Neither Born nor Made, but Socially Constructed: Promoting Interactive Learning in an Online Environment

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1. Introduction

Developments in translator training at undergraduate level vary greatly from country to country and institution to institution. The constraints of local, national and supranational contexts determine the success of training through the economic resources made available and overriding social, political and academic directives. National, university and departmental cultures can foster or stifle growth in teaching innovation; research-led institutions may shun or actively promote a link between "laboratory" and "classroom". But in any institution, when teachers/facilitators share common interests in research and teaching, close collaboration and coordination between them and their undergraduate students/learners can be achieved as knowledge is socially constructed. A close link between research and learning through the application of research processes strengthens the commitment of all involved and motivates learners (Roach *et al.*, 2001). The present study forms part of an ongoing project that integrates research and teaching. The authors belong to an R & D project financed by the regional government of Andalusia (Spain) in which we apply developments in the field of process-oriented terminology management and corpus linguistics to the generation of terminological resources within the domain of Coastal

Engineering (Faber *et al.*, 2005). The methodology and results of this project inform and resource the design of teaching materials in the context of two innovative teaching projects: "Aulaint", an online translation classroom (http://aulaint.ugr.es) funded by the Spanish Ministry of Education and Science, the regional government of Andalusia and the University of Granada; and "Analysis of the image-text interface in scientific and technical translation" financed by the University of Granada. The learners who participate in the study are final year undergraduates working from English to Spanish and from Spanish to English in the first degree in Translation and Interpreting of the University of Granada following elective courses in Scientific and technical translation and Localization and audiovisual translation.

In this teaching context, we apply a social constructivist approach through blended e-learning environments that combine different ratios of contact classroom teaching and online distance learning to promote effective learner-centered learning. Innovative action of any kind should not adversely influence learner performance and we would not expect our approach to have significant consequences on learner outcomes as revealed by final course grades. Our student groups are large enough for us to expect grades to approach a normal distribution frequency. In this study, our overriding aim in taking innovative action is to improve the quality of learning but our personal involvement in the process means we must seek to guarantee the integrity of learner outcomes.

The present article reviews the contribution of social constructivism (Kiraly, 1999, 2000, 2003, 2005) to translator training and defines the precise nature of "scaffolding" appropriate to promote learner-centered learning in an online environment. We describe instruments and activities we are currently developing and present initial qualitative and quantitative data on the results of our interventions.

2. Social constructivism in translator training

We believe that while learning is an individual mental process, it is significantly influenced by social interaction and shaped by

exchanges of information and opinions between individuals. Meanings are negotiated in debate and knowledge is constructed as a product of social interaction.

Kiraly (1999, 2000, 2003, 2005) adopts a social constructivist approach to translator training as a reaction against the context of the university where he teaches (Kiraly, 2000, p. 6). He seeks to promote an interactive learning environment that enhances teaching and learning for all involved by comparison with the unidirectional, teacher-to-student transmission of knowledge. He bases his alternative on a set of pedagogical premises and theories current in Foreign Language Learning (FLL) since the late 1960s and often loosely gathered under the "humanistic" umbrella (Stevick, 1990 provides an excellent overview of this field).

Multiple realities and multiple perspectives, Vygotsky's zone of proximal development (ZPD) (1994), appropriation, scaffolding, the acquisition of translator competence, socio-cognitive apprenticeship, transformation, learning-centeredness, collaborative/co-operative learning, project-based learning, situational learning and situated translation feature among the tenets of his approach. They constitute a mindset that underlies Kiraly's desire to reorient translator training so students can become proactive, responsible participants in their learning, as teachers relinquish their hold on power in the classroom and turn into supportive facilitators of that learning.

Figure 1 (Kiraly, 2000, p. 72) is a graphic representation of an idealized translation classroom. The relationships are balanced rather than hierarchical and the words "teacher" and "student" do not appear. The practice of translation in translator training is rooted in a real-world context. As opposed to the traditional translation classroom where knowledge would only pass from the teacher to the students, in the collaborative classroom, the teacher is the facilitator and the classroom is a part of the real world. The translation brief is carried out under real-world conditions: there is a client and an expert in the subject field, and students work in teams. In our real-world classroom, students work in an environment that models the realities of professional translation. They work in an online environment, they deal with authentic projects in teams, and the teacher is not the source of information but a facilitator.
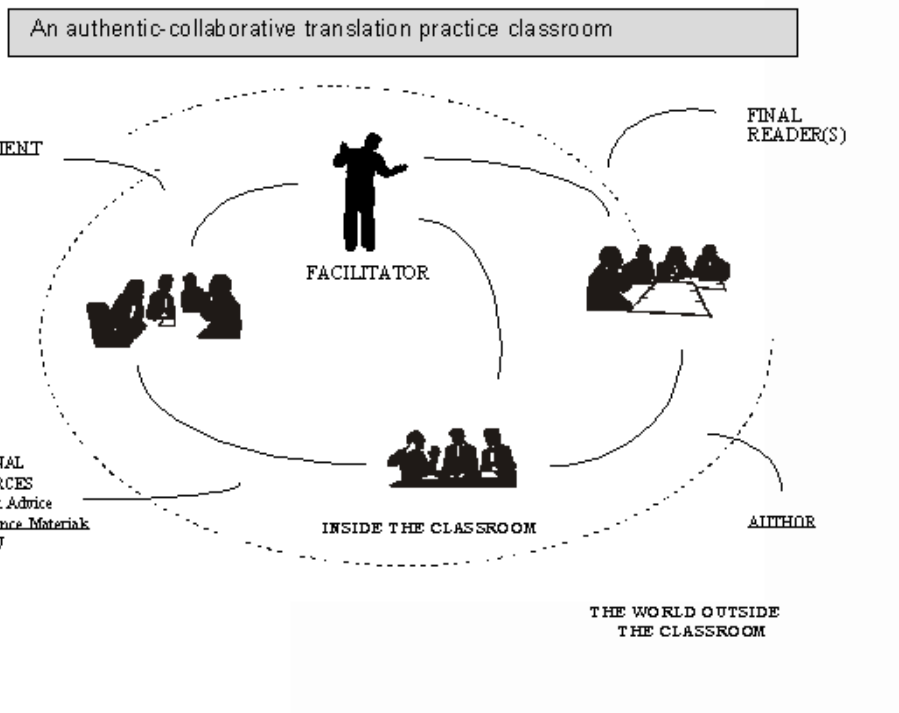
An authentic-collaborative translation practice classroom

CLIENT

FINAL
READER(S)

FACILITATOR

EXTERNAL
RESOURCES
• Expert Advice
• Reference Materials
• WWW

INSIDE THE CLASSROOM

AUTHOR

THE WORLD OUTSIDE
THE CLASSROOM

Figure 1. Social constructivism and translation (Kiraly, 2000, p. 72).

