

DESIGNING WEB-QUESTS: THEORY AND PRACTICE

СТВОРЕННЯ ВЕБКВЕСТІВ: ТЕОРІЯ ТА ПРАКТИКА

Current education paradigm tasks ESP teachers to improve the quality of learning experiences, as well as to create a supportive and productive learning environment allowing students to build relevant knowledge and develop required skills. It is rather challenging task due to the increasingly growing amount of constantly updating information needed to be absorbed. Thus, ESP teachers are to refocus their teaching strategies and adopt new approaches to meet the challenges, incorporate facilitative technologies and to provide models and opportunities for effective and ample practice of handling the information load. Results of recent studies reveal that web-quests could be a powerful learning environment with a great potential to enhance training quality. The growing recognition of web-quests as a promising teaching format with the potential to contribute in training quality owns to valid up-to-date content accessibility; ample visual support (graphics, charts, animation, video etc.); contextualized language; collaborative and individual learning modes; learning-by-doing concept.

However, the increasing popularity of educational web-quests has given rise to the concerns regarding the varying qualities of educational web-quests. Since there are many sources available online are considered as web-quests while not fitting the basic criteria and more and more practitioners are willing to create and employ the quests in their classes, the quality and proper design issues should be considered and highlighted.

The author presents the summarized information on critical criteria, design and quality issues. In addition, a technical solution for designing web-quests is presented. The author describes the positive personal practical experience of utilizing Zunal.com for designing educational web-quests to include them in the ESP university class. The described solution has an intuitive navigation, does not require a high level of computer literacy and coding skills, offers ready-made templates and other features that ensure the quality and criteria correspondence. Therefore, the author considers it as the one that might assist instructors and teachers to design high-quality web-quests to facilitate students in acquiring meaningful learning and enhance the learning process.

Key words: web-quest, criteria, design, model, technical solution, Zunal.com.

Сучасна освітня парадигма стимулює викладачів ESP неперервно покращувати якість навчального досвіду майбутніх фахівців, а також створювати сприятливе та

продуктивне навчальне середовище, що дасть змогу студентам формувати відповідні знання та розвивати необхідні навички. Це досить складне завдання через постійно зростаючий обсяг інформації, яку потрібно сприйняти та засвоїти. Таким чином, викладачі іноземної мови професійного спрямування мають переорієнтувати стратегії викладання та застосовувати нові підходи для подолання викликів сьогодення, включити технології, що сприяють, та запропонувати моделі та можливості для ефективної та широкої практики опрацювання інформаційних масивів.

Результати досліджень із теми демонструють, що вебквести можуть бути потужним навчальним середовищем із великим потенціалом для підвищення якості навчання. Визнання та популяризація вебквестів як перспективного формату викладання відбувається завдяки таким їхнім характеристикам: доступність актуального контенту; широка візуальна підтримка (графіка, діаграми, анімація, відео тощо); контекстуалізована мова; режими спільного та індивідуального навчання; реалізація концепції «навчання на практиці».

Однак популярність та поширення навчальних вебквестів викликає також занепокоєння щодо їх якості. В Інтернеті є багато доступних джерел, що називаються вебквестами. Однак не всі вони відповідають основним критеріям. Враховуючи бажання та готовність викладачів використовувати готові вебквести або створювати власні для роботи зі студентами, варто більш детально розглянути питання якості та належного дизайну вебквестів.

У роботі автор подає узагальнену інформацію про основні критерії, вимоги до дизайну та якості навчальних вебквестів. Крім того, представлено технічне рішення для розробки вебквестів. Автор описує позитивний особистий практичний досвід використання Zunal.com для розробки освітніх вебквестів. Описане рішення має інтуїтивно зрозумілу навігацію, не вимагає високого рівня комп'ютерної грамотності та навичок кодування, пропонує готові шаблони та інші функції, що забезпечують відповідність якості та критеріям. Тому автор вважає, що це може допомогти викладачам у процесі розробки якісних вебквестів.

Ключові слова: вебквест, критерії, дизайн, модель, технічне рішення, Zunal.com.

