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Analysis of the implementation of a WebQuest for learning English in a secondary school in Spain

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ABSTRACT

In this technological era we live in, the educative scenario is changing rapidly and significantly due to the incorporation of the Internet. Therefore, education should pay special attention to society needs considering the information and communication technologies (TICs) essentially in the teaching process in order to make students ready for this changing society. This paper is focused on the implementation, assessment and analysis of a computer-based approach, a WebQuest, in a third year of compulsory secondary education. The didactic unit implemented deals with the different English-speaking countries and their particularities. The new approach has been carried out using in-class sessions together with autonomous work and group work. The purpose of this study is to analyse and discuss students' opinions and reactions towards the use of this new teaching and learning strategy in an English as a Second Language class. In this sense, the study aims at showing whether students 1) gain a higher motivation in learning English, 2) have improved their digital competence and 3) have acquired cultural competence. The results show that the use of new technologies have motivated students towards the teaching and learning of the English subject, improving their digital competence as well as their cultural competence.

Keywords*: ICT implementation, secondary education, WebQuest*

INTRODUCTION

Technology along with the impact of the Internet has led to rapid progress of our history, consisting of sudden changes, globalization and multiculturalism of the society, which has brought new challenges to the citizens to face. These challenges need that people may have a great command of the new technologies such as computer and the Internet in order to become a competitive person. Technology improves education to a great extent and it has now become a need for revolutionizing education for the better. With the help of various resources for education, the Internet, teachers and students themselves see the advantage of educational technology. With the advent of educational technology in the classroom, education is faced with the challenge that teachers integrate educational technology in their daily work. Numerous studies have shown that a small number of teachers is willing to integrate educational technology in their teaching activities (Becker, 2000; Hermans et al., 2008; Stošić and Stošić 2013; Wang et al., 2004).

The ability of the World Wide Web inspired Dodge (1998) in creating a new model of teaching that incorporates the use of technological tools in the classroom, this model was named as WebQuest, hereinafter WQ. In this paper we critically analyse an approach to technology integration in English teaching through the implementation of a WQ. The purpose of this study is to implement a WQ for an ESL environment in a high school. For this reason, a WQ dealing with culture of the different English-speaking countries has been designed in order to assess the usefulness of this activity in terms of digital competence, cultural competence and motivation. In this sense, this didactic unit is based on the Valencian Decree 112/2007, on July 20th, in which the curriculum is established. According to the Decree, knowing a foreign language gives us

access to different information. At the same time it offers the possibility of using it to communicate. Foreign languages require contact with various linguistic models and the use of digital learning resources. All this contributes directly to the development of the digital competence (Decree, 2007). The main significance of the analysis of the implementation of this technological tool is twofold: on the one hand, we want to measure the motivation of the students in this new English learning process and on the other hand, we want to compare this methodology with the traditional one taking into account some important limitations such as reduced number of students and reduced time for implementation.

THEORETICAL FRAMEWORK

Technology and the Internet

According to Gallego and García (2011) the integration of technology and knowledge are two important pillars of nowadays society. The emerging advance of technology invades much of the daily activities that the human being do, for instance, education. Thus, schooling and particularly teaching methods should take the lead and make use of the Internet and digital tools in everyday activities.

A recent article appeared in ElPaís stated that the Spanish government has agreed to give the Internet access to more than 16500 schools between 2016 and 2017, thanks to the project called "Connected schools", a program funded by the European Regional Development Fund (ERDF). The goal is to improve or to give connectivity to schools that are in rural or isolated regions to give them the same opportunities that those from the city (ElPaís, 2015). If this occurs, it will be much easier for teachers to promote digital competence, regardless school location. This technological progress in education, especially in the process of teaching and learning, is developing the integration of information and communication technologies (ICT) in the classroom. Although its incorporation has significantly improved the quality of teaching in all ways, it does not necessarily imply either integration or innovation of the teaching process (Area, 2010).

If we want to succeed in the implementation of the ICTs in school, it is paramount that teachers have a high level of digital competence; therefore they will be able to transmit this process for their students (Mutka, Punie and Redecker, 2008). According to *EC Recommendation on Key Competences* (EC, 2006), digital competence involves the confident and critical use of ICT for employment, learning, self-development and participation in society (EC, 2006). In connexion with this, it is essential the knowledge of digital competence for working and learning.

Nonetheless, this brisk arrival of technology in our classrooms has led some drawbacks, particularly what is called the digital literacy. There is a disadvantage in the development of digital competence among teachers, which Prensky (2001) called digital immigrants and students of the 21st century, which Prensky (2001) named digital natives, causing a digital divide. Unfortunately, in our classrooms, another problem apart from the digital divide is also found that is the level of English of our students. A study carried out by Corpas (2007) which aimed at assessing the level of English that students get at the end of the compulsory secondary education, showed a profound lack in the proficiency of English. The average student of the compulsory education has trouble in writing a similar text to one already studied. In addition to that, it presents also problems to reach a decision or to think about a content exposed. Furthermore, they are unable to produce a comprehensive oral message to advise a friend about the most important cultural traits of the United Kingdom (Corpas, 2007). On this respect, Samuel and Bakar (2006) argued that the use of ICT in teaching and learning English has beneficial effects on behaviour, motivation, communication and process skills because it gives bored

students with a different and innovative way to learn. Furthermore, the authors affirmed that integrating ICT tools will enable students to become life-long learners by being aware of their learning experience.

E-learning

E-learning is understood in the eLearning action plan of the European Commission (2005) as "the use of new multimedia technologies and the Internet to improve the quality of learning by facilitating access to resources and services as well as remote exchanges and collaboration". However, there was not a current and inclusive accepted definition. Now, thanks to a research carried out by Sangrá, Vlachopoulos and Cabrera (2012) and with the consensus of most experts involved in the research they succeed in giving an accepted definition. E-learning is defined as a form of learning which exploits the electronic media as tools for improving the quality of teaching and training.