In the following discussion, we review the most important of these concepts in order to establish the elements that are clearly replicable in other translator training contexts. We look at some of Kiraly's sources and discuss the appropriateness of his proposals to our own context within the Spanish state university system.

When Kiraly writes of "multiple realities and multiple perspectives", he is proclaiming one of the most frequently overlooked truths of every classroom. Namely, that individuals understand and view things in different ways and that these differences can be used to inform and enrich the learning process. If the teacher/facilitator is open to an interactive learning environment, the varied input that a group can contribute is positive. Given that this potentially rich environment is available, Kiraly counters the opportunity with a note of caution when he

describes Vygotsky's concept of the zone of proximal development (ZPD). In a group of 10, 20, 30 or more individuals there are potentially 10, 20, 30 or more different contributions available; however, none of these individuals can learn unless they are able to build on knowledge they already possess. The ZPD is an area of knowledge close to and developing from what learners already know. If there is no common ground between the 10, 20, 30 or more potential contributions, there is no room for them to learn together. It is the responsibility of the teacher/facilitator to establish the nature of that common ground.

In tasks that enable or oblige learners to interact in order to establish shared knowledge, appropriation of that knowledge takes place. Content is no longer an object "given" to students by teachers; it is the product of interactive construction and thus belongs to the learners. They "appropriate" the content for themselves.

And "scaffolding" is the means Kiraly uses to achieve this. So the important questions are "What is involved in scaffolding?" and "How do we implement scaffolding in the classroom?" Kiraly describes scaffolding as an interactive structure that develops in the classroom because the roles of teacher and student change into those of facilitator and learners. He describes how, in his classroom, the teacher becomes a facilitator who negotiates with learners in the same way that translators negotiate with clients. Furthermore, he reports that the teacher/facilitator also gives hints, examples and signposts that help learners identify their own solutions, reflect upon the learning process, and gain autonomy. Scaffolding, he says, is "a flexible structure that emerges within the Zone of Proximal Development as a function of ongoing negotiations between the teachers and the learners" (Kiraly, 2000). However, scaffolding described in this way is not replicable. It is the product of the personal skills of the teacher/facilitator in question – namely Kiraly himself – and as such may be beyond the scope of others. As Schäffner (2004, p. 159) indicates: "It is not clear what Kiraly does, and he also does not explicitly comment on his own notions of translation which underlie his teaching…".

We prefer to define scaffolding within the context of an online learning environment as a flexible, interactive structure that stimulates learners to negotiate understanding and establish a common ZPD. Once they achieve this, they can collectively move forward to achieve a deeper, shared knowledge of key concepts. Our scaffolding consists of instruments and mechanisms designed to foster collaborative learning: participants exchange their notions of translation in order to make their process explicit, to establish and apply criteria of quality to their individual and team processes and to the products of these.

Kiraly proposes the collaborative/co-operative approach should be adopted in the translator training classroom, the basic principle of which is "positive interdependence", summed up as "we are all in this together, sink or swim." (Johnson *et al*., 1986, p. 59). The approach was developed for secondary schooling and heavily relies on teacher structuring – some might say "manipulating" – of learner teams to promote interdependence, accountability, interaction, collaborative skills and the conscious processing of group performance. This structuring includes the conscious formation of mixed ability teams and the changing of teams to ensure homogeneity of performance. The logic behind developing co-operative learning has much to do with the secondary classroom context and, particularly, with teenage behavior. Perhaps we should consider to what extent this is applicable in the modern European university that is currently undergoing wide-ranging reforms aimed at drawing much closer links between tertiary education and the market for graduates (Cózar Sievert, 2003).

More recently, Kiraly (2005) adapts project-based learning into his alternative to the traditional university classroom. Estaire and Zanón (1984), Jolly (1990), Nunan (1995), and Robinson and Ross (1996) are among the many teachers and researchers who have developed task- or project-based learning in the field of FLL and all have sought the same overriding objective: to develop authentic or near-authentic activities to enhance and improve the learning process. This authenticity was present in Kiraly's earlier work in the reference to "the world outside the classroom" seen in Figure 1.

In the Professional Approach to Translator Training (PATT), Olvera *et al.* (2005, 2007) draw these approaches together into a coherent whole that we adopt here. For practical translation tasks, our learners work in teams of five or six and individuals assume specific roles or responsibilities – documentalist, terminologist, translator, reviser/editor and team leader – in order to involve them in authentic translation experiences. Roles rotate from one task to the next to ensure everyone has ample opportunity to experience all aspects of the process.

3. Participants

The students who have participated in this research have been enrolled on one, two or three, one-semester elective course modules available to final year students of the first degree program in Translation and Interpreting at the University of Granada, Spain. The modules are in Scientific and technical translation from English into Spanish (labeled t8) and from Spanish into English (t9), and Localization and audiovisual translation from English into Spanish (t14). Maximum group size for these courses is 45 and data comes from 1 group per year for t8, 2 groups per year for t9, and 1 or 2 groups for t14, so the student population totals some 600 subjects. Data is drawn from academic years 2004-5, 2005-6 and 2006-7. Each module is the equivalent of 4.8 ECTS credits which is interpreted as 120 student learning hours.

4. Instruments

4.1 E-learning platforms

We have trialled and refined a range of instruments using three different e-learning platforms. The widely-known, commercial WebCT (http://www.webct.com/) platform is used by the University of Granada Virtual Learning Center, known by the Spanish acronym *Cevug* (http://cevug.ugr.es/web-cevug/index.php) for official, blended e-learning courses. A limited number of courses are taught online through this platform and undergo a strict selection process described elsewhere (Robinson *et al.*, 2006, pp. 18-19). Two of the three course modules studied in the present article are currently taught via WebCT; one is taught with support from the SWAD platform, developed by Antonio Cañas Vargas of

the University of Granada and in itself a teaching innovation financed by the University (http://swad.ugr.es/). The Basic Support for Collaborative Work platform (BSCW) is used by Aulaint (http://aulaint.ugr.es). Although no longer used as a work platform, participants draw on its excellent online library and continually growing resource links. It has formed part of the trialling of one of the course modules and is accessible to participants via WebCT. These three platforms have enabled us to use different degrees of blended e-learning ranging from a 50:50 approach, with students attending 60 hours of whole group sessions and following scaffolded learning activities for a further ±60 hours, to the 80:20 ratio, with students attending 24 hours of whole group or team sessions and participating in ±96 hours of online learning.

The e-learning platforms present contents and materials *à la carte*. Navigation is intuitive and flexible, and their interactive communication tools – e-mail from learner to learner, learner to tutor, tutor to learner(s), and discussions for the whole group or restricted to individual teams plus the tutor – can be scaffolded to facilitate interactive learning. The WebCT platform has a timed-release component that tutors can use to program the release and delivery of documents. For example, the translation brief, source text and bibliography can be released at 09.00 on Monday and participants are set a deadline of 14.00 on the following Friday for delivery of the target text.

