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Textual and Visual Aids for E-learning Translation Courses

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See table of contents

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Article abstract

The methodology of an e-learning course is based on the strategies of proactive learning, focused on the student as the key element of an approach to training in which the teacher acts as a facilitator of the learning process. Within the context of the design of a translation course in an e-learning context, the teacher must bear in mind that the student is faced with tasks that require the previous design of aids that help both in the translation process and in the acquisition of field knowledge to carry them out. Furthermore, the design should reflect the new multimedia structures that the information society has brought about.

We present a series of activities generated with both visual and textual material implemented in the design of e-learning courses in audiovisual translation (subtitling and multimedia), technical and scientific translation. One of the courses is accessible through the WebCT e-learning platform, another uses the BSCW^{TM} collaborative learning platform and the virtual classroom www.aulaint.ugr.es. The activities are intended to be of use for other subjects too, since they facilitate communication between students and act at the levels of lexical, phraseological, textual and cultural competence. Emphasis is put on the students' self-assessment of their progress.

Textual and Visual Aids for E-learning Translation Courses[*]

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RÉSUMÉ

La méthodologie d'un cours en ligne est basé sur une stratégie d'apprentissage autonome, dont l'étudiant est l'élément clé. Sous cette perspective éducative, le professeur devient l'élément qui facilite le processus d'apprentissage. Dans le contexte de la conception de cours de traduction destinés à l'enseignement en ligne, le professeur doit considérer que l'étudiant affronte des tâches qui requièrent la conception préalable d'activités facilitant aussi bien le processus de traduction proprement dit que l'acquisition de connaissances expertes pour mener à bien ces tâches. En outre, cette conception devrait être le reflet de nouvelles structures multimédias présentes au sein de la société de l'information.

Cette étude présente une série d'activités types créées grâce à un matériel aussi bien visuel que textuel et mises en œuvre pour les matières de traduction scientifique, technique et audiovisuelle. Ces matières sont disponibles sur la plateforme de téléenseignement WebCT. Lesdites activités prétendent être utiles pour d'autres matières puisqu'elles facilitent la communication entre étudiants, tout en développant un cadre méthodologique qui permet d'acquérir des compétences lexicales, phraséologiques, culturelles et textuelles. Dans la conception des activités, l'accent a été mis sur l'autoévaluation de la part des étudiants.

ABSTRACT

The methodology of an e-learning course is based on the strategies of proactive learning, focused on the student as the key element of an approach to training in which the teacher acts as a facilitator of the learning process. Within the context of the design of a translation course in an e-learning context, the teacher must bear in mind that the student is faced with tasks that require the previous design of aids that help both in the translation process and in the acquisition of field knowledge to carry them out. Furthermore, the design should reflect the new multimedia structures that the information society has brought about.

We present a series of activities generated with both visual and textual material implemented in the design of e-learning courses in audiovisual translation (subtitling and multimedia), technical and scientific translation. One of the courses is accessible through the WebCT e-learning platform, another uses the BSCW™ collaborative learning platform and the virtual classroom www.aulaint.ugr.es. The activities are intended to be of use for other subjects too, since they facilitate communication between students and act at the levels of lexical, phraseological, textual and cultural competence. Emphasis is put on the students' self-assessment of their progress.

MOTS-CLÉS/KEYWORDS
e-learning course, visual, text, proactive learning, translation training

1. Introduction

Since the publication of the Bologna Declaration in 1999, in the European Union much attention has been paid to one of its key points: the challenge of a European Space for Higher Education. Within such a *space*, The *E-learning* initiative was launched by the European Commission in 2000 to pursue both an improvement in quality standards and a response to the challenges of the so called Information Society (Castells 1996) at different levels. One of the main goals of such project

is the development of pedagogical tools to enhance alternative approaches to classroom teaching of university classes. At a local level, the last stage of the *eEspaña* program calls for the incorporation of online resources for teaching as a support for contact classes: "incorporación de recursos online para fines docentes que sirvan de apoyo a la formación presencial –aulas y campus virtuales-" (Fundación Auna 2004).