In contrast to e-learning, blended learning or b-learning is an educational approach that combines distance learning with face-to-face teaching (Bartolomé, 2004). Technological progress, electronic communication and the impact of globalization have increased the need for raising the educational level of the citizens that has led to a greater demand on distance learning. Galperin (2009) argued that in developed countries a high percentage of the population has access to the Internet, as opposed to developing countries where access to the Internet is gradually increasing, particularly in educational centres. This fact is leading to the use of tools such as WebQuest that can be used in all forms of learning such as classroom teaching or distance learning.

The e-learning model might have some benefits and some drawbacks in terms of an educational approach. This has been widely discussed by Cabero. According to Cabero (2006), there are several advantages of using e-learning. The greatest advantage might be that the use of technology keeps students with up-dated information, which could be used *just in time and just for me.* A second convenience is that e-learning favours multimedia training, since it is possible to listen to songs, watch videos, etc. Another quality of using technology might be that it offers a wide range of information on a single format, such as the computer screen, so that students have all the information they will need at their fingertips.

Theories supporting integration of WQ in instructions: Constructivism and Connectivism

Kanuka and Anderson (1999) considered the main constructivist theories that influenced learning by using technology, and allocated them in two dimensions: understanding of reality as objective/subjective, and design of knowledge as a social/individual. The combination of both outcomes in four types of constructivism: (1) Cognitive Constructivism, (2) Radical Constructivism, (3) Situated Constructivism, and (4) Co-Constructivism. In spite of some differences, we can argue that they share common views, such as: learning is active, not passive; language is an important element in the learning process; and learning environments should be focused on the learner. The focus of education according to constructivism is not content but process, so educators need to know their learners in order to organize this process. Constructivism focuses on how learners construct their own meaning. They ask questions, develop answers and interact and interpret the environment. By doing these things, they incorporate new knowledge with prior knowledge to create new meanings. Constructivism calls for the elimination of a standardized curriculum. Instead, it promotes using curricula customized to the students' prior knowledge. Also, it emphasizes hands-on problem solving. The relation between constructivism, the construction of technology-supported learning environments, and the practice of distance education is explained by Tam (2000). Distance learning provides a unique

context to infuse constructivist principles, where learners are expected to function as self-motivated, self-directed, interactive, and collaborative participants in their learning experiences.

Some learning theories (situated cognition, activity theory, experiential learning, anchored instruction, and authentic learning) are usually classified as constructivists. Connectivism is presented as a new and important constructivist theory. Connectivism or distributed learning is proposed as a theory more adequate to the digital age, when action is needed without personal learning, using information outside of our primary knowledge (Siemens 2004). In this line, Bell and Winn (2000) explore not only how this happens naturally in learning, but also how it can be used as an instructional strategy, for designing distributed learning environments. Downes (2014) sets out some design principles for connectivist 'courses' or cMOOCs, such as:

- learner autonomy, in terms of choice of content and how they choose to learn
- openness, in terms of access to the course, content, activities and methods of assessment
- diversity: varied content, individual perspectives and multiple tools, especially for networking learners and creating opportunities for dialogue and discussion.
- interactivity: 'massive' communication between learners and co-operative learning, resulting in emergent knowledge

WebQuest

In 1995, Dodge and March presented WebQuests to the educational community. WebQuests allowed educators to see how the Internet could be used in classrooms for inquiry-based teaching and learning. When working with WebQuests, learners take newly-acquired information and transform the information into authentic learning.

Scaffolding in WebQuests allows students to learn in a different way they are been doing traditionally (Dodge, 2001). March (2003) mentions cognitive science researchers like Bransford (1999) and reveals that "research in cognitive psychology tells us that if we want novices to perform at more expert levels, we need to examine how experts go about their work and then prompt novices through a similar process," and that "scaffolding positively affects student achievement". Scaffolding creates a "temporary framework to support student performance beyond their capacities" while completing a WebQuest (March, 2003).

Dodge (2001) states that WebQuests allow learners to have a structure to their learning that allows them to "act more skilled than they really are" and allows the "bar of what students can produce to be raised". Scaffolding learning makes learners work with new approaches with the help needed to succeed in these attempts.

WebQuests can help students to acquire, and transform knowledge using constructivist learning and high-level, critical thinking in the classroom. Kundu and Bain (2006) describe how WebQuests can be used to facilitate learning in a constructivist manner as WebQuests facilitate learners to take an active role in their learning. Constructivist learning methods allow for learning to be an "organic process" in which "meaningful learning occurs through reflection and resolution of cognitive conflict" (Kundu & Bain, 2006). Constructivist methods permit students to have multiple solutions, think reflectively, and make authentic connections between learning and the real world (Kundu & Bain, 2006). They also state that "WebQuests themselves are authentic" and "participants work cooperatively and collaboratively to produce knowledge".

On the other hand, critical thinking also have an instructional purpose in the WebQuests as: (1) Disciplined, self-directed thinking which exemplifies the perfections of thinking appropriate to a

particular mode or domain of thinking. (2) Thinking that displays mastery of intellectual skills and abilities. (3) The art of thinking about your thinking while you are thinking in order to make your thinking better: more clear, more accurate, or more defensible. (Paul, 1995 in Vidoni & Maddux, 2002, p. 104).

WebQuests emerge as an example of a powerful means for supporting the principles of constructivism (Matusevich, 1995, Dodge, 1997, Vidoni & Maddux, 2003, Godwin-Jones, 2004, March, 2008) in language teaching. WebQuests tend to be student-centered with teachers scaffolding the students through the learning process. In other words, they "foster cooperative learning through guided discovery" (Godwin-Jones, 2004:10). WebQuests are usually "group activities with an end goal of creating a document that collects, summarizes and synthesizes the information gathered" (Godwin-Jones, 2004:9, Vidoni and Maddux, 2002).