4.2 Team-building

We assemble teams by a variety of means but perhaps our most original contribution lies in the use of a random number generator (http://www.randomizer.org) to allocate learners to teams with new teams created for each task. Our motive for this approach lies in two principles: firstly, in a professional context we cannot choose who we work with but adjust to our colleagues whoever they may be, and the quality of our collective work depends on our ability to interact well with all, regardless of individual affinities and phobias. Secondly, in the context of collaborative assessment, when each member of a team receives the same score, in our experience the aggregate of an individual's scores better reflects their individual competence when derived from working in different teams, a finding implicit in Johnson *et al.* (1986). When

the same team works together for a period, some individuals "over-achieve" as they benefit from the work of stronger peers whereas others "underachieve" as they are prejudiced by the work of others.

Our scaffolding involves a significant volume of teamwork: in one module, it represents 30% of the final grade. Promoting teamwork is one of the principal objectives of the course modules, and tasks completed by teams are one of the pillars of course assessment. Assessment procedures include individual and team-based self-assessment (all the students in a team receive the same score) and individual and team-based peer-assessment (team 01 assesses team 02, team 02 assesses team 03, and so on) all of which is moderated by the tutor.

4.3 Self and peer assessment: rating scales of criterion-referenced descriptors with tutor moderation

The use of self- and peer-assessment, combined with tutor moderation, has become an essential part of our social constructivist approach to translator training. The e-learning environment enables us to manage participation in producing translations, completion of translation contracts with the tutor/client within a pre-established time frame, access to published versions of the target text, and revision and translation quality assessment (TQA) of the translation. This process is guided by a set of criterion-referenced descriptors (Figure 2) developed and adapted to suit course modules and language directionality.

Robinson (1998) and Robinson *et al*. (2006) provide detailed descriptions of the processes involved and empirical data to support the use of descriptors. The assessment model we apply is holistic and is similar to that often used to revise professional translations: translations that need no or only minimal revision obtain higher scores whereas those that need thorough revision may not achieve a pass. The application of descriptors is transparent, easy to understand and facilitates self-assessment as students become aware of positive and negative elements in translations. In applying the descriptors to conduct a TQA, learners acquire "editor like" training.

However, more important than this is the interaction that team members must engage in when conducting TQA as a team task. For instance, t9 course module units follow a cyclical progression of 8 activities and teams are changed for each unit:

Unit 1	Team translation (Activity 1)	Team self-assessment (Activity 2)
Unit 2	Team translation (Activity 3)	Team peer-assessment (Activity 4)
Unit 3	Team preparation and individual translation (Activity 5)	Individual self-assessment (Activity 6)
Unit 4	Team preparation and individual translation (Activity 7)	Individual peer-assessment (Activity 8)

In conducting the first team translation, participants are required to prepare and agree on a final version of the target text that they turn in by a specified deadline. The WebCT platform enables tutors to program access to documents so that, once the deadline for the translation has passed, a published version of the text becomes available via the platform. Participants then apply the criterion-referenced descriptors in a team activity to self-assess their work. This involves producing revised versions of the translation, appropriately marked by using the word processor "track changes" function. They compare and discuss these in a team session and through an online team discussion. This forces them to clarify their interpretations of the descriptors and agree on the samples taken from their translations that represent specific levels of performance. They must construct their own meaning for the frame document represented by the descriptors thus appropriating the instrument through their interaction.

In the second team translation (Activity 3), the process is repeated but the translation that each team assesses is that of a team of their peers. Translations are randomized and each team receives a text to assess. They again use face-to-face sessions and online discussions to debate and refine their interpretation of the descriptors and assign a numerical score to the translation. This score is later moderated by the tutor and added to the record for continuous assessment.

The third and fourth tasks repeat the basic process with the difference that translations and TQA are individual. In these units, participants should consolidate their learning from the two previous translations and draw on their earlier experience from the teamwork.

The descriptors are a flexible instrument in that course tutors can adapt them to their own context. The content of columns can be adjusted and weighted to take account of the level of the course and directionality of translation. For instance, the level of tolerance of written expression mistakes in participants translating into their mother tongue may be lower than that accepted when they are working into a first or second foreign language. This can be incorporated by weighting the written expression descriptions (Figure 3).

	DECODING	ENCODING		
	A. Content	B. Register, vocabulary, terminology	C. Translation brief and orientation to target text type	D. 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 limited. Major content errors. Major omissions of ST content.	Choice of register inappropriate or inconsistent. Vocabulary limited with some basic errors. Limited awareness of appropriate terminology.	Little or no evidence of orientation to TT type: formal or literal translation	Limited Errors in basic structures
3-4	Comprehension adequate. Minor content errors. Some omissions of ST content.	Choice of register occasionally inappropriate or inconsistent. Occasional mistakes of basic vocabulary. Clear awareness of appropriate terminology although some errors.	Some evidence of orientation to TT type: elements of formal or literal translation remain	Ineffective Errors in complex structures Mistakes in basic structures.
5-6	Comprehension good. 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 mistakes. Terminology appropriate despite occasional errors.	Clear orientation towards TT type: appropriate use of TT type rhetorical devices	Effective. Erors in use of articles, prepositions or spelling of less common words Occasional mistakes in complex structures.
7-8	Comprehension very good. Over- or under-translation does not distort ST content or result in ambiguity.	Choice of register appropriate and consistent. Vocabulary effective despite occasional mistakes. Terminology appropriate despite mistakes.	Effective production of TT type: consistently appropriate use of many TT type rhetorical devices with occasional errors	Good and effective Occasional errors of advanced usage only Almost mistake-free
9-10	Comprehension excellent.	Choice of register consistently effective and appropriate.	Effective, sophisticated production of TT type with few	Sophisticated No errors

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	ST content, including subtle detail, fully understood.	Sophisticated, highly effective choice of vocabulary. Terminology appropriate and wholly accurate.	or no mistakes.	Almost mistake- free

Figure 2. Criterion-referenced rating scale (Robinson *et al*., 2006)

DECODING	ENCODING		
Content	Register, vocabulary, terminology	Fluency and orientation to target text type	Written expression [x 2]

Figure 3. Weighting of criterion descriptors for translation into the mother tongue

In our context, these final year undergraduate modules sometimes include exchange students who are non-native users of Spanish or of both English and Spanish. However, we do not use weighting to adapt the descriptors to individual learners.

4.4 Online tools for self-assessment

Self-assessment enables students to assess performance and facilitates their acquisition of increased responsibility for learning and performance (Robinson *et al.*, 2006, p. 115). Self- and peer-assessment play a key role in blended e-learning as it helps learners follow their progress and allows tutors to individualize attention to specific issues. Self-assessment should cover the different stages in the translation process, the procedures followed and the end product whereas peer-assessment should focus on acquiring quality assessment techniques. One of the most popular ways to develop self-assessment tasks is by using electronic tools. Self-assessment software develops multiple choice questionnaires and quizzes. It offers learners immediate feedback on their work and can be used by tutors to identify difficulties through the analysis of participant scores.