In this paper, we describe a series of activities for the implementation of e-learning courses in the context of audiovisual, scientific and technical translation at university level.

2. Translation and e-learning today: methodological and teaching principles

> The innovator, however, must in the first place be discontented, he must doubt the value of what he is doing or question the accepted ways of doing it. And secondly, he must be prepared to take fresh paths, to venture into fields where he is by no means expert. (Passmore 1970: 282)

In order to contribute with any useful material to a particular community, every teaching and research endeavour must be based on solid methodological premises. When developing an e-learning initiative, as a starting point, one must reconsider the IRS "teacher Initiates, student Responds, teacher evaluates" sequence in such a fashion that an exchange of roles takes place in a classroom –physical or virtual– in which teachers act as facilitators in the learning process. In this context, it is necessary to emphasize the proactive component of the learning process. Social constructivism has proved efficient in achieving this aim in translation studies (Kiraly 2000; González Davies 2004). The authors of the present paper explored different paths to acknowledge the challenge of syllabus design in scientific, technical and audiovisual translation for e-learning at university level. One of the key elements is the preparation of frame activities which serve the function of "scaffolding" (Kiraly 2000: 45) aimed at creating more learner autonomy and thus making the learning and assessment processes more professional. The main objective was searching for the learners' autonomous work and progress via the use of e-learning platforms. In our approach to translation teaching, e-learning is considered to be simply an instrument to offer learners a close-up of real-world conditions, not as a panacea.

Following is a description of the frame activities we have designed and the particular translation strategies and competences they develop.

3. Acquiring decoding strategies through basic corpus analysis

The use of corpora has been explored by a number of authors in the context of teaching scientific and technical translation (e.g. Bowker 1998; Faber et al. 2001; Halverson 1998; Kenny 2001). What follows is a description of the activities performed by our students with the use of learner corpora made up of comparable and parallel corpora in scientific and technical translation. We define parallel text corpora as "sets of translation equivalent texts, in which generally one text is the source text and the other(s) are translations" (Peters et al. 1996; 1997: 254). Therefore, a type of parallel corpus would be a learner corpus made up of original texts and student translations. Comparable corpora, on the other hand, have been defined as collections of "texts which, though composed independently in the respective language communities, have the same communicative function" (Laffling 1992). Thus, they are not translation equivalents but are texts selected on the basis of shared essential features such as date of publication, discourse community, topic, function, style, genre, register, sublanguage or domain. Within our courses, we have been using comparable English and Spanish corpora compiled for a R&D project aimed at building a knowledge base on Coastal Engineering.

Corpus analysis of original texts (comparable corpora) can be used to develop textual aids that enable users to:
a) acquire field knowledge and relevant recurrent cognitive structures
b) assess different intercultural and interlinguistic conceptual frames

Terminological data banks and expert systems have been extensively recognized as a key element in accessing specialized knowledge. However, these generally work at an abstract level and require a previous basic understanding of the domain under study. Corpus analysis can be a powerful tool in teaching translation since learners can access the lexical item and learn its relevant contextual and cotextual information and know to analyze the interrelations between these.