A WebQuest is developed around an authentic topic relevant for students' everyday life. We can find some papers describing the successful implementation of WebQuests in a particular classroom (Vidoni & Maddux, 2003, MacGregor & Lou, 2006, Ikpeze & Boyd, 2007, Manning & Carpenter, 2008). Otherwise, very few articles are available that discuss the implementation of WebQuests in teaching EFL (Koenraad, 2002, Prapinwong, 2008).

This teaching tool has spread all around the world since Dodge and March developed it in 1998. If you search the term "WebQuest" in Google, it shows 1,030,000 results (20-03-2015). The origin of the WQ took place in a project designed by Dodge and Muñoz called *San Diego Microworlds Project*. The project involved students creating invented worlds in the form of historical-adventure games, and it took place from 1990 to 1994 (Dodge and Muñoz, 1997). The project was implemented in an urban middle school, named O'Farrell Community school. This school was located in an economically deprived school with a high average of immigrants. *Microworlds Project* was basically based on an interdisciplinary approach, a cooperative learning and within five different scenarios where the students played different roles according to the different locations. The results shown were more than satisfactory in terms of students historical knowledge and the collaborative group work. The conclusions reached from this experience derived directly on the WebQuest model we know currently (Dodge and Muñoz, 1997). The reason why he developed a WQ later on was due to a course he was teaching at San Diego State University for second-semester students teachers. His idea was to show them how to work in an educational simulation called *Archaeotype*. Dodge formed different groups for researching with the aid of different information sources, a few web sites, an evaluation report on the project and a virtual chat with an expert in the field. The task was to read, select, transform the information and to discuss whether, and how, the *Archaeotype* program could be successfully implement it or not (Starr, 2012).

On the one hand, a short-term WQ can be devoted from one session to three class sessions. The main aim is that students achieve knowledge through the acquisition and organization of information, in terms of observation, analysis and synthesis. When learners finished the short-term WQ, they "will have grappled with a significant amount of new information and made sense of it" (Dodge, 1995). On the other hand, a long-term WQ can typically take between one week and a month classroom context. The objective is to process the knowledge about a specific field or topic. Learners, having been introduced to new information, have to process it through complex cognitive processes such as induction, deduction, classification, abstraction, etc. After having completed it, they have to "transformed it in some way, and demonstrated an understanding of the material by creating something that others can respond to, on-line or off-line" (Dodge, 1995)

The WQ should contain at least the following parts if we consider Dodge's definition (1995):

a) Introduction: The aim of this part is to grab student's attention, in order to make it desirable and fun for them. The purpose of the motivational component is to present the topic visually attractive, relevant to the learner's both experiences and future goals (Dodge, 1995).

b) Task: This part focuses on what the learner has been asked to do, usually it states a specific problem or situation to be resolved. Moreover, “a well designed task is doable and engaging, and elicits thinking in learners that goes beyond rote comprehension” (Dodge, 2002).

c) Process: This section is where the teacher guides their students through different steps toward reaching their goal, the task itself. The steps might be broken into different sub-tasks so that all students can easily follow the activity. This section also includes students' roles. It may also include some guidance, also known as scaffolding, on how to organize the group as well as some strategies regarding collaborative work or linguistic reinforcement, when considering WQ for L2. Any learning advice or interpersonal process would be welcomed. Another important aspect to bear in mind is the simplification and clarity of the instructions and the language use.

d) Resources: This part consists of a list of web pages that the teacher preselects. Then, students have to read or even search for more information in order to complete the task. It is crucial to insert not only web pages but also other kind of resources such as videos, songs, maps and so on.

e) Scaffolding: This is a temporary structure that aims to encourage learners to do an activity more skilfully than they really are (Dodge, 2001). There are three types of scaffolding (Dodge, 2001):

Reception provides help to students to plan and to better understand what they are learning. Some examples of reception scaffolds are observation guides, timelines, glossaries and organisational charts. Transformation refers to the guidance given to help students take the information and transform it into new knowledge using processes such as comparing, contrasting or reasoning. Production relates to give students instruction to create a final product. This can be scaffold by providing them with templates, writing and presentation guidelines.

Scaffolding is a key component in the design of a WQ, because the teacher gives some guidance beforehand so that students might be able to fulfil the task. This idea was first developed by Vigotsky (1978) by introducing the idea of the “Zone of Proximal Development” which can de defined as the distance between what a student is able to do by his own and what he can do with the help of an adult or through collaboration with peers.

f) Assessment: Students are given the different criteria upon they are going to be assessed on. This part of the WQ, although it comes at the very end, it has to be acknowledged since the beginning of the project. The most popular form of assessment is the rubric, which encourage critical thinking due to its pattern of self-assessment and self-improvement (Stevens and Levi, 2011).

g) Conclusion: This section aims at summarising and reflecting upon what students have learned and also to encourage them to continue searching about the topic. During this part, teachers can encourage their students to suggest improvements for future WQ.

WebQuests in an ESL context

In the last years, the inclusion of WQ in our classrooms have been very successful, so numberless web pages have been formed in order to help teachers to create new ones or to re-use WQ from other teachers. For example, here in Spain, there are well-known pages where collections of WQ for all levels and ready to be carried out with students appeared. This is the case of WebQuestCat and Aula21.net.