Although self-assessment software has proved efficient in FLL and, to a lesser extent, in theoretical disciplines (see http://www.educa.madrid.org/portal/c/portal/layout?p_l_id=10970.55&c=an), its use in the teaching of translation has not been thoroughly exploited as it generally requires the laborious collection of previous translation renderings by the tutor and the classification of common errors and mistakes. Since the assessment of appropriate procedures and skills in the translation process is more desirable than the assessment of a specific translation option for a particular source text segment, these tools should not be used as a summative assessment instrument but, rather, in formative assessment as a means to acquire specific strategies and procedures and to stimulate debate.

We believe self-assessment tools should suit scenarios, i.e. the stages in the translation competence acquisition process and the particular skills being developed. Activities should be progressively more and more difficult and stimulate further debate among learners.
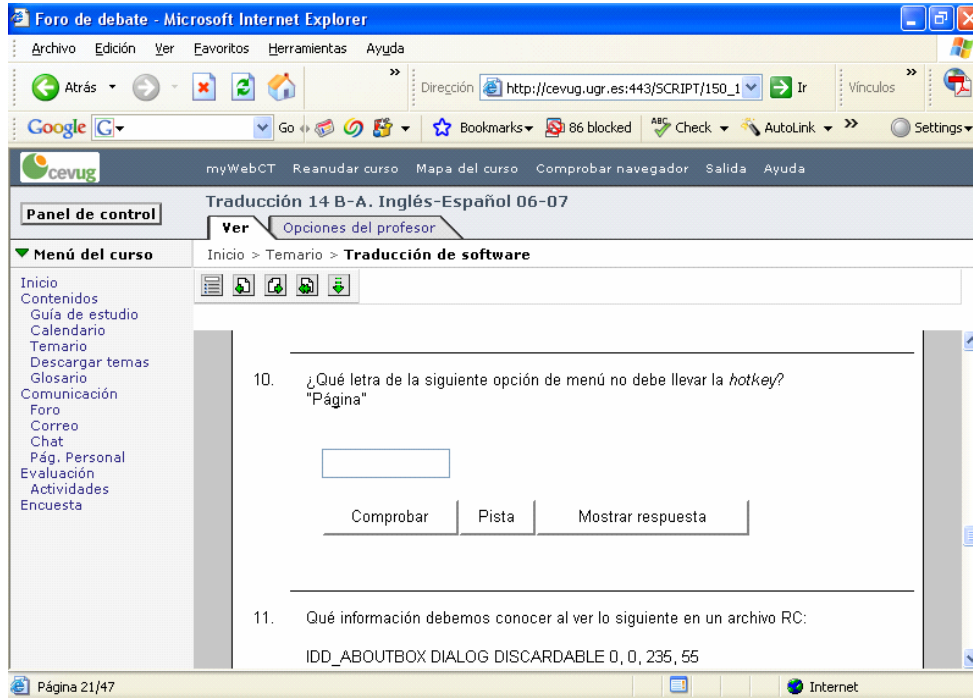

Figure 4. Fill-in-the-gaps exercise using Hot Potatoes via WebCT from the t14 module in Localization and audiovisual translation

In the following section, we discuss some of the activities that have proved useful in the three course modules we teach (see also Tercedor *et al.*, 2005). All examples are based on the use of Hot Potatoes, software available to publicly-funded non-profit-making educational institutions free of charge (http://hotpot.uvic.ca), although most of the options included are standard in similar software packages.

Since one of the key aspects of translation training is the production of acceptable target texts (TT) in a limited time, the

development of timed, problem-focused exercises can help learners accustom themselves to working under pressure.

Fill-in-the-gaps exercises are useful to focus on particular technical issues or key theoretical concepts. Figure 4 shows a fill-in-the-gaps exercise to assess the application of the concept *hotkey* in software localization from English into Spanish.

We use multiple-choice questionnaires (Figure 5) to show learners different translation options selected because they indicate specific challenges in the translation of a particular genre, or to train learners in the use of the criterion-referenced descriptors by classifying translation errors and mistakes, or to stimulate reflection on translation quality and direct further debate. Learners are required to decide why a particular translation is unacceptable. These activities are constructed from genuine learner-translations edited, if necessary, for the questionnaires.
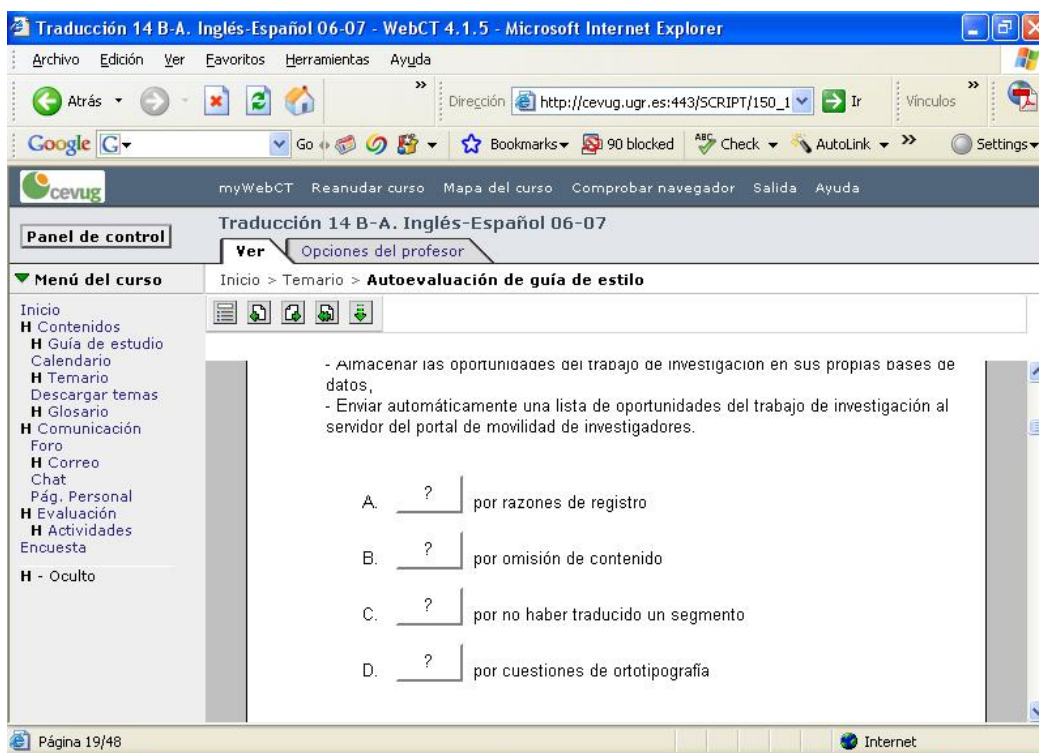

