

**MARINE SCIENCE-RELATED WEB SITES: A TEACHING  
EXPERIENCE WITH STUDENTS OF ENGLISH FOR SCIENCE**

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RESUMEN

*Inglés Científico* se incluye en la oferta de optativas del primer ciclo del nuevo plan de estudios de la licenciatura en Ciencias del Mar de la Universidad de Las Palmas de Gran Canaria desde el curso académico 2001-2002. Dado que la lectura comprensiva de publicaciones científicas y divulgativas de la especialidad se encuentra entre los objetivos principales de esta asignatura (así lo indican los descriptores del BOE), consideramos que, por tratarse de un formato atractivo para los estudiantes, una buena forma de facilitar el aprendizaje del vocabulario general, la terminología científica y la sintaxis de estos textos sería habituarlos a la consulta de páginas web en inglés relacionadas con las Ciencias Marinas. En este artículo, describimos la actividad didáctica programada para tal fin y analizamos los resultados docentes obtenidos.

*Palabras clave: inglés científico, destrezas lingüísticas, terminología, páginas web, Internet.*

ABSTRACT

In the academic year 2001-2002 *English for Science* was introduced as a first-cycle optional course in the degree in Marine Sciences offered at the University of Las Palmas de Gran Canaria. In this paper, we describe a teaching experience intended to encourage learners to access Marine Science-related web sites in English. Apart from providing them with useful information about their studies, this task is also aimed at helping them to get familiar with English common vocabulary, specialized terminology and syntactic structures typical of scientific and divulgative texts.

*Key words: English for Science, language skills, terminology, web sites, Internet.*

## 1. INTRODUCTION: DESCRIPTION OF THE TEACHING EXPERIENCE

The use of the Internet as an auxiliary tool in the teaching of English for Specific Purposes (ESP) has been internationally acclaimed since the net became so popular in the 1990s (Eastment 1996, Alejo 1997). Research has shown that teachers should not only regard it as an easy way to access plenty of helpful information but also as a resource to be used in class for a wide variety of language-focused tasks which are usually very attractive to students (Sperling 1997, Gitsaki 2000, Teeler & Gray 2000).

For that reason, we decided to include in our syllabus an activity based on the Internet in a teaching experience aimed at the students of *English for Science*, a first-cycle optional course recently introduced in the degree in Marine Sciences offered at the University of Las Palmas de Gran Canaria. This activity was mainly designed to enhance the learners' knowledge of Marine Science-related web sites in English and exploit reading, writing, listening and oral skills. It was also intended to favour cross-curricular work as it requires the students' knowledge gained in their other degree courses.

They were asked to do an oral presentation based on the web site of an organisation or institution of an English speaking country, devoted to any field being dealt with in their studies —mostly oceanography, algology, marine biology, ecology and geology. They were told to be original and resort to web browsers to find material likely to be unknown to the rest of their colleagues. Once they had chosen an adequate web site under the teacher's supervision, the presentation would consist of the description of the centre summing up the information displayed on the site. The requirements were established as follows:

- They were expected to choose a quality web site with serious well-written scientific or divulgative texts.
- They had to work cooperatively in groups of three or four people and edit a coherent text of three pages maximum.
- Everyone in the group would read a similar-length part of that text in class. Considering that the level of most students was rather low and they were not proficient enough to improvise when speaking in English, reading was permitted in order to reduce their anxiety and nervousness during the oral presentation. The use of transparencies, photographs and layouts was recommended in order to clarify their explanations in a didactic and entertaining way.

## 2. RESULTS

In two sessions of two hours they were able to choose the web site in the computing facilities, produce the texts and show them to the teacher for revision. Thus, it was possible to devote the following two classes to the oral presentations of the 13 groups they formed. They picked out and described the following centres related to marine life:

- 1) *The Alaska Biological Science Center* [<http://www.absc.usgs.gov/research/walrus/pwid/manager.html>]

The Pacific Walrus Research Project is one of the current research efforts at this centre where they keep an international database (PWID) with a comprehensive set of Pacific walrus biological data collected by several participating organizations in the Bering and Chukchi Seas.

- 2) *The Marine Wildlife Care Center (Humboldt State University)* [<http://www.humboldt.edu>]

It is part of a network of wildlife emergency centres along the California Coast for oil spill prevention and response, though it is also used as a teaching facility for wildlife university studies programmes. During emergencies it is transformed into a rescue centre for oiled birds.

- 3) *The American Cetacean Society* [<http://www.acsonline.org/index.html>]

This is the oldest whale conservation group in the world. It is as a nonprofit, volunteer membership organization with members in 22 countries and is aimed at protecting whales, dolphins, porpoises and their habitats through education, conservation and research.