It is significant to explain Pérez work due to the fact that she had focused on the design and implementation of a WQ from the point of view of second language learning (Pérez, 2005). It is obvious that the implementation of WQ for teaching and learning a second language might be more complex than learning any other subject in the first language of the student. It is for this reason that a difference in the structure of WQ must be applied to make them a useful tool also in the area of language teaching in a L2 context. Pérez (2005) wrote that: A WebQuest for teaching and learning a second language is an inquiry oriented 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. Pérez (2005) defends that the main traits that have to be applied in the design of a WQ for second language learning are the following:

- Significant use of the L2
- The level of linguistic knowledge
- Linguistic and non linguistic goals
- The result of the task
- The process
- The WQ must be integrated into the syllabus
- The WQ should be planned to practise the language skills

It is important to provide students guidance by providing the appropriate scaffolds, however when dealing with second language WQ, this part becomes much more relevant. Thus, direct instructions in the original WQ model have to be considered to ensure that the WQ is a language oriented activity and in this way learners will be conscious of their language learning experience (Pérez, 2005). Bearing in mind all these traits, the WQ “A Top Secret Mission” has been created.

Research questions

In order to analyse the impact of learning English when implementing a WebQuest (WQ), the following questions are addressed:

- To what extent does the WQ contribute to improve students' digital competence?
- To what extent does the WQ contribute to acquire cultural competence?
- To what extent does the WQ contribute to motivate students towards learning English?

These questions are going to be answered after the implementation of the computer-based activity and the post-questionnaires, in order to see students' attitudes and opinions about this new teaching tool. It has to be pointed out that the main objective of this study is to assess whether the strategy of the WQ is useful to motivate students to learn a foreign language. In addition, the study wants to check if this tool also helps at improving participants' digital competence as well as cultural competence. For this purpose, the WQ model has to be designed in order to prove that it would be possible.

METHOD

Students and school setting

This didactic unit has been carried out in the *Vila-Roja* Secondary School, which is located in Almassora, a town near Castelló. Almassora has a total population of over 27,000 inhabitants and there are two high schools, both of them states centres. This research has been implemented in a 3rd year of compulsory secondary education, in a class composed by 23 students. Taking into account the results presented after passing the level test *Essential Grammar in Use* from Cambridge, it could be firmly stated that there are significant differences among the students' proficiency of English. Results show that 35% of students did not achieve a minimum of 25 corrected answers. Then, it could be affirmed that 48% of students would be considered to be at an average level as long as they have answered correctly between 25 and 35 questions. It is important to mention that 17% of students have obtained more than 30 out of 50 questions in the level test. Considering the Common European Framework of Reference for Languages, hereinafter CEFR, the students are divided into three different levels which describes what a learner is able to do in English. Therefore, there are the beginner level (A1), the elementary level (A2) and the pre-intermediate level (A2+).

Didactic unit

The objectives are stipulated in the Valencian Decree 112/2007, on July 20th, in which the Secondary Education Curriculum of LOE is established.

Regarding general objectives, at the end of this didactic unit the student should be enabled to:

- Read real pieces of text autonomously in English.
- Participate in activities and group work, which develop confidence and initiative to express themselves in public and in writing.
- Identify and respect the customs and daily life features of other countries and their cultures, in this case the different English-speaking countries.
- Foster critical thinking by sharing and discussing different topics related with culture.

Considering specific objectives, the students will be enabled to:

- Produce a short and coherent oral text about certain topics.
- Be interested in a neat presentation of the written texts, on paper or digital.
- Use words and expressions related to the topics.
- Use the most common structures and functions of the language, with an adequate pronunciation and intonation.

As concepts, students will work through a WQ called “A Top Secret Mission”, they will gain cultural-consciousness. At the end of this didactic unit they will be asked to elaborate a visual presentation along with an individual document as the final products. Oral language will be practised in terms of expressing opinion and showing interest.
As procedures, students will be able to read specific information in English, understand and interpret different sources of information, as well as, write in English autonomously. The use of the Internet as well as PowerPoint in order to fulfil the main task.
And finally, as attitudes, students will be more autonomous, they will do group work, for this reason they have to discuss and foster critical thinking. They will learn the most significant differences among the customs, behaviours, attitudes and values of different societies whose language is being studied.

Materials

a) WebQuest

The WQ requires the use of a computer with the Internet access, at least it would be advisable that each group might have access to one computer to work with. Students will need to work autonomously at home from time to time. However, some lessons will be devoted to let them work in groups or to elaborate the final presentations. One of the main sections of the WQ is the 'Resources' section. In this section, the teacher has provided the students with several web sites selected beforehand. According to Dodge (2001), March (2003) and Pérez (2006), it is not the task of students to search for information but to process it, thus the importance for the teacher to select the appropriate materials.

b) Pre-questionnaire

The pre-questionnaire consists of 5 questions, which have the purpose of knowing the digital competence the classroom has. The items asked are the following:

- The Internet access at home
- Devices used when searching information
- Use of digital tools
- Purpose of using these digital tools
- Familiarity with WQ

c) Students' post-questionnaire

The post-questionnaire comprises 8 questions, which are close-questions, apart from one which is an open-question.
The items expected to answer are the following ones:

- Close-questions:
    - Usefulness of WQ to learn English
    - Motivation using ICT
    - Usefulness of ICT to acquire knowledge
    - Perceptions about the WQ in terms of improving the digital competence
    - Appropriateness of selected pages to learn culture
    - Perceptions to learn culture through the WQ
    - Willingness to work with a WQ

- Open-question:

    - Students' feelings while working with the WQ

Sessions

This didactic unit was implemented in 4 in-class sessions of approximately 50 minutes

***Table 1**: Sessions*

SESSION	ACTIVITIES	MATERIALS	TIMING
Session 1 (28th January)	1. Fill a level test 2. Fill an ICT questionnaire	1. The level text 2. The ICT questionnaire	1. 15 minutes 2. 35 minutes
Session 2 (14th April)	1. Introduce the concept of WQ to students 2. Show the students the WQ they are going to work with 3. Doubts and questions 4. Start the WQ, form groups of 4 students and assign the different countries to each group.	1. A visual presentation, a projector, a screen and a computer 2. The WQ, a projector, a screen and a computer with the Internet access	1. 15 minutes 2. 10 minutes 3. 5 minutes 4. 20 minutes
Session 3 (16th April)	1. Reading information in groups and individually	1. The WQ and computers with the Internet access	1. 50 minutes
Session 4 (out-class session)	1. Organisation of their individual presentation part 2. Work together on their final presentation		
Session 5 (20th April)	1. Presentation 2. Post-questionnaires	1. A projector, a screen and a computer 2. The post-questionnaire and teacher's evaluation	1. 40 minutes 2. 10 minutes

Assessment

Evaluation is considered in terms of group working and individual work, following two different rubrics. The individual rubric, specially designed for this research, is composed of four different items. The first one takes into account the attitude towards the activity and the English language. The second one is related to the cooperation among peers. The third one is aimed at ensuring that students have read the different web pages provided, so a written document has to be delivered at the end of the first session. The last item evaluates their performance in the oral presentation.

