

Using Web2.0 Tools to Facilitate the Development and Sharing of Interactive Language Learning Content

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Abstract

In the present context of a growing number of Web 2.0 tools that enable and encourage online interaction, many efforts have already been made in exploring these emerging technologies to facilitate learning. While more and more learners are familiar with the benefits of exploring the free material that Internet provides, teachers are still trying to adapt and explore the best ways of integrating technology in the teaching activities. But which are the most efficient tools and how to successfully integrate each tool in a meaningful way in the teaching process? These are few questions that LaProf project, a Multilateral project funded by the Lifelong Learning Programme, tried to answer by discussing some of the ICT tools used in the project to promote language learning in the form of WebQuests to immigrating professionals.

1. Introduction

In the past few years, the ICT advancements had a great impact on the way we communicate. Responsible for this change are the new software applications already known as Web2.0. Although not designed for educational purposes, Web2.0 tools such as wikis, blogs and social software are nowadays explored by educators and gradually embedded in traditional teaching scenarios. In the case of language learning, the blending of communication and technology could represent a significant step for teaching practices, with the benefits of using these tools for educational purposes acknowledged by educators. Nevertheless, the appropriate method of integrating the technology in the pedagogy needs further exploration. In other words, the use of Web 2.0 tools does not necessarily guarantee a more fruitful teaching and improved learning outcomes.

The scenario of adult education can be more challenging. Today, a large part of learning takes place in the working environment as well, where a careful adaptation of the use of ICT tools is required. The challenges presented by the integration of ICT and faced by the educators teaching professionals differ from the ones faced in primary, secondary or tertiary education. The tools used in classroom settings might prove inefficient or require adaptation in the case of adult education. In most cases, professionals have more responsibilities, both toward work and family and thus, less time for learning, especially in traditional learning settings. Although adults are likely to be more self-motivated, they might as well be less familiar with online learning and technologies or might have difficulties in adapting to them [1]. When designing learning activities for professionals, their background, experience and expectations should be taken into consideration and addressed.

This paper presents the challenges of teaching immigrating professionals in the fields of Agriculture and ICT and analyzes the way in which the language learning resources were designed and implemented online in order to match the needs of the two target groups. Moreover, the paper discusses the challenges that arise in the case of teaching immigrating learners, such as how to best integrate the language learning resources in the immigration preparation process and how to embed the acquisition of cultural competences in the language learning process. The solution proposed to



address the cultural integration and language acquisition in the immigration process is the design and implementation of an inquiry-based activity, more specifically, WebQuests. The WebQuests were implemented on three platforms: a Wiki page, a platform for interactive exercises (Miksike LeFo) and an educational Portal for sharing resources.

2. Background

As described in 1995 by its creator, Professor Bernie Dodge at San Diego State University, the WebQuest is “an inquiry-oriented activity in which some or all of the information that learners interact with comes from resources on the internet”. Typically, a WebQuest should contain at least five components: Introduction, Task, Process, Evaluation and Conclusion. However, the WebQuest framework is an evolving product. March offers a revised definition of WebQuests, as follows:

A WebQuest is a scaffolded learning structure that uses links to essential resources on the World Wide Web and an authentic task to motivate students’ investigation of a central, open-ended question, development of individual expertise and participation in a final group process that attempts to transform newly acquired information into a more sophisticated understanding. The best WebQuests do this in a way that inspires students to see richer thematic relationships, facilitate a contribution to the real world of learning and reflect on their own metacognitive processes. [2]

From the point of view of language learning, in „A Model of WebQuest for teaching and learning an L2” Torres defines language learning WebQuests as follows:

A WebQuest for teaching and learning a second language is an enquiry orientated activity placed in a relevant thematic context in which the development of the task implies using web resources and developing high order thinking processes in a collaborative environment. At the same time it provides the students the opportunity to learn and put into practice some linguistic skills, supported by a set of linguistic and procedural scaffolding. [3]

According to Bernie Dodge, in creating a WebQuest there are few critical attributes that need to be considered, such as:

- The task needs to be doable and interesting to incite learner’s curiosity
- The WebQuest should require higher level thinking and include synthesis, analysis, problem-solving, creativity and judgment, not just reading and summarizing.
- The resources should be mainly based on real resources from the web [4]

Technologically speaking, the traditional way of creating WebQuests supposed the downloading of a template and use of tools such as Dreamweaver. Nowadays, creating WebQuests is a much easier task. In most cases, WebQuests are hosted by web sites that offer step-by-step guidelines for the teachers, that only need to edit the content and include hyperlinks. Some of the most famous authoring systems for WebQuests are listed below:

- QuestGarden (<http://questgarden.com/>), created by Bernie Dodge, was awarded in August 2007 with the MERLOT Classics Award for its plentiful support offered to the teachers in designing their teaching activities. The hosting service that includes a navigation bar translation in 10 languages allow the teachers to download and adapt from other teachers and to insert photos and upload supplementary documents. Membership costs \$20 for a 2-year subscription.
- PHP Webquest (http://phpwebquest.org/?page_id=14) is another similar WebQuest Generator that allows teachers to easily create WebQuests and supports images uploading. The system must be installed on your own server. Unlike QuestGarden, there is no membership fee on PHP Webquest.