Following are two examples of activity-types to illustrate the above premises. When faced with the translation of a text such as the one below (Fig.1) describing a basic event, in our case the definition of "wave" and its elements, the translation students need a clear idea of the basic concepts that shape the domain. Students can gain an understanding of these concepts in a corpus based manner if we provide the student with the relevant corpus concordance analysis to do so.
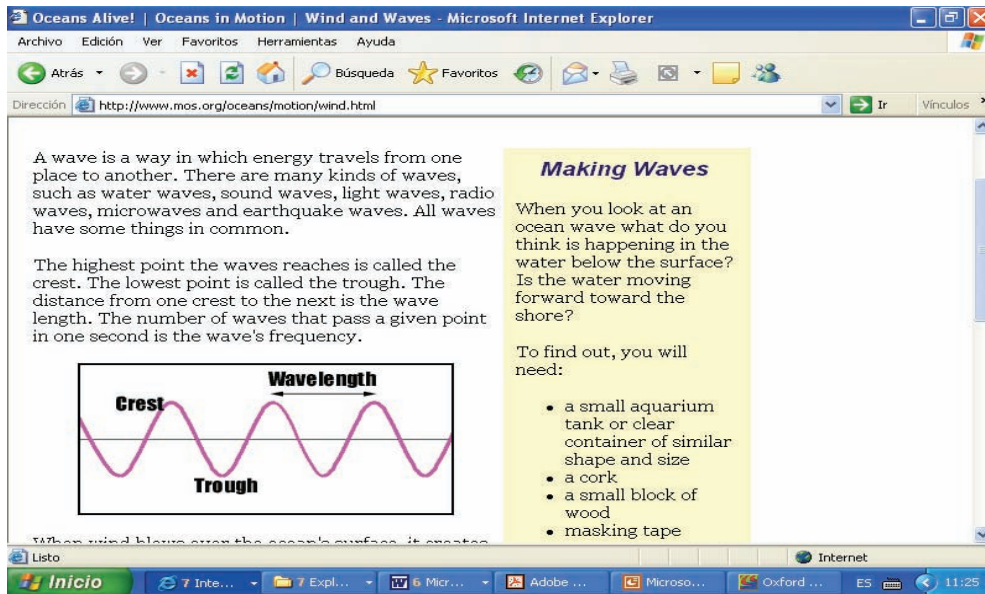

Figure 1. Basic text on "waves" aimed at secondary school students.

Here (fig.2) is a concordance of the equivalent of the lexical item in Spanish. Sorting the concordance to the left of the lexical item ("ola") under study, prompts us to see the basic concepts that shape the domain in question.
Through examples of concordance such as these, which we term "conceptual concordance", the student can learn all the basic concepts related to wave at a glance.
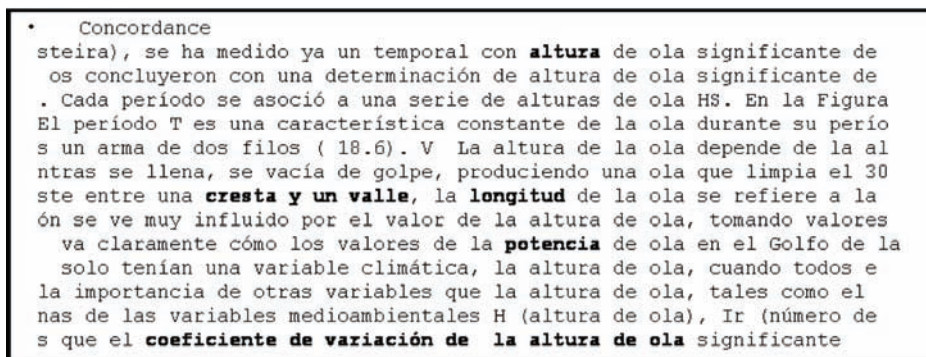

Figure 2. Left context Spanish "conceptual concordance" of the word "ola".

In bold are the basic concepts that shape the conceptual domain surrounding "wave".

The example below (Fig. 3) demonstrates the main application of using a corpus in a translation class: learning the context and cotext of a particular item and inferring the relevant collocational data: e.g. "playa fluvial artificial", "playa fluvial natural". However, a closer look at the phraseology of the concordance can tell us about conceptual relations in the domain: antonymous relations such as "playa abierta" vs. "playa abrigada", "playa emergida" vs. "playa sumergida" or "playa arenosa" vs. "playa rocosa".