***Table 2**: Rubric individual work*

	Needs improvement **1**	**Good** **2**	**Very good** **3**	**Outstanding** **4**
Attitude	You have not been interested in working with the WebQuest.	You have worked although you could have used your time better.	You have worked hard and you have been very interested in the work.	You have worked very well and you have showed a lot of enthusiasm.
Word document	The answers of the questions are not correct. The answers have a lot of grammar and spelling errors.	The answers are correct but the document has some important errors.	The answers are correct and you have used full answers but with some errors.	The answers are correct and you have answered with full sentences using correct English.
Oral presentation	The presentation is not well prepared. You have read most of the times and you have not looked at the audience.	The presentation is prepared but it needs some more rehearsals. You look at the audience but you have read sometimes.	The presentation is well prepared. You are confident and you look at the audience.	The presentation is perfect. You speak fluently and clearly. You have prepared it very much.
Cooperation	There has not been any cooperation with the other members. There has been only individual work.	There has not been much cooperation, mostly individual work.	There has been cooperation with the other members of the group.	There has been a lot of cooperation and a lot of discussion with other members.

The group work rubric consists of five items. The first one deals with the content and the ideas appeared in the PowerPoint presentation. The second one with its organisation. The third focuses on the good use of the graphics. The fourth item is related to the correctness of the language and the grammar mistakes. The last one deals with the amount of text used.

Table 3: *Rubric group work*

	Needs improvement **1**	**Good** **2**	**Well done** **3**	**Outstanding** **4**
PowerPoint ideas and content	One of the parts of the presentation is missing.	The PowerPoint lacks some information of the different parts.	The PowerPoint has all the information but it is very general.	The PowerPoint has all the information and it shows a full understanding of the topic.
PowerPoint organisation	The PowerPoint is not organised as it is said in the WebQuest.	_____	_____	The organization is correct.
PowerPoint images	Some slides do not have pictures.	The PowerPoint has just a few pictures but does not support the information.	The PowerPoint has a lot of pictures and photos to support the information.	All the slides have pictures to support all the information.
PowerPoint language and grammar	The slides have more than 4 errors. There are many capitalisation errors.	The slides have 3 or 4 grammar errors and/ or capitalisation errors.	The slides have 1 or 2 grammar errors and/or capitalisation errors.	The slides have no grammar errors or capitalisation errors.
PowerPoint text	The slides have too much text.	_____	_____	The slides have just the necessary information (titles).

THE WEBQUEST

The didactic unit can be found at http://www.webquest.net63.net/start.htm, which was created for the purpose of this study.

Start

It is crucial that students get hooked at the very beginning as it is said by Dodge (1998). This was the idea when naming it as “A top secret mission”, it is supposed that students think that they are going to work through something that has to be kept in secret.

Introduction

The introduction provides an overview and a clear explanation of the lesson. In this case, it is explained that they have been asked to work for Angelina Jolie and Brad Pitt in order to help them to decide where to go this summer. Moreover, a picture of them appears in order to catch students' attention since they are a well-known American couple and to make the task more credible. In addition, it is said that they are going to work in groups.