- Zunal WebQuest Maker (<http://www.zunal.com/>) is another free web based software for creating WebQuests that allows embedding of videos.
- TeachersWeb (<http://teacherweb.com/>) is another online tool for creating WebQuests for a \$27/year fee.

Either free of cost or not, the existing hosting systems for WebQuests offer rich databases and guidelines for developers and allow the integration of external links. Teachers can download others' materials and adapt them. However, these systems do not allow collaborative editing and the creation of interactive exercises, which is an important feature in language teaching. Considering the importance of offering teachers a free platform that would allow them to work collaboratively with both teachers and students and integrate in their WebQuests their own online language learning exercises as resources, a new collaboration of platforms is required.

3. The LaProf Wiki Platform

To answer the need of a free, collaborative platform to support the creation of WebQuests, the LaProf project (<http://www.laprof.eu/>) chose a Wiki page as the main platform. Figure 1 illustrates the multilingual WebQuests available on LaProf Wiki page.

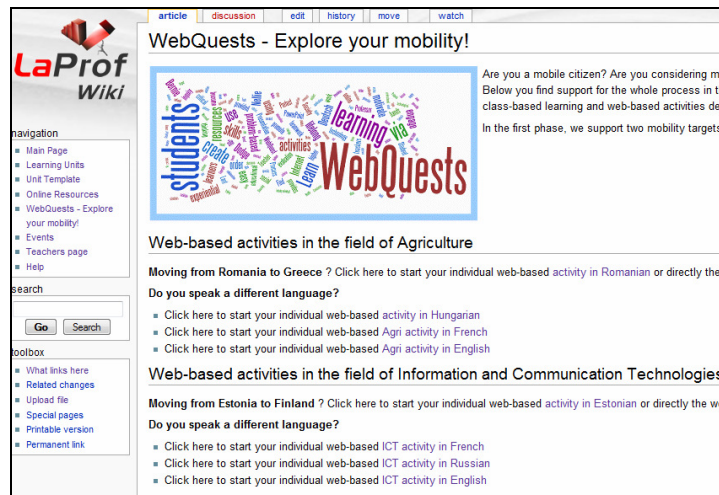


Figure 1: The LaProf Wiki Page

Using a Wiki page (supported by MediaWiki) for teaching and WebQuest implementation presents various advantages:

- It is a free, efficient, flexible, user friendly interface for interaction and knowledge creation [5];
- Wikis are reliable software and easy to use [6];
- It allows the creation of accounts for users – having registered users makes it easy to track the changes/editing of students/learners. Solving WebQuests on the Wiki and not on paper helps in making students more responsible and aware of what they write knowing that anyone can review their work [7];
- It allows communication through the discussion page available on each editable page;
- It supports the concept of links (within and outside the Wiki, through Internal links and External links);
- It allows for a good structure of the WebQuest content with the help of headings, subheadings and an automatic insertion of Tables of content after the use of more than 3 headings.

4. The Miksike LeFo Platform

The second platform used is the Miksike Learning Folder - LeFo (<http://www.lefo.net/>), that supports the creation of interactive language learning exercises. The links of these exercises were later included as hyperlinks in the Resources section of the WebQuests on the Wiki.