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Concordance
on una orientación en este tramo es NE-SO. Es una playa abierta con una extensión de 12 km, donde la variabilidad estacion
ión por primera vez del METODO de ESTABILIDAD DE PLAYAS ABRIGADAS . Innovación tecnológica, basada en el equilibrio d
da entre los límites de marea alta y baja, y una playa alta (backshore o ´transcosta´) que corresponde con el área cubiert
 debería construir un varadero permanente en una playa arenosa. Los pilones de madera se deberían hincar en dos líneas r
uación Detallada de Impacto Ecológico  (diques y playas artificiales), aunque a tenor de una resolución  por la que se Inte
a cual algunos autores distinguen dos zonas: una playa baja (foreshore o ´zona de batida´), comprendida entre los límites d
eve litoral. Al fondo de esta Ría se extiende la playa barrera del río Anllóns o playa de Enmedio, la más importante de l
nte el estudio sistemático del comportamiento de playas colgadas o sustentadas por medio de un pie sumergido. Para ello
reniscas pliocenas; no se identifican niveles de playas cuaternarias en el interior de la cuenca, salvo al pie de los cerro
 construyendose encima de  los campos dunares y playas de acumulación, así como la extracción masiva de   arena con de
imensional B (m-3/2) asociado a la reflexión. En playas disipativas, caracterizadas por pendientes muy suaves y una refle
ción del nivel del  mar trasvasando arena de la playa emergida a la sumergida hasta alcanzar un  determinado perfil de
 suficiente como para que pueda considerarse una playa estable. La reciente  construcción de un espigon en la Piedra del
del Puente se extienden doscientos metros de una playa fluvial artificial muy intensamente utilizada en los meses de verano
cos. Este es el único tramo donde aún existe una playa fluvial natural. El margen izquierdo presenta problemas de erosión
iles capaces de describir el runup y run-down en playas interiores o próximas al puerto.    5. Resultados    Durante las Jo
link & Turner (en Short, 1999) corresponde a una playa intermedia tipo barra de bajamar con retorno. Estas playas se cara
minan los modos normales de inestabilidad de una playa longitudinalmente uniforme (Falqués et al., 2000).  El crecimiento o
 por Masselink y Turner para la clasificación de playas mesomareales (en Short, 1999) y por Masselink y Pattiaratchi, (2
la morfodinámica de playas, dentro del modelo de playas micromareales propuesto por Wright y Short (1984), donde se est
 río Landro. La playa de Covas es hoy en día una playa modificada, que se desarrolla entre la Punta Anchousa en el Oeste
róstegui et al., 1996). Creación y protección de playa nudista (área occidental del ápice). Inundación del delta en 1996: c
ón adecuados para zonas   de calma relativa como playas protegidas o el interior de puertos ya existentes. En general, si e
 arriba del puente Mayor.  Fig. 7. Aspecto de la playa recrecida y acondicionada.  Fig. 8. Vial del aparcamiento. Fig. 9.
se realizan sobre una topografía uniforme en una playa rectilínea. Este trabajo pretende contribuir a la investigación del
 bosque de Collserola, la sierra de Marina y las playas recuperadas. El lecho del Besòs es un espacio público de gran m
esta describe perfiles con mayor concavidad para playas reflectivas y perfiles con menor concavidad, más tendidos, cuand
itando su penetración en grietas y fisuras y las playas rocosas tardan más tiempo por lo general en regresar a su estado
o sus diferentes parámetros (cota de coronación; playa seca y estrán; partes emergidas y sumergidas, pendiente final). En
 presenta un mayor intercambio de arena entre la playa sumergida y la intermareal, ya que se encuentra en la zona de entr
con retorno o en el caso en el que ?=5,6 con una playa ultradisipativa. Sin embargo, los perfiles no se ajustan por sus car
eso al litoral, especialmente en el caso de las "playas vírgenes", debe ser:  - Inclusión de los accesos en los instrument
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Figure 3. Spanish centered concordance of the search item "playa*".

4. Threefold approach to self assessment

One of the main challenges for a web-based translation course is generating well-designed self assessment tools. The following considerations have proved useful in our research.

4.1. Self assessment through the use of learners' corpora

Parallel corpora made from original texts and student translations of those texts can be a powerful tool to develop self-assessment strategies.