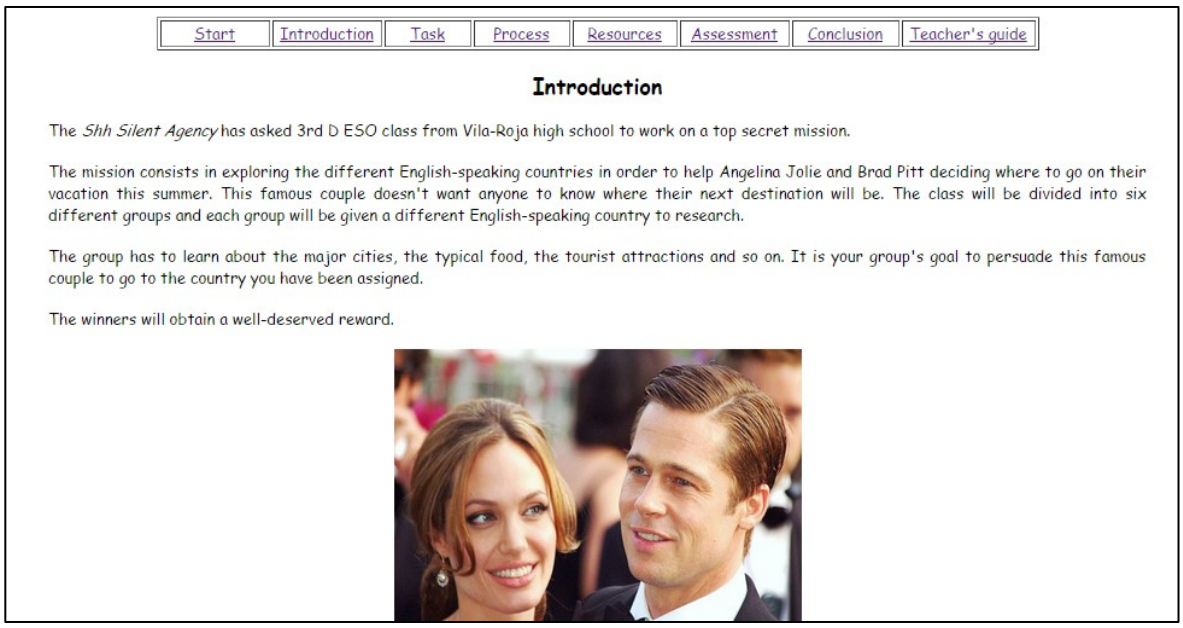

***Figure 1**: WebQuest Introduction*

Task

They are asked to answer some questions depending on the role they have chosen, and then to create a PowerPoint in-group. The first document serves as a kind of scaffolding, which has been demonstrated to positively affect student accomplishment (March, 2003). The documents consist of several questions, so they have to find the answer in the different pages appeared in the Resources section. Furthermore, it encourages them to create an attractive presentation, thus their goal is to persuade the couple.

Table 4: *WebQuestTask*

GEOGRAPHER: QUESTION GUIDELINES

Answer with full sentences → S + V + Complements

Ex: The capital of Spain is Madrid.

- Use the Present Simple (The capital has a lot of attractions) or Present Perfect (I have learned that in Spain the tourism industry is very important.)

1. Find a map of the country assigned.
2. What is the capital of the country?
3. Write the name of at least 3 other major cities.
4. Find the flag of the country. Is there any meaning of the use of colours? Explain the meaning.
5. What is the currency used in the country?
6. Are there any other official languages? Which ones?
7. Have you learned other information about the country, such as the weather, population or other? Explain them.
8. Discuss your findings with your group. You have to give them a clear idea of what you have found and decide how you are going to organize the information.

HISTORIAN: QUESTION GUIDELINES

Answer with full sentences → S + V + Complements

Ex: The capital of Spain is Madrid.

- Use the Present Simple (The capital has a lot of attractions) or Present Perfect (I have learned that in Spain the tourism industry is very important.)

1. What are the main attractions of the country? Use pictures.
2. Where are they located?
3. Which one do you think is the most impressive? Why?
4. Write a brief description of at least 3 attractions.
5. Is there any important festivity in the country? Which one?
6. When does the festivity take place?
7. What do people do on that day?
8. Discuss your findings with your group. You have to give them a clear idea of what you have found and decide how you are going to organize the information.

GASTRONOME: QUESTION GUIDELINES

Answer with full sentences → S + V + Complements

Ex: The capital of Spain is Madrid.

- Use the Present Simple (The capital has a lot of attractions) or Present Perfect (I have learned that in Spain the tourism industry is very important.)

1. Which is the most typical ingredient in the country?
2. Is there any typical drink?
3. Which interesting fact have you learned related to this topic?
4. Choose one recipe and explain it. Use pictures.
5. Are the recipes of the country very different from the Spanish recipes? Why?
6. Discuss your findings with your group. You have to give them a clear idea of what you have found and decide how you are going to organize the information.

ENTERTAINMENT RESEARCHER: QUESTION GUIDELINES

Answer with full sentences → S + V + Complements

Ex: The capital of Spain is Madrid.

- Use the Present Simple (The capital has a lot of attractions) or Present Perfect (I have learned that in Spain the tourism industry is very important.)

1. Which are the most important sports in the country?
2. Do you know all of them? Explain one which is not familiar to you. Use pictures.
3. Is there any traditional music genre? Which one?
4. Is there any important musician or band? Which one? Use pictures.
5. Which are the most important celebrities of the country?
6. Which one do you think is the most important? Why? What he/she did?
7. Discuss your findings with your group. You have to give them a clear idea of what you have found and decide how you are going to organize the information.

Process

This part consists of steps that guide carefully students towards the final task. This part is formed by six clear instructions as well as some tips for making a good presentation. Therefore, this is the scaffolding part of the lesson. The first step aims at dividing the class into six different groups formed of four members. The instruction number two gives students the opportunity to decide which role each students desires to take. The roles are described as well. The objective of step three is to guide them on how to start the research of information. First of all, a video has to be seen in group and some web pages. Afterwards, they are asked to work individually according to their assigned role by visiting web sites already selected, in order to do so 4 guideline documents have been created to help students find the specific information on the different web pages, each document corresponds to each role. The aim of the fourth direction is to stimulate them to share their findings and to discuss about them so as to organize the different information in their PowerPoint. The fifth step wants them to work collaboratively to build the presentation. In addition, it is said that the use of pictures is crucial for their final mark. And finally, the sixth step suggests that a well-prepared oral speech have to be done by several rehearsals at home.

Resources

This section gathers the different web pages students have to visit in order to search the specific information asked in the previous part. The web sites are classified according to countries and then depending on the specific role. The structure is very clear so students can easily find them. Each member has three different web pages to visit which contain the appropriate information to answer the questions appeared in the document. The web pages selected, although they are assigned to native English speakers, they are easy and with a lot of images to make the information clearer. The Wordreference dictionary, the PowerPoint tutorial and the British Council web page, where some useful expressions and an oral presentation example are presented, are used as a scaffolding too. These resources are very important for students to become autonomous in their learning process.

Assessment

This part includes two different rubrics in order to grade on student's work during the different sessions. What is more, the rubrics are also a guide for students so they know since the beginning what the teacher will take into consideration to give them a final mark. Assessment includes group and individual work.
To see the different items visit the WQ page: http://www.webquest.net63.net/assessment.htm. The different items have been fully explained previously.

Conclusion

This is the last part of the lesson, in this part teacher tries to outline what students should have learned. In this case, what is more important here is to encourage learners to keep on reading English as well as discussing. The aim is to reflect upon what they have been able to do through the WQ and that all has been done in English.