- 4) *The Institute of Aquaculture (University of Stirling)* [<http://www.stir.ac.uk/aquaculture>]

It is been regarded as the largest international research and post-graduate training centre of its kind in the world. Research is mainly focused on sustainable aquaculture, environments, reproduction, genetics, aquatic health, nutrition and feed supplies. It also provides services to industry, especially in project design, development and management.

- 5) *Joint Oceanographic Institutions* [<http://www.joi-odp.org/JDI/programs.html>]

It is a private, non-profit consortium of US academic institutions which fosters integration and coordinated work in the oceanographic community.

- 6) *The Marine Biological Laboratory (MBL)* [<http://www.mbl.edu/inside>]

It is the oldest private marine laboratory in the USA and also an international centre for education, training and research in fields such as cell and developmental biology, ecology, microbiology, molecular evolution, global infectious disease, neurobiology and sensory physiology.

- 7) *Minerals Management Service* [[http://www.gomr.mms.gov/homepg/regulate/ environ/ marman/sperm\\_research.html](http://www.gomr.mms.gov/homepg/regulate/environ/marman/sperm_research.html)]

This agency belongs to the United States Department of the Interior and was created to manage the mineral resources on the US Outer Continental Shelf and collect, verify and distribute mineral revenues produced in Federal and Indian lands.

- 8) *The Marine Institute (Ireland)* [<http://www.marine.ie>]

It is an Irish government agency for marine research and development which works with national and international organisations to support the marine sector in Ireland.

- 9) *The Florida Marine Research Institute* [<http://www.floridamarine.org>]

As a branch of the state's Fish and Wildlife Conservation Commission, it conducts applied research and makes sure that the scientific needs of their resource managers are met.

- 10) *The Universal Cetacean Institute* [<http://www.uci-endingcaptivity.org/aboutuci.html>]

This institute is a non-profit organization which funds dolphin, whale and monk seal projects as well as advertising campaigns to educate the public about the suffering of some marine mammals held in captivity for the display industry.

- 11) *The Australian Institute of Marine Science* [<http://www.aims.gov.au>]

Its main aim is promoting research related to the development of conservation-friendly tropical aquaculture industries. Current targets include land-based aquaculture of marine species, identification of new industries and development of production-enhancing new technologies.

- 12) *The Department of Fisheries of the Western Australian Government.* [<http://www.fish.wa.gov/comm/index.html>]

This institution is responsible for the management of the State's fish resources and pearling industry. One of their key objectives is to minimise adverse human impact on the aquatic environment.

- 13) *The School of Ocean and Earth Science (University of Southampton).* [<http://www.soc.soton.ac.uk/soes>]

This school is part of the Faculty of Science and the largest single university group of marine scientists in the UK. There are seven research groups: Ocean Circulation and Climate; Upper Ocean Processes and Biogeochemistry; Marine Biodiversity and Population Dynamics; Sedimentary Dynamics and Diagenetic Processes; Hydrothermal Processes and Ocean/Crust Interaction; Marine Geophysics and Palaeoceanography and Palaeoenvironments.

During the presentations all students were both speakers and listeners and although they had been told to ask questions after their peers' talks, it was observed that most of them showed some reluctance to co-operate in this area, maybe in case their inquiries could not be answered by those doing the oral presentation. Once they all had finished, the teacher explained to each of the members of the groups the pronunciation and presentation mistakes they had made. In this way all students got private individual comments on their performance and those with a lower level of English could learn from their errors without feeling inhibited. Special emphasis was put on the fact that they should avoid non-verbal communication inadequacies such as lack of eye contact or wrong intonation in future presentations they may have to do in their studies or professional careers.

According to the students' remarks and reactions, it should be pointed out that, in general, they felt more motivated reading texts on the Internet than in traditional formats like books or journals, even though hypertext obliged them to learn some basic vocabulary on the topic to go into the next pages and consequently they had to make a greater effort. In fact, many of them expressed their enthusiasm for their findings on the net and were decided to go on visiting web sites in English at home, since they found out they were not so difficult to understand as they had expected.

### **3. CONCLUSION**

From the teacher's point of view, the results obtained can be regarded as quite satisfactory. Apart from permitting the exploitation of four language skills (reading, writing, listening and speaking), this teaching experience is obviously popular among students and consequently it seems to have a great potential for motivating them to read English scientific and divulgative texts. Since science students are not usually accustomed to standing in front of the class to deliver a presentation, team work in small groups has proved to help them to exchange ideas and reduce the anxiety that most of them show when speaking a foreign language in public.

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