Self assessment of progress can be carried out in a top-down manner through criterion descriptor training (see 4.2.) and bottom-up fashion, by focusing primarily on microstructure to provide a more thorough analysis at sentence, paragraph and text level.

As parallel corpus we have used a learner corpus of student translations with relevant problem segments extracted with the use of WordSmith Tools® and tagged as "<problem></problem>". We classified the segments to represent samples of problem and error types and offered students "filtered" concordances to assess their rendering of a particular segment against those of their peers. All texts were blind as regards the author of the translation and were classified by level of specialization and function.

This extract (Fig. 4) shows an example problem ST segment and student target text renderings. The concordance is obtained by searching for a particular key element that is predicted

to appear in most translations (in the example the segment "97%") and given to students in a whole sentence. Students grade renderings and explain particular error and problem types.

As nutrient recycling provides 95% of the phosphorus and 97% of the silicon used by Lake Tanganyika algae in primary production 7, modest changes in mixing efficiency have great consequences for lake productivity.
Como reciclaje de **nutrientes** proporciona el 95% de fósforo y el 97% de silicio utilizado por algas del lago Tanganika en la producción primaria; modestos cambios en la eficiencia de la combinación tienen grandes consecuencias para la productividad.
Teniendo en cuenta que la renovación de **nutriente**s proporciona el 95% del fósforo y el 97% del silicio usados por las algas del lago Tanganika en la producción primaria, cualquier cambio en el rendimiento de la mezcla tiene grandes consecuencias en la productividad del lago.
El reciclaje de **nutriente**s provee el 95% del fósforo y el 97% del silicio usado por las algas del lago en la producción primaria, estos pequeños cambios en la eficacia de la mezcla tienen consecuencias importantes para la producción.
Como el reciclaje de **nutriente**s provee el 95% del fósforo y el 97% de la silicona usadas por las algas del lago Tanganica en la producción primaria, leves cambios en la eficiencia de mezclas tienen grandes consecuencias en la productividad del lago.
Ya que los **nutriente**s proporcionan el 95% del fósforo y el 97% de la silicona utilizada para los productos primarios de algas del lago Tanganika, incluso las pequeñas variaciones en la mezcla llevan a importantes consecuencias para la productividad del lago.
Debido a que los **nutriente**s reciclados proporcionan el 95% del fósforo y el 97% del silicio que utiliza las algas del lago en la producción primaria, un cambio sin aparente relevancia en la eficiencia de la mezcla acarrea grandes consecuencias para la productividad del lago.

Figure 4. Source text segment from "The Heat on lake Tanganyika" (*Nature* **424**, 731 – 732, 14 August 2003) and 6 of students' translations.

After choosing a specific segment as the most suitable equivalent for a particular source text segment, students had to explain and justify their decision on the basis of quality parameters (Laurscher 2000; López and Tercedor 2004).

4.2. Self assessment of translations through criterion descriptor training

In addition to the segment or paragraph approach seen above (4.1.), students can develop self assessment strategies through top-down analysis in which the focus is placed on the text as a whole and students infer conclusions from super- and macro- to micro-structural level. We developed a frame grading system that was further adapted to suit the conventions and idiosyncrasies of the various courses involved in the initiative: Scientific and technical translation English-Spanish for 3rd year students, Scientific and Technical Translation Spanish-English for 4th year students, Localization and Audiovisual translation English-Spanish for 4th year students. We trained students in the use of the grading systems through multiple choice questionnaires. The criterion descriptors (below) are presented showing a left to right progress from decoding to encoding strategies and a vertical progression with regard to quality.