UDC 378.147:004:811.11
DOI <https://doi.org/10.32843/2663-6085/2021/32-2.36>

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Problem statement. ESP university course aims at enabling students to use English efficiently and fluently in their future professional settings. Current education paradigm tasks ESP teachers to improve the quality of learning experiences, as well as to create a supportive and productive learning environment allowing students to build relevant knowledge and develop required skills. It is rather challenging task due to the increasingly growing amount of constantly updating information needed to be processed

for further productive use. Thus, ESP teachers are to refocus their teaching strategies and adopt new approaches to meet the challenges, incorporate facilitative technologies and to provide models and opportunities for effective and ample practice of handling the information load.

Reading is one the core skills for university students, as they have to absorb massive amounts of information in academic settings and throughout their future career. Nowadays, English is the medium in

every domain of communication, both in local and global contexts and it is becoming increasingly true as international relations are expanding. Since the majority of the topical information is provided in English, it is used for the purposes of academic, career and social productive performance. Therefore, developing reading skills is one of the main goals in the university ESP class. However, nowadays it is vital to read in a more active way than ever before. It involves deep and complex engagement that includes analysis, interpreting, evaluating etc. Nowadays, students are to be taught to read critically.

Theoretical framework. A large body of recent studies evidence the positive results of Web-based activities in foreign language classes. Since World Wide Web grants access to an infinite amount of valid authentic resources, educators accept it as a viable environment, which facilitates the process of establishing the connection between learning and real world [1; 5; 8]; has a great potential to compliment a course and assignments with topical and up-to-date content [5; 6; 14]; supports crossdisciplinary curriculum [1; 4; 6; 8]; fosters situated and active learning [1; 5; 8]; emphasizes students' centeredness [1; 5; 6]. However, large-scale research results presented by Trotter [14] revealed that exposure to web-based resources is an insufficient prerequisite for enhancing students' academic achievements. Therefore, instructors and teachers need to design and implement strategies facilitating the development of critical skills such as sources selection, analysis, evaluation and information synthesis in meaningful ways. Regarding this, the practitioners are challenged to create meaningful web-based activities for their students [9; 2].

Having analyzed the studies reported the positive effect of web-based activities in developing reading skills, we note the growing recognition of web-quests as a promising teaching format with the potential to contribute in training quality owing to: – valid up-to-date content accessibility [7–11; 13; 15]; – ample visual support (graphics, charts, animation, video etc.) [8; 10; 15]; – contextualized language [7; 9; 10; 14]; – collaborative and individual learning modes [8; 9; 11]; – learning-by-doing concept [7; 12; 13; 15].

Unsolved problems under consideration. The constantly increasing favorability of educational web-quests has given rise to the concerns regarding the ranging qualities of available online educational web-quests. “There are too many errors in most web-quests and they are not very well prepared” [12; p. 9]. Since there are plenty of sources that are considered as web-quests while not fitting the basic criteria and more and more practitioners are willing to create and employ the quests in their classes context, the quality and proper design issues should be considered and highlighted.

The study aims to report the findings on the topical studies analysis and present the technical solution

to facilitate the process of creating properly designed and high-quality web-quests.

Main body. The concept of Web quest was presented by Dodge and March to forward and facilitate building teaching activities enhanced with ample online resources. The concept addressed the need of the practitioners “who are interested in using the Internet to help students acquire meaningful learning in a safe and dynamic way” and “appropriate to focus on using information rather than looking for it and to support learners' thinking at the levels of analysis, synthesis, and evaluation” [2].

Criteria. However, treating a list of hyperlinks as a web-quest is a big misconception. Dodge, the author of the web-quest concept, presents a list of critical attributes for an activity to fit the concept and be considered as a web-quest:

1) interesting, topical and relevant scaled down tasks that are normally completed in everyday activities/professional performance; 2) tasks requiring higher level of thinking; 3) based on Web sources only; 4) not a research report or a step-by-step procedure – having learners simply distilling web sites and making a presentation about them isn't enough; 5) not a series of primitive web-based experiences – having learners to complete “look-read-copy-paste” tasks doesn't require higher level thinking skills and so, by definition, cannot be considered as a Web Quest [2].