Figure 5. Multiple-choice questionnaire from the t14 module in Localization and audiovisual translation

As mentioned earlier, exercises should be designed so that they lead to further discussion and reflection. In this respect, it is important to provide learners with feedback as to why a particular answer is appropriate or not, in order to avoid automatic answers and develop their ability to justify their translation decisions in a professional way (Figure 6).
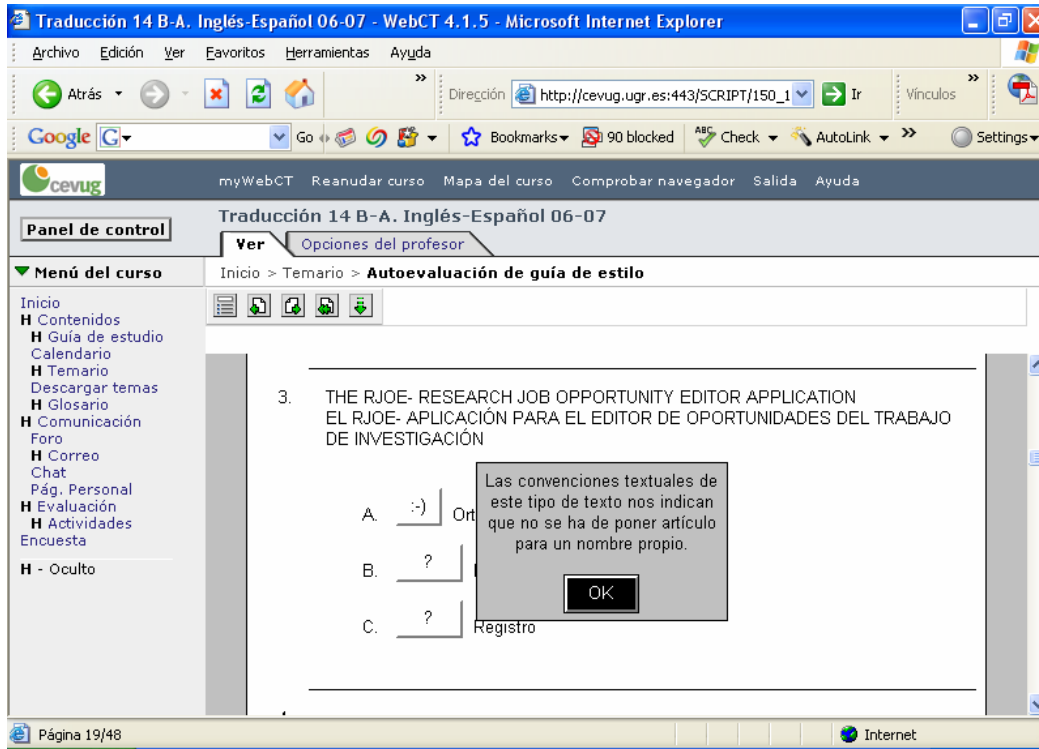

Figure 6. Feedback via a multiple-choice questionnaire from the t14 module in Localization and audiovisual translation

4.5 Corpus based exercises

Many studies have applied corpus linguistics in translator training (Bowker, 1998, 2000; Faber *et al.*, 2001; López, 2003; Zanettin, 1998, 2001; Zanettin, Bernardini and Stewart, 2003). The use of comparable and parallel corpora contributes to learner autonomy by helping students find adequate words for a particular context and text type. Here, we present some corpus-based exercises involving the analysis of corpora and the use of tags especially designed for didactic purposes.

4.5.1 Compiling a DIY corpus

Learners compile and use different types of corpora. Firstly, they compile a DIY corpus (Do-It-Yourself corpus), i.e. a collection of Internet documents created ad hoc as a response to a specific text to be translated (Zanettin, 2002: 242). To do this, they read many specialized texts in electronic format, assess their reliability and organize them in folders. In the DIY corpus, we ask learners to look for texts that include visual and multimedia materials since the new formats of scientific and technical translation include more than ever this sort of material. Once they have compiled their DIY corpus, they search the corpus with WordSmith Tools (http://www.lexically.net), lexical analysis software, in order to see the appropriateness of terms, syntactic combinations and collocations, and to improve their understanding of certain expressions. Secondly, with the source texts (ST) and TTs produced by our learners, we create a learner corpus of parallel texts. Learners manipulate this corpus by adding tags to the source and translated texts. This corpus enables them to study solutions to translation problems and hence develop translation strategies.

4.5.2 Corpus annotation

As shown in López, Robinson and Tercedor (2007) the manipulation of different types of tags increases learner autonomy and self-assessment strategies. For the present study, we proposed four sets of tags to insert after the target fragment in question. We decided not to include opening and closing HTML-like tags to avoid visually overloading the text. We used tags to specify a) translation challenges in the ST and in the TT, b) error and mistake types, as defined in the criterion-referenced descriptors, c) adequacy/appropriateness of translated sentences, and d) first impressions of the translation.

<CON>	Conceptualization (inability to understand the source text)
<PRO>	Procedural (inability to judge the reliability of documentation sources, reading problems, problems caused by wrong use of dictionaries or terminological databases, etc.)
<TRA>	Transfer (due to linguistic and cultural differences between the source and target languages)
<QTO>	Lack of quality of the Source text (ambiguity of the source text, inappropriate style)