DECODING		ENCODING		
	Content	Register, vocabulary, terminology	Translation brief and orientation to target text type	Written expression
0	The text fails to meet minimum requirements	The text fails to meet minimum requirements	The text fails to meet minimum requirements	The text fails to meet minimum requirements
1-2	Comprehension very limited. Major content errors. Substantial omissions of ST content.	Choice of register inappropriate or inconsistent. Vocabulary very limited with many basic errors. No awareness of appropriate terminology..	Formal or literal translation. Little or no use of rhetorical devices appropriate to TT type.	Very limited, ineffective and unclear. Many errors in basic constructions. Complex structures are not attempted or unclear.
3-4	Comprehension limited. Minor content errors. Some omissions of ST content.	Choice of register sometimes inappropriate and. inconsistent Vocabulary limited with some basic errors. Limited awareness of appropriate terminology.	Elements of formal or literal translation. Limited use of rhetorical devices appropriate to TT type.	Limited, barely effective, sometimes unclear. Basic constructions are accurate but complex structures are avoided or unclear.
5-6	Comprehension adequate. Minor omissions of less relevant ST content. Over- or under-translation distorts ST content or results in ambiguity	Choice of register mostly appropriate and consistent. Vocabulary effective despite errors. Terminology appropriate despite errors.	Clear orientation towards TT type. Appropriate use of many TT type rhetorical devices	Effective and clear. Complex structures are clear. Some errors in use of articles, prepositions or spelling of less common words.
7-8	Comprehension good. Over- or under-translation does not distort ST content or result in ambiguity.	Choice of register generally appropriate and consistent. Vocabulary effective despite mistakes. Terminology appropriate despite mistakes.	Effective production of TT type. Consistently appropriate use of TT type rhetorical devices	Good and effective. Systematic errors of advanced usage only. Occasional mistakes.
9-10	Comprehension very good. ST content fully understood.	Choice of register consistently effective and appropriate. Vocabulary wholly accurate with some sophistication. Terminology appropriate and largely accurate.	Effective, sophisticated production of TT type with few errors.	Very good. Sophisticated use of language with few or no errors of advanced usage and occasional mistakes only.

Figure 6. Scaffolding: a learning frame to develop self-evaluation competence.

Students are taken through the process of distinguishing between different Target Text versions of phrases drawn from the learner corpora in order to identify the difficulties they entail and select the alternatives they prefer with reference to the criterion descriptors. Initially, they focus in the left-to-right columns to identify error types. Figure 5 shows errors of content. They are then expected to 'rank' the translation fragments on the vertical 0 to 10 scale. These activities lead them towards a fuller understanding of the errors they typically commit and the ability to identify their own and their peers' errors, to classify these in terms of type (using the left-to-right criterion labels) and in terms of seriousness (using the vertical 0 to 10 scale).

4.3. Self assessment through multiple choice questionnaires

Multiple choice questionnaires are used extensively and prove useful testing instruments in many disciplines. In our research, they have demonstrated their efficiency when dealing with topics such as:

a) Relevant theoretical questions and research articles that learners should be familiar with
b) Becoming familiar with standard text structures or formats as a key to identify the text type and convention (i.e. a particular superstructure such as that of a resource file in localization)
c) Identifying particular metaphors in a domain (as a cognitive resource) or a particular text (as a textual element) (cf. question 9 on figure 7)

