put separate pieces of information together into one booklet. You will need to discuss the following issues:

- What design will the pieces of information have?
- What order will you put the pieces of information in?
- What pictures will you include?
- What will the cover of the booklet look like?
- Will they all have the same fonts, layout, or will each part be different?
- After making a decision you should work together to produce ‘The booklet about the year of 2018’.
- Hand out the booklets around the class.
- Discuss whether the project was a success, what could have been improved.

4. Conclusion (Evaluation), where the assessment is carried out, summarizes the experience that was obtained by the participants in the performance of independent work on the web quest. The teacher provides a description of the criteria and parameters for evaluating a web quest, and may show as an example a successfully completed quest of similar content. Evaluation criteria depend on the type of learning tasks that are solved in the web quest. An interesting point is the comparison of self-assessment with the assessment of the result obtained by representatives of other groups. Experience shows that the students themselves are the harshest judges of the works. We would like to emphasize the importance of the final stage, when a public presentation of the work performed is made. Here it is necessary to organize a constructive discussion and open assessment of their own work and the work of other students. It is important to learn to be correct in making comments, to be able to identify and note the positive moments and the most interesting findings in the tasks performed, to be able to explain and defend one's point of view. Posting a WebQuest on the Internet greatly enhances students' sense of responsibility for the end result, as well as motivation.

#### Self-evaluation

It is now time get a feedback. Fill in the following questionnaire, and give it back to your lecturer.

I found the group work challenging because ...

My English has improved during this project because ...

The next time I work in a team I'd like to ...

What did I find out about producing a ‘booklet’?

What did I learn about browsing the Internet?

What did I learn about the past year?

## **4. Purpose of the Study**

The purpose of the study implies dwelling on the efficacy of using WebQuests in classroom activities as a possibility to involve all students and provide them with an opportunity to work not only in class, but also at home, or at any other place available, taking into account modern requirements in teaching-learning process, that imply constant access to the resources and continuous educational activity. We managed to answer the following questions:

1. Whether it is a time-consuming process for a teacher – to make a WebQuest template for students, the time students spend on activity, bearing in mind that time is valuable not only for teachers, but also for students. The teacher
2. Whether students' passion for fulfilment of the task is being saved during the whole process;
3. Whether the results of the activity will be applicable in further teaching-learning process.

### **4.1. The answers to the stated questions**

The advantages of the activity connected with the use of WebQuests are obvious:

1. The teacher does not spend hours preparing assignments for his students. The set of tasks can be deduced while cooperating with students that implies their involvement from the beginning. Students are engaged into the activity gradually, they can plan their time rationally, work at any location they are, involve any resources they need.
2. Students' passion and motivation to proceed with working is maintained by the creativity of the task itself, their independent work, and aiming at getting result.
3. The activity gained our praise as the opportunity to develop skills of creating an oral presentation, a computer presentation, an essay, a web page. It can be integrated into the teaching-learning process naturally.

### **4.2. The practical application of our experience**

Depending on the topic suggested for WebQuest activity, students can gain useful information from the sources they value. The teacher and students learn about each other preferences, get the skill of effective and resultative mutual work.

## **5. Research Methods**

While working with WebQuests, analysing its efficiency and productivity, we used two groups of methods that help us in estimating the implementation and integration of WebQuests into the educational activity: quantitative and qualitative. The justified combination of both can provide the objective character of our paper.

### **5.1. Quantitative methods**

Quantitative methods of data collection and analysis helped us in getting objective information about WebQuestuse. In our research we used calculations allowing us to summarize the results got and evaluate them.

While tackling the results, we used a descriptive method and inferential statistics to analyse the data.

## 5.2. Qualitative methods

In the research all phenomena are described in a narrative fashion that allows to get rich, in-depth, narrative description of samples. After in-depth analysis, we summarized and generalized the data.

## 6. Findings

As the result, we can estimate WebQuests as valuable input into teaching-learning process.

### 6.1. Practical results

WebQuests can be used in class, these technologies can be integrated into other forms of education (extracurricular, distance, combined). Students get practical knowledge of making comparison, classification, ability to persuade (inducing), at the same time they are taught how to make a conclusion (deducing), to generalize (abstraction), to analyze mistakes, to formulate arguments.

### 6.2. Theoretical results

The WebQuest makes educational environment open, interactive, accumulating joint knowledge and experience, provides mutual evaluation and monitoring.