Figure 7. Tags to identify problem areas in the source text

Before working with the learner corpus, learners read the ST, identify potential translation challenges (Figure 7), and tag the ST. As Figure 8 shows, they add a sentence reference number, followed by a tag indicating the problem area as described in López and Tercedor (2004, pp. 33-35). In these concordances, the focus is not on the words as such, but on the tags identifying the type of problem in the source text, and the sentence where the problem appears. In concordance lines, the initial and final words are usually cut.

```
and consists of:  3  Snap  Shots<3><PRO>: These images are instantaneo
 4  Time exposure images (Timex)<4a><PRO>: These images average the
 ver a time period of 10 minutes<4b><CON>.  5  Typically images are rec
 frequently over shallow sanbars<6><QTO><CON> generating foam appear a
 .  7  The wave-breaking patterns<7><PRO> highlighted in the timex imag
 the surface.  8  Variance images<8><PRO>: These images represent the v
 ude the waters edge (swash zone)<10><CON><PRO> where the beach is p
   projected on the ground plane<11a><CON>, resulting in rectified image
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Figure 8. Concordance displaying tags indicating translation challenges in the source text: "The Argus World".

Challenging segments are discussed in class and a final tagged version of the ST is elaborated including suggestions made by learners to be used for future reference. Learners also tag the TT according to the type of mistake or error, the adequacy or appropriateness of translated segments, and first impressions of the translation. Tags that indicate type of error or mistake are directly related to the columns in the criterion-referenced descriptors (Figure 9). For example, <pr> indicates pragmatic mistakes, which we define as failure to fulfill target text functions or to meet audience expectations.

DECODING		ENCODING	
TRANSLATION INTO ENGLISH			
Content	**Register, vocabulary, terminology**	**Translation brief and orientation to target text type**	**Written expression**

<se> meaning
 	
We can add nuances to this tag:
 	
<chse> Lack of cohesion
<mise> less information than ST
<pluse> more info than ST
 	
<tvse> wrong tense that causes change in meaning
<cose> change in meaning due to wrong collocation
 	
<dtse> changes in the data
	<lx> lexis and terminology
	
	   <colx> wrong collocation
	
	   <rglx> term that is not appropriate for the register of the text
	
	<rg> register (inconsistencies)
		<o> organization
		
		<pr> pragmatic mistakes
		   <rtpr> Grammatically correct but it sounds unnatural. The rhetorical effect of the ST is missing. Literal translation.
		
		<ist> inappropriate style
		<ot> orthotypography
		<f> layout, wrong accomplishment of style sheet or computer requirements
		
		<rc> inappropriate rendering of cultural reference
			<or> spelling
			
			<pt> punctuation
			
			<sx> syntax
			   <ccsx> lack of concord

TRANSLATION INTO SPANISH			
Content	**Register, vocabulary, terminology**	**Fluency and orientation to target text type**	**Translation brief and professional aspects**

Same as translation into English	Same as translation into English	**\<o\>** organization **\<pr\>** pragmatic mistakes **\<rtpr\>** Grammatically correct but it sounds unnatural. The rhetorical effect of the ST is missing. Literal translation. **\<ist\>** inappropriate style **\<rc\>** inappropriate rendering of cultural reference	**\<f\>** layout, wrong accomplishment of style sheet or computer requirements **\<or\>** spelling **\<pt\>** punctuation **\<sx\>** syntax **\<ccsx\>** lack of concord **\<ot\>** orthotypography

Figure 9. Type of error/mistake tags according to criterion descriptors

For instance, to indicate a mistake related to register, vocabulary or terminology (column 2), we use one of the following tags: <lx> indicates the word or term is inappropriate; to highlight a wrong collocation, <colx> is used; <rglx> is used when the word or term is not appropriate for the register of the text; and finally, when there are inconsistencies in the register of the text, the tag <rg> is added.

Tags also describe the adequacy/appropriateness of translated sentences following quality parameters (Lauscher, 2000; López and Tercedor, 2004) (Figure 10).

<AA>	Excellent solution
<type of error/mistake>	Inappropriate translation. The type of error/mistake is specified, for example, <f> format, <pr> pragmatic error/mistake, <se> meaning, etc.
<type of error/mistake><FF>	Very serious mistake/error

Figure 10. Type of error/mistake according to the adequacy/appropriateness of translated sentences

Finally, in order not to lose sight of professional, pragmatic and stylistic aspects that impinge on first impressions of a translation, we also propose a set of initial tags assessing style, translation brief and professional aspects along a 0-10 scale (Figure 11).

<style=7> <t-brief=8> <professional=5>

Figure 11. Tags to indicate first impressions of the translation

4.5.3 Tags for peer-assessment

Once learners are familiar with these pedagogical tags, they evaluate potentially problematic segments of texts from team assessments. To that end, we show learners an ST segment and offer them a list of "filtered" concordances with their own rendering of these segments. They are asked to tag the peer-

translations indicating type of mistake/error and the adequacy or appropriateness of translated segments. In the example (Figure 12), the ST contains a spelling mistake ("sanbar" instead of "sandbars"). This mistake poses a conceptual problem that will hinder the documentation process. If we look at the solutions proposed and evaluated by learners, the best translation for "shallow sandbars" is tagged with <AA> (see concordance line 4), whereas line 7 includes an unacceptable translation <FF> that involves a lexical mistake and a grammatical mistake (lack of concord).

This type of self-assessment task can be complemented by access to different corpora located on the e-learning platform thus further increasing learner autonomy. With WordSmith Tools, learners can carry out searches of the corpora, and learn to research the appropriateness of the solutions given to different translation problems.
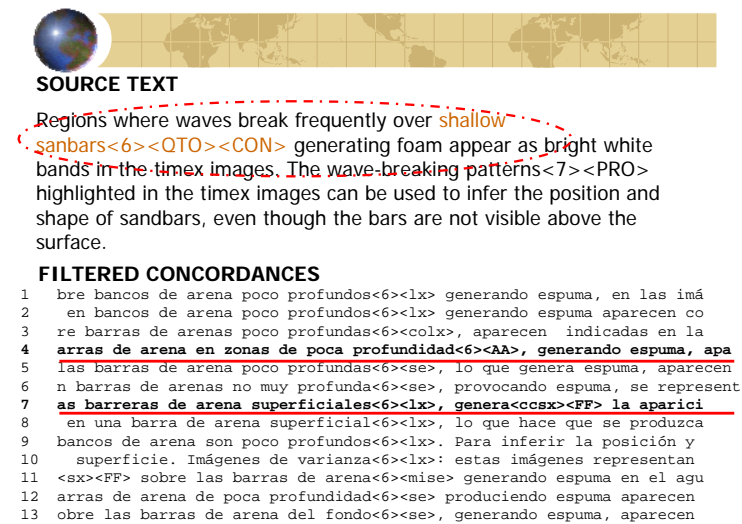
SOURCE TEXT

Regions where waves break frequently over shallow sanbars<6><QTO><CON> generating foam appear as bright white bands in the timex images. The wave-breaking patterns<7><PRO> highlighted in the timex images can be used to infer the position and shape of sandbars, even though the bars are not visible above the surface.

FILTERED CONCORDANCES