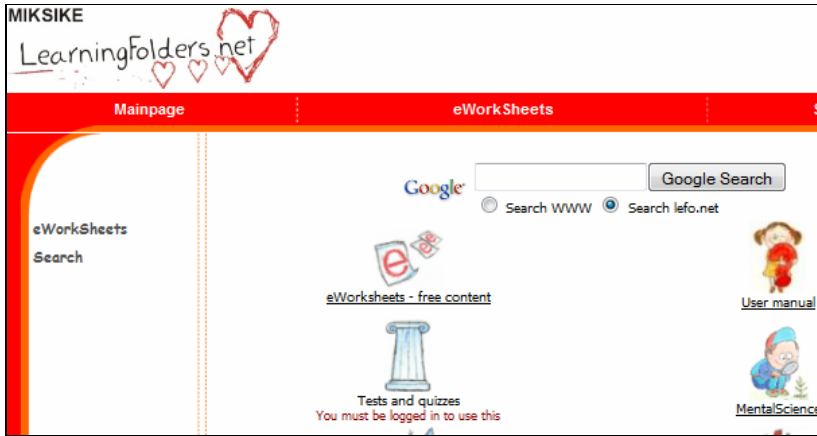


Figure 2: The Miksike LeFo Platform

Miksike Lefo is centered around worksheets in HTML including a variety of collaborative learning services to facilitate learners in constructing their knowledge. The exercises support the teaching of vocabulary, grammar, practical writing and creative writing. The eight different types of interactive exercises can be used in schools, further education, continuing education and adult education. Miksike LeFo was chosen by LaProf project as a suitable platform for developing the exercises because of the following reasons:

- It is a free, personalized, motivating and interactive platform that assists the user during the learning process;
- It does not require specific computer skills and exercises' degree of difficulty can be adjusted to meet learner's needs;
- It is flexible, allowing both individual learning and collective learning in classroom;
- It allows the integration of images and visual effects.

5. The Language Learning Portal

The third platform used by the project is the Language Learning Web Portal (<http://www.language-learning-portal.eu/>) created in LaProf project. Educational portals are used to describe a single starting point to educational resources and information used to facilitate the learning process of a designated audience. They provide a space for sharing, collaboration and evaluation of resources.



Figure 3: The LaProf Language Learning Portal

The Language Learning Web Portal was created in the context of LaProf project with the purpose to provide access to language learning resources tailored for specific target groups (agriculture and ICT professionals) and is available in English, Greek, Finnish, Estonian, Romanian and Polish. To this end, the educational material developed for the project such as exercises were collected, described, categorized and stored as digital training content. Additionally, external learning resources were collected and described on the portal. The use of a Portal for creation of WebQuest is justified by the quick and easy searching, locating and downloading of resources that are an essential part of WebQuests. By using a portal for the WebQuest creation, teachers can simply go through the descriptions of exercises or other resources and select the appropriate ones for their WebQuest, instead of going through hundreds of pages in the search engines or downloading various files to check for the suitable ones.

6. Case study: Developing and sharing language learning resources in LaProf

According to the Needs Analysis report [8], the main target groups of the LaProf project are Romanian agricultural professionals interested in improving their Greek language skills for professional and mobility purposes and Estonian ICT teachers or trainers interested in improving their Finnish language skills. The users self-assessed level of Greek, respectively Finnish were noted to be A2 of the Common European Framework of Reference for Languages. The primary objective of the project was to develop language learning units and exercises to help the prospective users to communicate effectively within their fields: Agriculture and ICT by creating educational material with an emphasis on speaking, reading and writing skills. This chapter will illustrate how language learning materials were created and implemented with the use of three platforms: a Wiki Page, the Miksike LeFo and the Language Learning Portal.

The first resources developed were the learning units. These were first developed on paper, then translated and implemented on the Wiki Platform. The language units were organized around groups of lexical items, in the form of two modules: Agriculture and ICT, with each module comprising of five independent units that can be studied in any order. Figure 4 illustrates the list of the learning units on the Wiki page.



Figure 4: The English Monolingual Units on LaProf Wiki

In the second stage of development, the exercises were created based on the learning units. The exercises were first developed on paper (Figure 5), implemented online in the form of interactive exercises on the LeFo platform (Figure 6) and then included as hyperlinks on the Wiki.