## 7. Conclusion

The design of the WebQuest is described and some findings related to its implementation are qualitatively reported. The results of the self-assessment of student reviews show that this type of work actually enhances motivation, learning efficiency, develops the ability to work both independently and in a group, the ability to evaluate the work done, both his and others. Thus, if we consider the achievement of the goal as the main criterion of success, this method fully justifies its effectiveness. In conclusion, the correctly chosen topic, supported by various material on the Internet, will provide teachers and their students with a lively, interesting and memorable lesson.

Work in project groups contributes to the achievement of increased motivation to learn, develops self-education skills, forms new competencies, realizes creative potential, develops critical thinking skills. Communication becomes the main goal of learning a foreign language.

## References

- Barguzina, E. I. (2011). *Veb-kvest tekhnologiya kak didakticheskoe sredstvo formirovaniya inoyazychnoj kommunikativnoj kompetencii (na primere studentov neyazykovogo vuza) [WebQuest technology as the didactic means of foreign language communicative competence formation (on the example of non-linguistic high school)]* (Doctoral dissertation). Moscow humanitarian university. [in Rus.]
- British council (n. d.). *Webquests*. Retrieved from <https://www.teachingenglish.org.uk/article/webquests>
- Burenko, L., Sidelnik, E., & Melnik, O. (2016). Engineering Discourse in the Structure of the ESP Training at Southern Federal University. *Universal Journal of Educational Research*, 4(3), 511-515. <https://doi.org/10.13189/ujer.2016.040306>

- Considine, D., Horton, J., & Moorman, G. (2009). Teaching and Reaching the Millennial Generation Through Media Literacy. *Journal of Adolescent & Adult Literacy*, 52(6), 471-481. <https://doi.org/10.1598/JAAL.52.6.2>
- Dodge, B. (1995a). *Some Thoughts About Webquests*. Retrieved from [http://www.webquest.org/sdsu/about\\_webquests.html](http://www.webquest.org/sdsu/about_webquests.html).
- Dodge, B. (1995b). WebQuests: A technique for internet-based learning. *Distance educator*, 1(2), 10-13.
- Dodge, B. (2001). *A Rubric for Evaluating WebQuests*. Retrieved from <http://webquest.org/sdsu/webquestrubric.html>
- Galustyan, O. V. (2015) Praktika primeneniya veb-kvesta v obuchenii anglijskomu yazyku (The Practice of WebQuest implementation in Teaching English) *Vestnik VGU. Seriya: Lingvistika i mezhkul'turnaya kommunikaciya*, 2, 116-122. [in Rus.]
- March, T. (2004). The Learning Power of WebQuests. *Educational Leadership*, 61 (4), 42-47. New Needs, New Curriculum.
- March, T. (2008). *What WebQuests are (Really)*. Retrieved from [http://bestwebquests.com/what\\_webquests\\_are.asp](http://bestwebquests.com/what_webquests_are.asp).
- Mezentseva, M. E. (2017). Quest as a modern technique among interactive ways of teaching foreign languages. *Teaching Methodology in Higher Education*, 6(21), 75-83. <https://doi.org/10.18720/HUM/ISSN 2227-8591.21.8>
- Pérez Torres, M. I. (2005). *Diseño de Webquests para la Enseñanza/Aprendizaje del Inglés como Lengua Extranjera: Aplicaciones en la Adquisición de Vocabulario y la Destreza Lectora [Webquests design for Teaching / Learning English as a foreign language: applications in vocabulary acquisition and reading skills]*. (Doctoral dissertation) Granada: Servicios Editoriales de la Universidad de Granada. [In Sp.]
- Renau, M. L., & Pesudo, M. (2016). Analysis of the implementation of a WebQuest for learning English in a secondary school in Spain. *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, 12(2), 26-49.
- Sidelnik, E., Melnik, O., & Lutsenko, N. (2018). ESP as a Tool to Develop Social Capital at University. *European Proceedings of Social and Behavioural Sciences*, 51, 652-659. <https://doi.org/10.15405/epsbs.2018.12.02.71>
- Sutherland-Smith, W. (2002). Weaving the literacy Web: Changes in reading from page to screen. *The Reading Teacher*, 55(7), 662-669.
- The Center of linguistic and methodological information resources of the Institute of distance education of Novosibirsk state technical University (n. d.) *Webquest*. Retrieved from <http://www.itlt.edu.nstu.ru/webquest/wqtemplatetrtbd.htm>
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