```
1    bre bancos de arena poco profundos<6><lx> generando espuma, en las imá
2     en bancos de arena poco profundos<6><lx> generando espuma aparecen co
3    re barras de arenas poco profundas<6><colx>, aparecen  indicadas en la
4    arras de arena en zonas de poca profundidad<6><AA>, generando espuma, apa
5    las barras de arena poco profundas<6><se>, lo que genera espuma, aparecen
6    n barras de arenas no muy profunda<6><se>, provocando espuma, se represent
7    as barreras de arena superficiales<6><lx>, genera<ccsx><FF> la aparici
8     en una barra de arena superficial<6><lx>, lo que hace que se produzca
9    bancos de arena son poco profundos<6><lx>. Para inferir la posición y
10    superficie. Imágenes de varianza<6><lx>: estas imágenes representan
11   <sx><FF> sobre las barras de arena<6><mise> generando espuma en el agu
12   arras de arena de poca profundidad<6><se> produciendo espuma aparecen
13   obre las barras de arena del fondo<6><se>, generando espuma, aparecen
```

Figure 12. Filtered concordances of translation equivalents for the expression "shallow sanbars"

5 Assessing the usefulness of scaffolding

5.1 Data analysis

One of the key issues when we introduce innovations in the classroom must be the results which, we hope, would not substantially differ from those produced through the traditional format of the courses. To control this, we have compared final grades for two courses using data from the last academic year in which the course was taught in a traditional manner and the first two years of blended e-learning.

The first course, Localization and audiovisual translation (Figure 13), maintained the same balance of assessment procedures; the second course, Scientific and technical translation from Spanish into English (Figure 14), introduced changes in assessment procedures to reflect the new objectives that a social constructivist approach to learning entails.

The first column in each set represents final grades the last time this course was taught in a traditional format and the other two columns represent the first two blended e-learning editions. The overall pattern of grades has varied little and it seems safe to assume that the differences are due to the different student cohorts rather than the influence of the change in course delivery. It is interesting to note that the final column, showing the percentage of learners registered on the course who did not complete it, has fallen in the two e-learning editions. This may be because e-learning, while much more demanding, is more motivating or it may be because an e-learning course requires learners to participate throughout the semester. It has been our experience that on traditional format courses, there is often a percentage of learners who gradually drop out over the semester. Their motives for not completing the course vary but the inability to attend classes regularly is one of them. The flexibility of the e-learning approach obviates this problem.

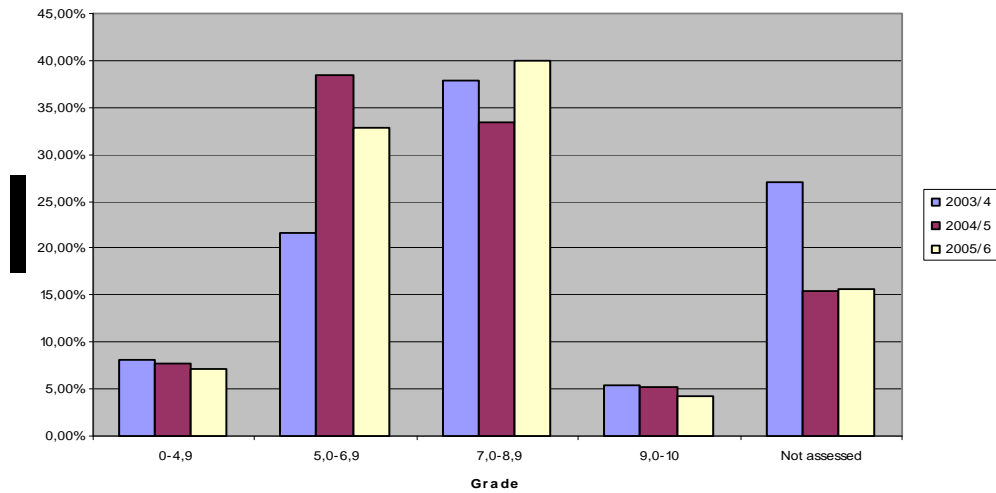**Audiovisual Translation and Localisation**

Figure 13. Traditional vs. blended e-learning: comparison of final grades for the Localization and audiovisual translation module

In Scientific and technical translation (Figure 14) the configuration of the final grade has changed. In the last traditional edition of the course, this was based on a combination of teamwork translation tasks (50%) and individual tasks (40% or 50%) with an optional final exam (0% or 10%) that gave participants an opportunity to improve a disappointing, assessed grade; now a Participation component and a Dossier have been introduced. Currently, assessment is made up of five components:

Participation	20%
Collaborative teamwork translation and TQA tasks	30%
Individual translation and TQA tasks	30% or 40%
Dossier	10%
Final exam (optional)	0% or 10%

The Participation component is determined by calculating student interaction using the e-mail and discussion logs and is based on the distribution of frequencies of interventions,

moderated by a subjective assessment of the "quality"' of interventions. For the distribution of frequencies, we use quartiles to give marks for participation. These are useful for intervention measurement but obviously do not assess knowledge or skills acquired.

The optional final exam gives participants the chance to raise their assessed grade if they are personally disappointed with their performance. The decision to take the exam is left entirely to individual participants and, should it fail to improve their overall grade, the exam score is simply ignored. Most of the students who decide to take this exam do so because they are able to do so without it affecting their performance on other courses. Those who have a heavy exam schedule tend not to bother.

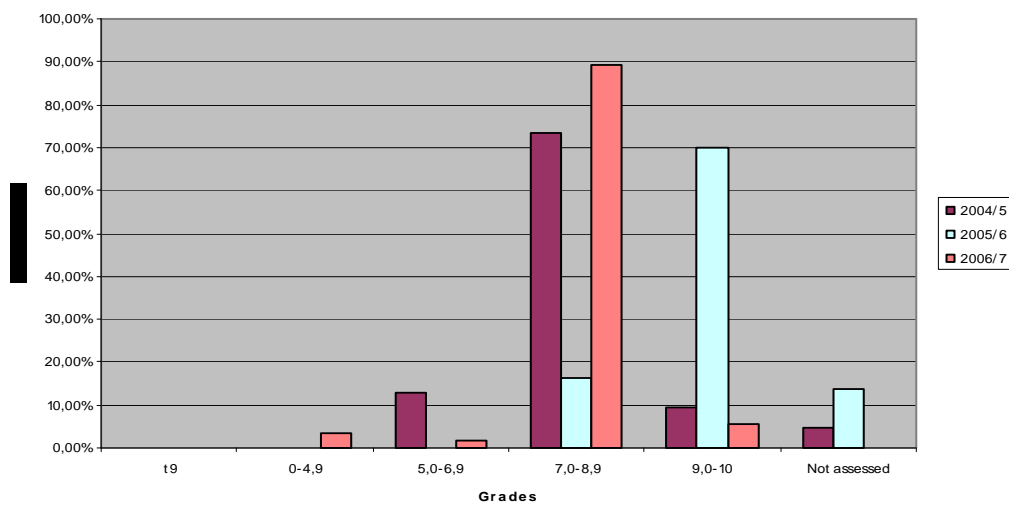**Scientific and technical translation**

Figure 14. Traditional vs. blended e-learning: comparison of final grades from the Scientific and technical translation module

Clearly, a comparison of two different sets of learners has limited value. Nonetheless, we believe these three columns reveal substantial differences in the pattern of final grades awarded for the first e-learning version of the course, the central column of

each set of three. The graph shows that the mode and median for this edition of the course were much higher and we have considered two possible explanations. Either learners were markedly 'better' than those who preceded and followed them or the Participation component benefited weaker learners more. The final column is of interest, too. In the most recent edition of the course all learners registered proceeded to the final assessment stage. No one dropped out, but two failed. In the previous years, only a few dropped out but no one failed the course.

5.2 Learner skills and personal achievement

We encourage learners to reflect on their learning process in the belief that through introspective analysis and the subsequent sharing of experiences, participants' appreciation of their learning grows. By consciously charting their own progress and analyzing changes, they become more positively critical of themselves and more tolerant of others.

Through the online menus, we have introduced a "time to reflect" section in each of the units. Learners use this to make notes on their subjective impression of the course and suggest how to improve contents and timing in subsequent editions. The qualitative analysis of these reflections reveals that learners coincide in having obtained great personal achievement and underline the following values: commitment, cooperation, friendship, generosity, interdependence, objectivity, patience, principled criticism, respect, tolerance, trust, understanding and versatility.

Some of these gains – versatility, interdependence, objectivity – prepare learners for the profession through the enhancement of the instrumental-professional competence (PACTE, 2000) while others, such as friendship, generosity, tolerance, respect, understanding or patience clearly have a social and emotional component (Tirkonnen-Condit, 1996) which will have an attitudinal impact in their careers.

5.3 Limitations

The present study offers quantitative data that help us reach a number of conclusions but cannot be considered definitive. There are many variables we have been unable to control – differences between the cohorts in terms of ability and attitude, differences in the challenges presented by specific translation tasks, to mention