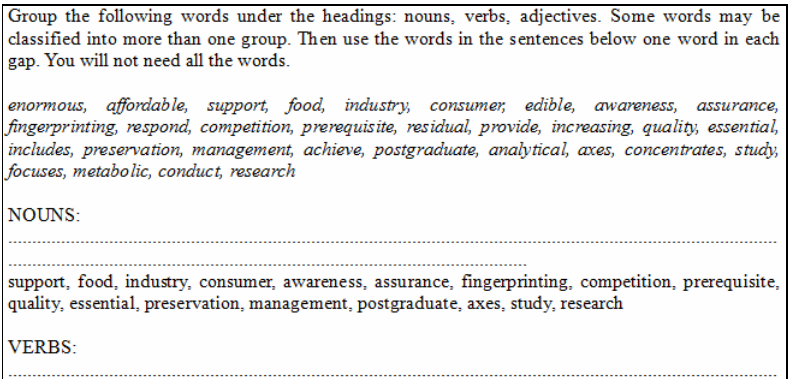


Figure 5: LaProf Exercises on Paper

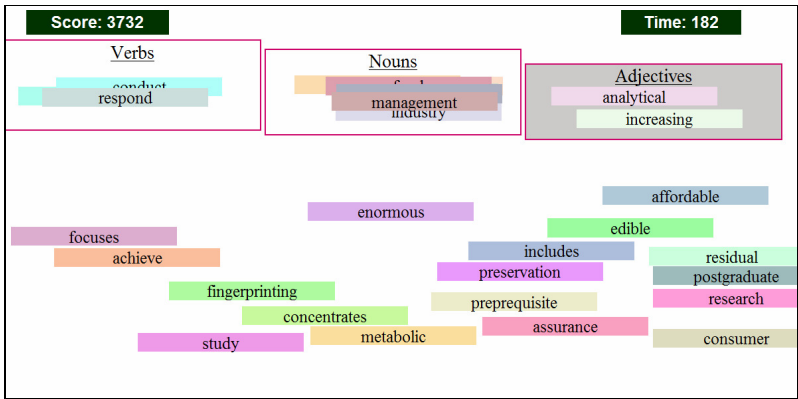


Figure 6: LaProf Exercise on the LeFo Miksike Platform

The creation of the WebQuests represented the third step in the development of language resources. The WebQuests are the project’s solution for embedding the acquisition of cultural competencies in the learning process and the immigration preparation process. The advantage of using WebQuests for professional mobility was the possibility of engaging and motivating learners to generate different unique output, as different as their needs and backgrounds as professionals. The development of WebQuests took place directly on the Wiki page. Considering that finding the suitable web resources to integrate in the WebQuests is a demanding task, especially in the case of Greek and Finnish language resources for ICT and Agriculture professionals, where a clear lack was highlighted, the project’s solution was to integrate in the WebQuests resources previously created such as the interactive exercises. Figure 7 shows the Webquests available on Wiki that integrate hyperlinks to the LeFo exercises.

Working Life

Note: The whole list of exercises used in the following quests and their CEFR description are available here: http://wiki.agroknow.gr/laprof/index.php/Food_Management#Exercises

1. Situation: You’ve learnt that there are some possibilities to improve your knowledge in the field of Agriculture by joining some courses offered by MAICh in Chania, Crete.

Task: Read the text here: http://wiki.agroknow.gr/laprof/index.php/Food_Management#Reading_Practice and check if you can understand the information provided by the speaker.

Test your knowledge:

- Complete the exercise here <http://www.lefo.net/en/gtests.html?test=595&start=1&laprof=en> to test if you have understood correctly the information about the courses at MAICh.
- Complete the exercise here: <http://www.lefo.net/en/lmtests.html?test=521&start=1&laprof=en>

Figure 7: LaProf WebQuests and Exercises

On the other hand, the WebQuests needed to include other external language resources relevant to the selected topics. Therefore, the project tried to build on already existent Greek and Finnish language learning resources created by other European-funded projects. These products were useful for the project’s target group since they could support and guide the learner in the early stages of language acquisition. To collect and share there resources, the Language Learning Portal was implemented.

Finally, Figure 8 explains how the LaProf learning resources and platforms are connected: the exercises were created with the help of the LeFo platform and together with the learning units and external resources were integrated in the WebQuests implemented on the Wiki page. Users can access resources (WebQuests, units and exercises) from both the Wiki page and the portal.

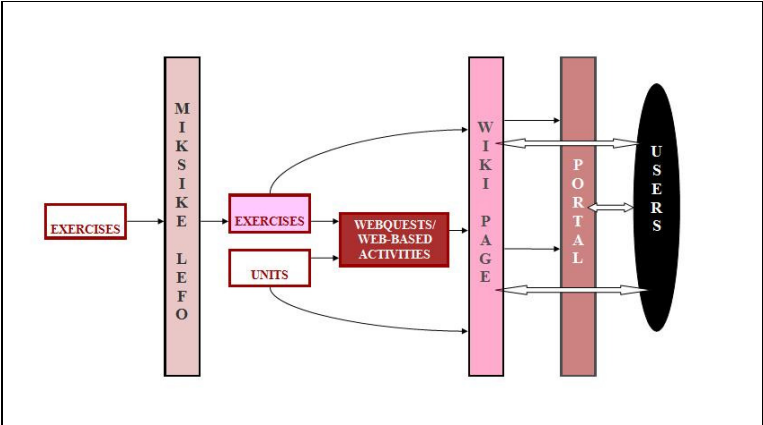


Figure 8: LaProf Learning Resources and Platforms

7. Conclusion

In this paper we presented the use of Web2.0 tools to facilitate the development and sharing of interactive language learning content for professionals in the fields of ICT and Agriculture encouraging language acquisition, mobility and cultural integration. We described how learning resources such as WebQuests and exercises were implemented online with the help of a Wiki page and the LeFo platform and made available through an educational portal that collects and describes such content in seven European languages.

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