d) Getting acquainted with standard translations in highly technical documents (question 10 on figure 7)
e) Identifying the function and focus of an image in relation to a text through matching exercises. We here have used several images representing the same concept from different perspectives on one column and their matching texts on another column.
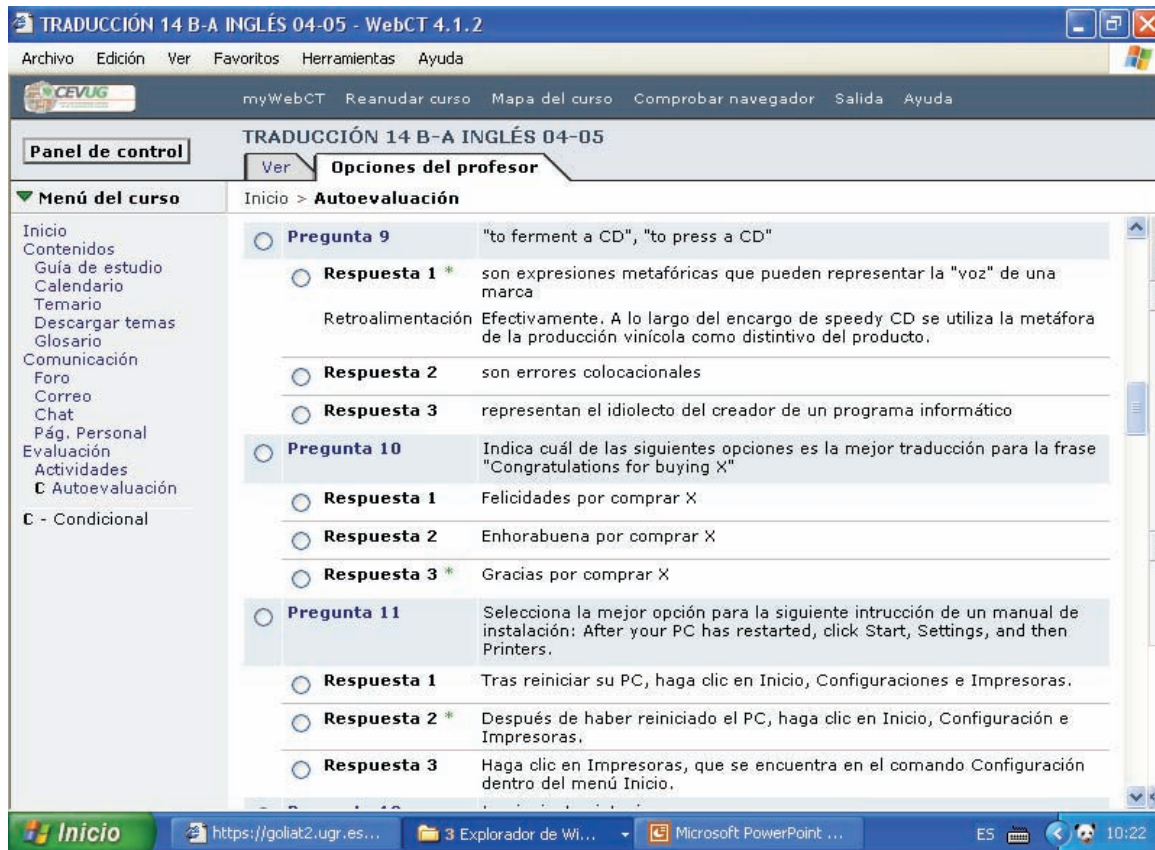

Figure 7. Screenshot of a multiple choice questionnaire from the course on Localization on the webCT platform.

These topics help students with theoretical issues as well as with text conventions of different genres. However, we believe it is necessary to warn against the use of this sort of tool for assessing translations as there a proposal might be seen as *the* translation for a particular segment.

5. Moving away from the text-centered approach: assessing the image-text interrelation in class

Today's professional environment has new implications as regards the work demanded from the translator. These include the shift towards new concepts of translation that include focusing on non textual information to produce translation or technical writing solutions.
Translation courses must assess the new sorts of activities that are being demanded from the translator and that are not accounted for in the traditional definitions of what the translation practice is (as Maria Tymozcko points out in the current volume). Given the nature of the courses we work with, we place special emphasis on the importance of visual and graphic information in texts. We take the view that:

a) the presence of images is not fortuitous in the text
b) the image directs the reader attention to a particular aspect on the text
c) images can be classified by register, level of expertise and geographical relevance

It is useful to try and classify images according to their function within the textual structure and the perception the user has of them as regard their relationship with the concept or text they serve. This brings us to culturally oriented images and the need to try and find solutions to word plays accompanied by images such as it often happens in localization (Tercedor 2005).

As cognitive support for the text, the image should contain basic level categories of the text it accompanies. In a process oriented html document on recycling (below), the image clearly represents the process described in the text.