but two – and further research is needed within our own institution and elsewhere to consolidate that presented here.

6. Conclusions

Research-led teaching motivates teachers/facilitators and students/learners. Tying these two often disassociated aspects of our professional world together is a challenge that can bear fruit for all involved. In the context of a Spanish state university system that is advancing towards convergence with a Europe-wide frame for tertiary education we have sought to draw on resources from an R & D project in order to innovate in our undergraduate classrooms. The foundations of European convergence have been laid on a fusion of students', employers' and university teachers' expectations and have provided new perspectives on the aims and objectives of our joint endeavor. The search for closer, more obvious links between the university classroom and the professional realities of post-university life has stimulated innovation but this has to be exercised with caution given the responsibility we have towards our students/learners.

The social constructivist approach towards translator training proposed by Kiraly clearly reflects much of the spirit of convergence and is innovative when compared with traditional university teaching. The key concepts of the zone of proximal development, appropriation and scaffolding provide innovators with a sound base from which to design instruction; they also constitute the key to the essential change in roles from teacher to facilitator and from student to learner without which any innovation will remain purely cosmetic.

The professional translator depends on the online environment and translator training through blended e-learning simply reflects this reality. The intuitive, flexible, interactive nature of e-learning can be scaffolded by teachers/facilitators through the use of the ZPD, exploited via online chats and discussions. Students/learners can appropriate content by creating and exploiting their own DIY corpora, negotiating their understanding of criterion-referenced descriptors, and they can grow independent by using online assessment tools. An internal course structure such as the Professional Approach to Translator Training can provide active, semi-authentic experiential learning that will more than adequately prepare learners academically and personally for the challenges of the post-university market place.

Innovative teaching requires checks and balances and the bottom line must be the quality of student preparation as a result of their training. The qualitative data we present here indicates that students/learners are aware of personal growth and development that, while it may well have taken place when modules were taught in the traditional format, was not contemplated by teachers (who were not yet teachers/facilitators) and was certainly not evident to them. Despite its limitations, the quantitative data suggests student grades have not been harmed by these changes although patterns of achievement appear to have altered. Clearly, new objectives should lead to new modes of assessment. The inclusion of a Participation component may, rightly, be challenged. At the very least, it should stimulate further research into assessment techniques.

Acknowledgements

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ABSTRACT: Neither Born Nor Made, But Socially Constructed: Promoting interactive learning in an online environment – The social constructivist approach to translator training (Kiraly, 1999, 2000, 2003 and 2005) represents a clear statement on the importance of directing university teachers towards a student-centered, learning centered mode. By acknowledging the fundamental role of Vygotsky (1994) in determining his approach, Kiraly brought translator training in line with the established, broad-based humanistic approach to Foreign Language Learning; by drawing on Stevick (1980) and Schön (1987), among others, he made this debt explicit.

In this article, we apply the social constructivist approach through blended e-learning environments in courses offered to final year undergraduate students of translation. Our objective is to determine the success of combining technology and social constructivist pedagogy in promoting effective learner-centered learning. In Kiraly's terms (2000), we have "scaffolded" our instruction by applying instruments such as rating scales of criterion-referenced descriptors (Robinson, 1996 and 1998; Robinson, López and Tercedor, 2006); textual and visual aids (Tercedor, López and Robinson, 2005 and 2006); and learner generated corpora (López, Robinson and Tercedor, 2007; López and Tercedor, 2008). Our qualitative data is drawn from a variety of interactive formats: whole group online discussions, team-based online discussions, e-mail exchanges and specific "reflective" activities. We conclude that the quality of the "scaffolding" is essential to success in stimulating learning and that the e-learning environment is an excellent medium for the social constructivist approach.

RÉSUMÉ : Ni par naissance ni par habitude, mais acquis socialement: Favoriser l'apprentissage interactif dans un environnment en ligne. – L'approche socio-constructiviste dans la formation de traducteurs (Kiraly, 1999, 2000, 2003 et 2005) permet de mettre en évidence l'importance d'orienter la formation universitaire vers un modèle axé sur l'étudiant et l'apprentissage. Tout en reconnaissant le rôle fondamental de Vygotsky (1994) comme point de départ de sa démarche, Kiraly attribue à la formation du traducteur une dimension humaniste caractéristique

de l'enseignement des langues étrangères et c'est, entre autres, sur la base des travaux de Stevick (1980) et Schön (1987) qu'il rend explicite son approche.

Dans ce travail, nous appliquons la démarche socio-constructiviste au domaine de l'enseignement semi-présentiel (*blended e-learning*) dans les matières de dernière année de la licence de traduction. Notre objectif est de déterminer le succès dans la conjonction de la technologie et la pédagogie socio-constructiviste afin de favoriser l'enseignement axé sur l'étudiant. En suivant Kiraly (2000), nous avons développé un « échafaudage » pour la formation à l'aide d'instruments tels qu'un barème de descripteurs (Robinson, 1996 et 1998; Robinson, López et Tercedor, 2006), des aides visuelles et textuelles (Tercedor, López et Robinson, 2005 et 2006), ainsi que des corpus constitués par les étudiants (López, Robinson et Tercedor, sous presse). Les données qualitatives sont extraites de différents moyens interactifs: forums, débats en ligne par groupes, échanges de messages de courrier électronique et activités spécifiques de réflexion. Nous concluons que la qualité de « l'échafaudage » est une condition essentielle visant à stimuler l'apprentissage et que le domaine de l'enseignement semi-présentiel constitue une excellente voie pour développer la démarche socio-constructiviste dans la formation des traducteurs.

Keywords: Spain, translator training, blended e-learning, social constructivism, learner-centred learning

Mots-clés : Espagne, formation en traduction, enseignement semi-présentiel, constructivisme social, enseignement axé sur l'étudiant

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