Based on these criteria Dodge emphasizes the significant difference between basic treasure hunts and web-quests that are more complex. While in treasure hunt activities learners deal with predetermined questions and aim to present static answers, the way web-quests are designed drives learners to collect, process, analyze, evaluate and report the results. Therefore, treasure hunt activities are aimed to obtain the information while web-quests are aimed to use the obtained information.

Design. To address the criteria mentioned above, Dodge developed a web-quest design model. The model presents five steps in building a web-quest (fig. 1).

Selecting a topic. At this stage, the task may be rather challenging, as not every topic may be suitable. The topic has to: require in-depth understanding, be based on the web-resources, and fit curriculum standards. Respectively, March highlights that if “students achieve this learning just as effectively without the Internet... let's save the bandwidth for something better” [10]. Therefore, if the selected topic could be studied using printed or recorded materials in an off-line mode it might not be the appropriate and adequate option for a web-quest.

Selecting a design. In his study, Dodge offers twenty-six design patterns categorized into five dominant thinking verbs [3]. However, this list should be treated as the basic guideline and practitioners may

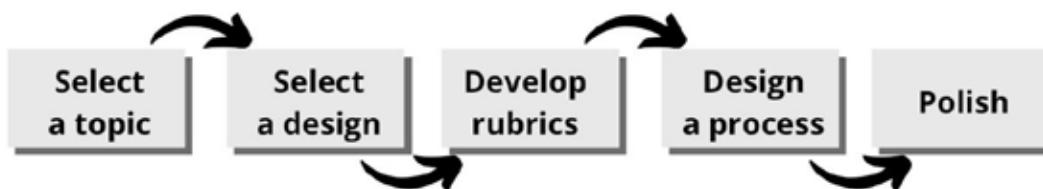


Figure 1. Dodge's web-quest design model

create their individual designs as long as these designs fit the criteria mentioned above.

Develop rubrics. This stage is aimed to describe how the learners' performance and results will be evaluated. Utilizing rubrics, instructors and teachers give the learners clear understanding of the expected outcomes and achievements. It is vital to define exactly what and how will be graded, explain what will be required and how much points will be based on each attribute. It helps to insure against bias and prevents learners' disappointment.

Design the process. Creating a list of reliable and validated resources is vital. The selection should be done properly in order to eliminate not relevant, outdated or broken links. After the process of selection, an instructor or teacher should describe the steps and roles to guide the learners to the successful task completion. Each step should be clearly stated. It is important to ensure that the participants understand the perspectives and share responsibility in accomplishment steps presenting results. This stage is the most time-consuming as selecting resources and making comprehensive guidelines take time.

Polish. This step involves completing attributes (such as introduction, conclusion etc.), checking and improving visuals (fonts, backgrounds, images, graphs and figures) and testing navigation and accessibility.

Quality. The increasing popularity of educational web-quests has given rise to the concern regarding the qualities. Since a wide array of web-quests is available online and practitioners can use them or create their own, it is vitally important to evaluate the web-quests carefully and comprehensively before making them public or applying them in an individual class context. The meaningful assessment can be provided by means of rubrics. Nowadays, there are several web-quest rubrics designed by researchers, however three rubrics are widely considered to be the most reliable and verified: rubric for Evaluating Web-quests by Dodge, Webquest Assessment Matrix by March and eMINTS Rubric.

Technical solution. In our practice, we have a positive experience of designing and successful implementation of the educational web-quests in the context of the ESP course at the National technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute". The web-quests were designed on the Zunal.com platform.

Nowadays, teachers have access to a great array of services, which can be used to create web-quests. Having analyzed the key features, pricing, availability and technical requirements we chose the platform Zunal.com as the most suitable for us. It is a platform that enables teachers to create educational web-quests from scratch, to use ready-made web-quests or to adopt them to any course since an extensive and constantly updated library of resources is available. The service is available on any computer or mobile device with the Internet connection and can be run in any browser. To make a quest users do not need the high level of computer literacy or coding skills. Having registered and logged in, the user may choose the "Browse" option to access ready to use quests or "create a new Web quest" and start the process of adding content and adjusting settings. In the "Browse menu" a user can browse web-quests, search for web-quests applying refining options (keywords, grade, subject) to make the search results more precise.