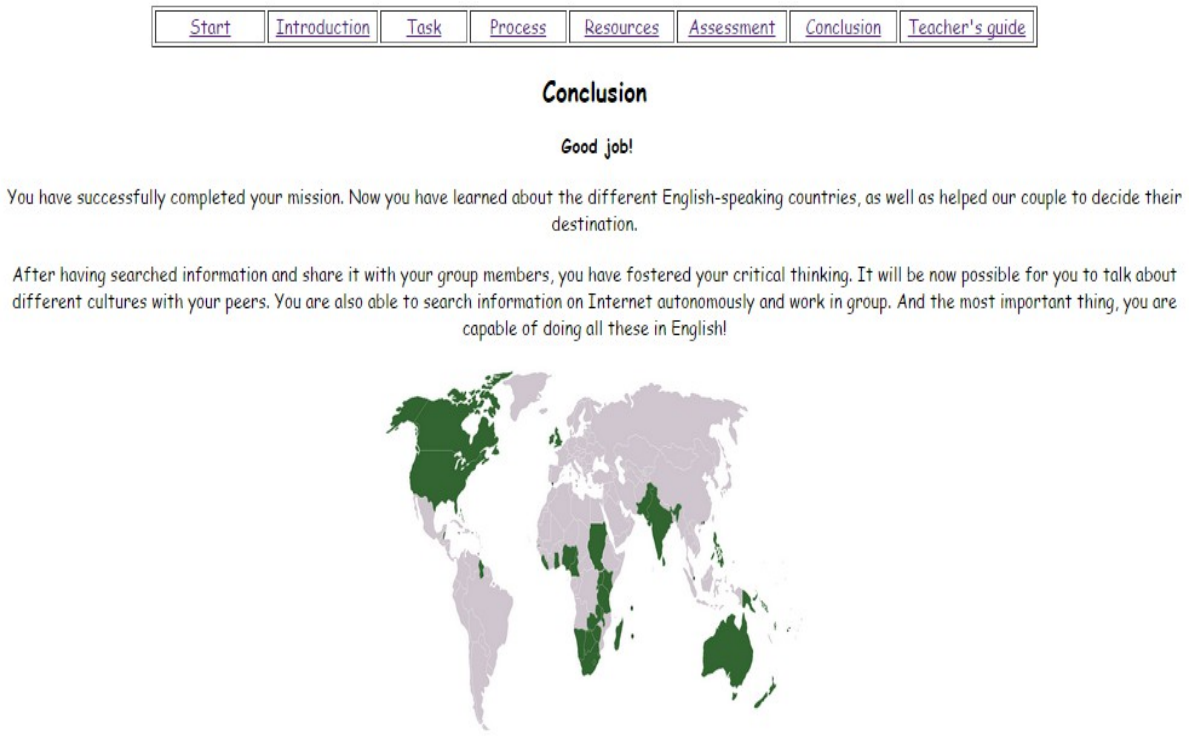

Figure 2: *WebQuest Conclusion*

RESULTS

Task

WQ are characterized by the use of web resources in a constructivism way, that is to say, students construct their own knowledge by interpreting their personal learning experience according to their beliefs and prior knowledge. This approach is basically based on the works of Piaget (1972) and Vigotsky (1978). At the end of the activity, students will have done a research work, which concludes with the final task. This task consists of a heading, and 4 parts related to each role. They have been asked to use pictures rather than text, thus their explanation had to be supported by images instead of blocks of text. Even though it was a challenging task for them, the vast majority succeed in including just pictures and giving a good presentation. As mentioned before, each student has a different role, and their aim is visiting the different pages preselected by the teacher so they will become experts. Next, they should explain what they have found to the other

members and then, collaboratively prepare the PowerPoint presentation. Groups consist of 4 members corresponding to the different roles: the geographer, the historian, the gastronome and the entertainment researcher.

The geographer makes a small presentation about the location of the country, its main cities, as well as other aspects such as the meaning of the flag, currency and other languages.

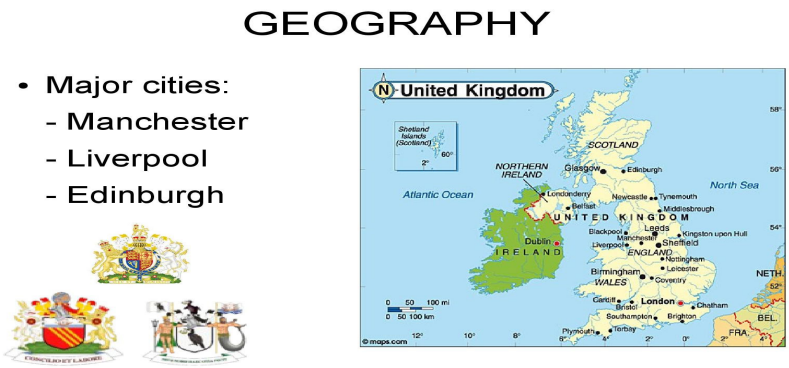

Figure 3: *The geographers' presentation*

The historian talks about the main monuments and a description of a festivity, focusing on what citizens usually do on that particular day.

Figure 4: *The historians´ presentation*

The gastronome describes the most common food and explains one of the most typical recipes from the UK. Finally, the British and the Spanish cuisine are compared.

Figure 5: *The gastronomes´ presentation*

The entertainment researcher speaks about cultural aspects such as music, bands and other important celebrities born there.

Figure 6: *The entertainers´ presentation*

Research Questions

The previous results have shown the opinions of students from 3rd year of ESO after having worked with the WQ in terms of motivation, digital and cultural competence, which are related with the three research questions:

Regarding research question 1, that is, **to what extent does the WQ contribute to improve students' digital competence?**

WebQuests may be labeled inquiry-centered or problem-centered learning by some, while others may view them simply as activities that provide students the freedom to learn by accessing multiple resources. However they are characterized, WebQuests are reflective, fluid, and dynamic. They provide teachers with the opportunity to integrate Internet technology into the course curriculum by allowing students to experience learning as they construct their perceptions, beliefs, and values out of their experiences (Beane, 1997).