Figure 8. Extract from "Tips for reducing solid Waste". http://www.epa.gov/epaoswer/non-hw/reduce/catbook/the12.htm

5.1. Working towards accessibility in translation

Accessibility puts the multi in media
J. Clark (2002)

The current context of university translation teaching demands we consider concepts such as accessibility and usability. As the W3Consortion suggests, creating accessible content means that the content can be used by people regardless of disability; by the same token, translating html and xml documents has necessarily to include training in how to deal with these two concepts in a way that students (1) learn how to analyze drawbacks for accessibility in a web site (2) acquire the basic knowledge to provide a web based document with textual solutions that boost accessibility.

We propose activities that include the writing of text descriptions in the 'alt' attribute of an html document to make web sites accessible for people who cannot access visual information in images. Alternative sources of information that improve accessibility are captions and "collated text transcripts" (caption text with text descriptions of video information) for videos (Haritos-Shea 2002).

In contrast with the text description in the image shown above (Fig. 8), there are many technical and scientific web documents which lack text descriptions in images accompanying texts and make it impossible for the image to be retrieved by search engines. In other cases, the descriptions offered are poor in the sense that:

(i) the same description is given for different pictures in the site,

(ii) the description is two short to be informative enough or two long to be retrieved by text-to Braille conversion tools.

When approaching the translation of these documents, students are encouraged to propose a text description for the image that requires one:
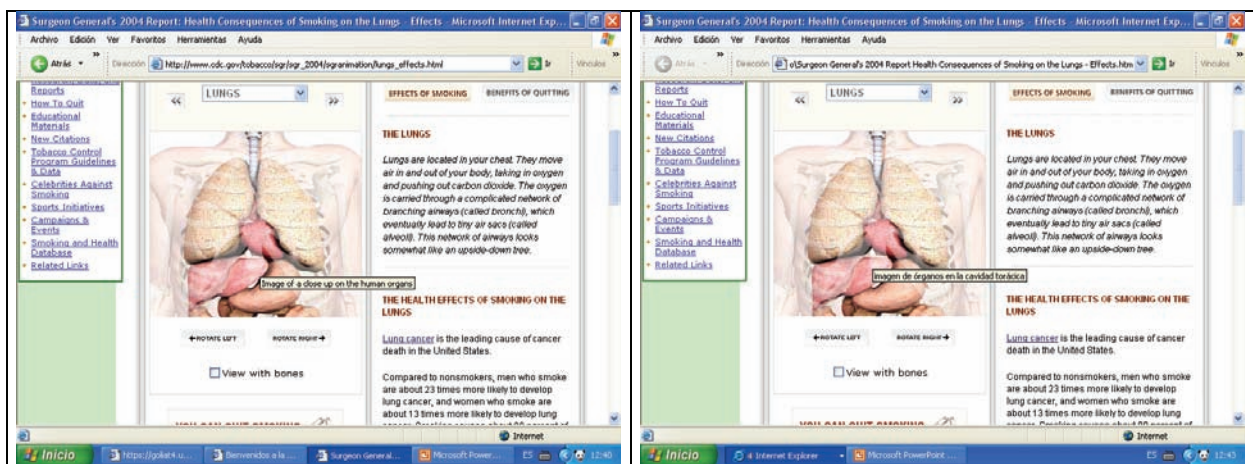

Figure 9. English source text with image with inadequate text description (left). Spanish translated text with text description for image to boost accessibility.

We believe that these exercises, in addition to being highly motivating, also illustrate the importance of the image in the new web based document types as a key to register, function of text and focus of information.

6. Conclusion

Developing aids for courses in audiovisual, scientific and technical translation can address the challenges of the accessible IT society through the use of multimedia text types and by responding to the new tasks demanded of translators through boosting the use of corpora in class and carrying out translation related activities that imply focusing on textual and non textual material as a means of studying register and focus of information.

In the context of e-learning, the concept of scaffolding must be taken into account in order to follow an approach in which partial tasks are components of a methodology in which teachers act as facilitators of the learning process.

NOTES

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