While choosing "create a WebQuest" a user starts the process of creating an individually designed quest. The template offered by the platform is unified and fully corresponds to the above-mentioned requirements. There are eight sections to complete.

The features offered on the platform enable supplementing each section via adding any rich media (audio, video, images) and hyperlinks. Every section has comprehensive detailed instructions explaining the phase, its aims and procedure (Fig. 2).

In addition, a user can add extra four module types: additional pages, quiz, frequently asked questions, hangman game.

The presented Reliability Analysis of ZUNAL Web-quest Design Rubric proves the ZUNAL web-quest rubric holds promise as an assessment tool for evaluating web-quests. The rubric is officially adopted and currently being used officially by thousands of users [15].

Therefore, the author considers this platform as the one that is valid, reliable and might assist practitioners to design high-quality web-quests.

Conclusions. Being designed appropriately, web-quests can enrich the traditional learning process and make it more productive. It is compatible with the regular curriculum and has a good potential to make course content more topical. However, the process of implementing new formats of training requires careful planning and proper design.

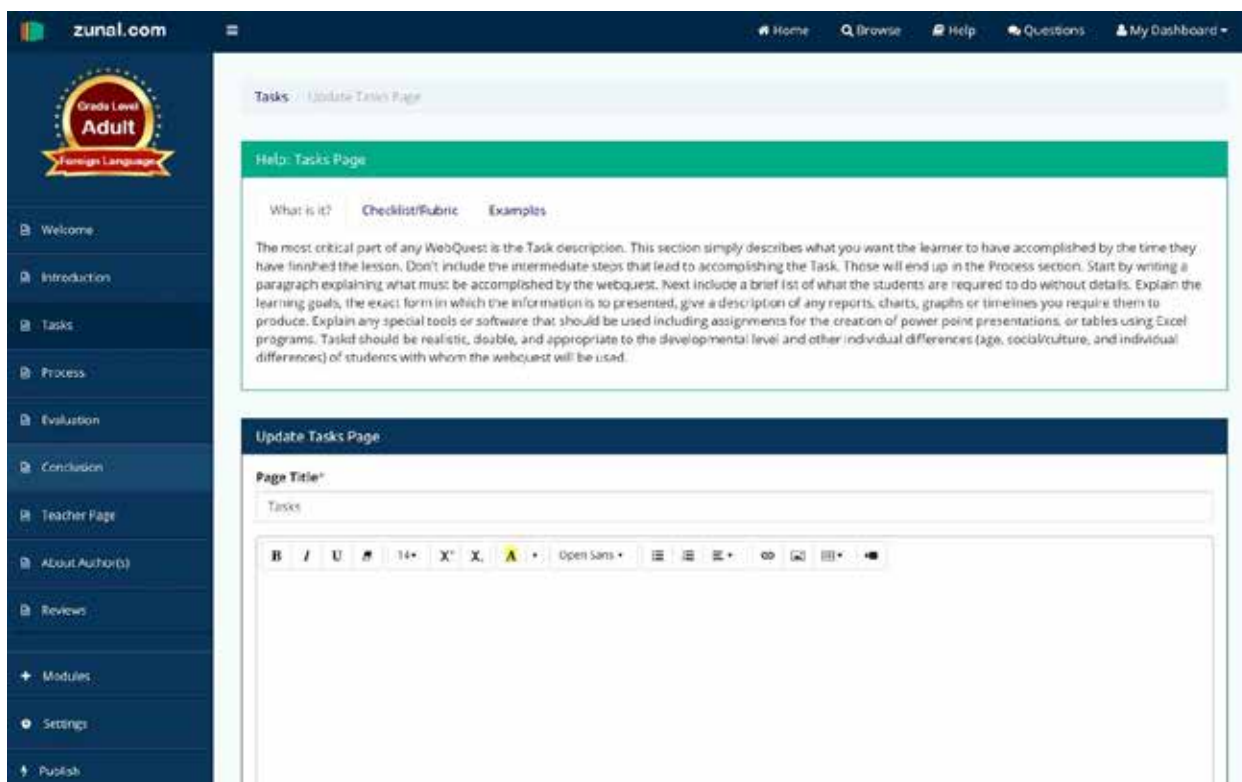


Figure 2. Zunal. Com features

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