As it has been shown in the pre-questionnaire, students have a high command of technology in daily and academic activities. It might be mentioned that students' digital competence has only slightly improved, considering that they are digital natives. Therefore, some of them admitted that working with the WQ have not helped them to improve their digital competence because they already knew how work with computers. Moreover, according to students' perceptions, the majority of students express that using digital tools has helped them to acquire knowledge. In this sense, students argue that not only they learn the contents appearing in the curriculum, but also to improve their computer's and the Internet use. The majority of them admit that since this is a different way of working to which they are not accustomed, they find it much more motivating.

Considering research question 2, that is, **to what extent does the WQ contribute to acquire cultural competence?**

Culture in language learning is not an expendable fifth skill, tacked on, so to speak, to the teaching of speaking, listening, reading, and writing. It is always in the background, right from day one, ready to unsettle the good language learners when they expect it least, making evident the limitations of their hard-won communicative competence, challenging their ability to make sense of the world around them. (Kramsch 1993: 1).

In order to acquire cultural competence, we followed what Tomalin and Stempleski (1993) named as ***the task-oriented approach.*** This approach is based on learners' own research. It is characterised by co-operative tasks. Learners work in pairs or small groups on different aspects of the other culture. They share and discuss their findings with others in order to form a more complete picture. Lastly, learners interpret the information within the context of the other culture and compare it with their own.

In order to obtain an evidence of the students´ acquisition of cultural competence, two questions were asked. The first one aimed at knowing whether the different pages selected have been helpful to learn about different cultures and the purpose of the second one was intended to show to what extent students have found useful the WQ to learn culture, considering group work, discussions and classmates' presentations. In this case, the vast majority appreciated that this web-based model has taught them different aspects about a new culture. Although some of them were already familiar with the country, they have also learned other aspects they were not aware of before. Yet, some of them have expressed their eagerness to travel to the countries assigned due to the interesting facts they have found, as well as, their tolerance towards other cultures.

And finally, considering research question 3, that is, **to what extent does the WQ contribute to motivate students towards learning English?**

Pérez Torres (2005) states: "a WebQuest for teaching and learning a second language is an inquiry oriented activity placed in a relevant thematic context. At the same time, it provides the students the opportunity to learn and put into practice some linguistic skills"

The WQ has been validated as a motivational tool in order to learn a foreign language. Some students have highly valued its oral and discussion pattern which allow them to express their feelings and their opinions in English, which is something they are not very used to do in the

traditional lessons. Students have also positively assessed the WQ because it allows them to simulate their ambitions for the English and at the same time to learn new vocabulary. Finally, it was asked the willingness to work with a WQ next year, hence a great percentage of participants expressed that working through a WQ has been motivating and interesting and they would like to work with it next year.

Taking into account the results, it can be said that students have found not only the resources highly effective in terms of gaining cultural and digital competence, but they also have a positive attitude towards the implementation of the WQ.

CONCLUSION

WebQuests are used to reach the best use of learner's time, knowledge acquisition and integration and extending knowledge. When working with a WebQuest, learners have to cope with a significant amount of new information and made sense of it (Dodge, 1998). WebQuests help students in working on both critical-thinking and analysis skills. Based on ideas of inquiry and constructivism, WebQuests involve cooperative learning as students work in groups. The results of its impression in the classroom demonstrated that WebQuest is an important tool of stimulus for the teachers, a suitable teaching and learning method and a way for integrating Internet in learning. One of the greatest achievements of the WebQuest implementation was obtained in pupils' motivation and cooperative work.

In this paper, an innovative unit and methodology have been implemented for teaching a second language. The Internet offers students more relevant and more complex learning activities than traditional learning models. In this sense, the WQ provides them with a great amount of new information facilitated by the teacher. In the light of the above, using technology and the Internet in classroom might have positive effects on students' opinions and motivation. According to Varank (2005), students' motivation increases while working with computers in class because it gives them another perspective of the topic. It is obvious that textbooks cannot give the appropriate information for the current context we are living, as it was stated before, many changes are occurring. Therefore, it could be argued that the use of WQ in classroom can be a positive tool to teach content to students.

After having analysed and interpreted the data interpretation and analysis, the idea of implementing a WebQuest for learning English served as a tool to improve the level of English proficiency of the participants involved in the study, and also was a useful and innovative technique for English language instruction, and established a direct and collaborative way of learning which allowed students the authentic use of the target language. On the whole, data interpretation and analysis suggest that the WQ is a useful and motivating activity worth of taking into consideration due to the fact that it encourages students' towards the acquisition of the language using a wide range of resources. Nevertheless, some weaknesses have to be acknowledged such as time management and low motivation towards speaking in front of the class using English.

Other drawbacks related with the design of the WQ have to be noted. It should be taken into account that although many templates are available on the Internet to design a WQ, teachers have to have a basic idea about creating web pages as well as web editor programs, since these are needed. Finally, time has been a strong restriction in order to implement the WQ.

According to March (2003) the best way to get attention and relevance in a WebQuest is to choose an engaging topic, attractive for students. The task should be related to the topic and meaningful for the learner. it should be a task in which the student are involved in understanding or solving a

real problem. After having analysed and discussed students' opinions and feelings in the participation of the WQ the main conclusions are drawn:

- The WQ has helped students to learn more about the different English-speaking countries.
- The WQ has improved the digital competence of students.
- The use of ICTs in the classroom motivates students towards learning a second language.

The conclusion of this study is to encourage English teachers to make use of the WebQuest in the EFL classroom since it demonstrated to be a useful teaching strategy that lets addressing the gaps between the traditional teaching and learning processes. The WebQuest provides a technological resource that brings together the students' needs and enhances motivation by creating dynamic and adaptable learning situations.

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