

THE TYPES AND EFFECTS OF PEER NATIVE SPEAKERS' FEEDBACK ON CMC

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Online collaborative writing tasks are frequently undertaken in forums and wikis. Variation between these two communication modes has yet to be examined, particularly type of feedback and its effects. We investigated the type of feedback and the impact of English native-speakers' feedback on Spanish peers' discourse restructuring in the context of an online collaborative writing task involving tertiary level students of English and Spanish as foreign languages. The collaborative task was to develop a tourist brochure in the foreign language in a Moodle e-learning environment. Two corpora were compiled of learner exchanges. The communication formats of both forums and wikis determined the type of feedback provided by peers in online communication tasks. Regarding the effect of such feedback, we can conclude that, although morphosyntactic and lexical feedback is largely acknowledged and incorporated, the Spanish peers seemed to accept it without further follow-up or discussion. Affective feedback, in the main, provoked no language-based reaction. These effects vary, however, by forums and the wiki sub-tasks.

Keywords: Writing, Computer-Assisted Language Learning, Collaborative Learning, Technology-Mediated Communication, Computer-Mediated Communication

INTRODUCTION

The use of computer-mediated communication (CMC) in the foreign or second language classroom has opened up new possibilities regarding the type and frequency of interactions between students of a foreign language or between students and native speakers of the target language. As stated in Lee (2008), the use of CMC is beneficial in terms of the quantity of the learner output, the quality of such output, and the possibilities offered for the students' attention to form.

One of these areas of attention is the role played by corrective feedback (CF) in CMC, either in synchronous or asynchronous environments. This is especially interesting when students do not normally have access to a native speaker who may help them with a task in a collaborative way. The user-friendly atmosphere created by CMC scenarios in which participants are students of foreign languages of the same age and similar interests favours their fluent communication and mutual help towards the successful completion of a similar task (An, Kim, & Kim, 2008; Arnold, Ducate, Lomicka, & Lord, 2005).

Simultaneously, the use of Learning Management Systems (LMS), such as Moodle or Blackboard, has become widely popular in tertiary education (Schroeder, Minocha, & Schneider, 2010), speeding up the process of integration and normalization (Bax, 2003) of CMC in everyday language teaching. Although research has revealed interesting findings regarding CF in collaborative scenarios (see Literature Review below), research which examines collaboration and the role of peer feedback during the stages of process writing across different modes of communication, and which benefits from scenarios where fluent communication is fostered by means of a more relaxed, less academic atmosphere, has not been carried out (Arnold, Ducate, & Kost, 2009).

In the case of our investigation, Spanish students of English at an intermediate level and English students of Spanish at the same level embarked on the writing of a tourist brochure in the foreign language by means of asynchronous CMC. This proved to be the first academic experience that these Spanish and English students had regarding the writing of text with the help of a native speaker of the target language. This was especially important when considering that all the students who took part in this collaborative

experience were studying languages and tourism either in Spain or in England. Therefore, the use and command of the foreign language for specific purposes, in this case, tourism, is determinant in their future careers. For this reason, a typical genre of the tourism field, the tourist brochure, was selected as the final outcome of this collaborative online writing task.

In line with previous research on the type and frequency with which students provide feedback to their peers, our research was interested in comparing the type and frequency of feedback provided in two communication scenarios, forums and a wiki. These two communicative scenarios were designed in combination to fulfill the writing of the brochure in the foreign language by reflecting the two main approaches to writing, namely writing as a process approach and writing as a product approach (Faigley, 1986; Grabe & Kaplan, 1996; Hedge, 1988; Richards, 1990).

Drawing on the language related episode (LRE) taxonomy used in Ware and O'Dowd (2008), or Focus on Form Episodes (FFE), in Ellis, Basturkmen and Loewen's (2001) terminology, this paper analyzes whether there are specific differences in how and for how long two different CMC tools, namely forums and wikis, are used. Thus, our research questions are:

1. What amount and type of feedback do English peers provide for Spanish students in the context of an online writing task?
2. How do Spanish students react to that feedback, as seen in their linguistic behavior or written output?
3. Is there any relation between the number of words used and the type of feedback provided? Is that relation different in forums and wikis? Does the number of days during which students can work on forums or the wiki affect the quantity of feedback provided?

Literature Review

Early insights into online intercultural exchange included the use of the terms network-based language teaching (Kern, 1995) and tandem learning (Stickler & Lewis, 2008), which stressed the benefits of international partnerships and telecollaboration in the field of language learning (Ortega, 1997). This first period of excitement and realization led way to a second moment which called for further reflection and analysis (Kern & Warschauer, 2000; Warschauer, 2000). During the early years of the 21st century, a plethora of studies addressed a wide range of areas involved in online intercultural exchange. In general, these analyses of CMC considered the use of a particular technology (Godwin-Jones, 2003, 2005) and how its use interacts with a variable, or sets of variables, within the broader context of SLA, negotiation of meaning, and the promotion of communicative competence and/or intercultural competence (Belz, 2002, 2003; O'Dowd, 2007).

While the uses of particular technologies such as wikis or blogs are of enormous interest in the context of language communication, the compartmentalized use of these technologies has given rise to difficulties in designing meaningful student interactions (Garrison & Arbaugh, 2007) in the context of communicative language teaching. At the same time, the widespread use of Web 2.0 tools is fostering a massive adoption of new communication habits and a new way to look at how technologies can be integrated into everyday teaching routines which goes beyond the aforementioned compartmentalization. For example, the most recent social software applications are enabling new forms of community-based collaborative learning (McLoughlin & Lee, 2007) as well as new ways of interaction. In this context, the emphasis on the use of a particular technology gives way to a scenario with more opportunities for learners to present their own insights and consolidate and refine each other's contributions (Garrison & Arbaugh, 2007).

Recent research has investigated different uses of wikis (Lund, 2008; Kessler, 2009) and forums (Kol & Scholnik, 2008). For example, Trentin (2009) has explored the potential of wikis to evaluate individual contributions to co-writing tasks, an important issue in higher education writing courses. Miyazoe and

Anderson (2010) investigated the simultaneous use of forums, blogs and wikis, claiming a positive effect on the students' language learning progress. They state that their study takes a step forward in terms of how to think of online writing, as the different stages involved in writing make use of different tools and are still part of one single task. Apart from the above-mentioned publications on the use of CMC, research has also focused on the theoretical constructs in online communication and its relation with SLA.

Ware and O'Dowd (2008) have identified three major theoretical contexts which have attracted the interest of researchers in online communication—mainly sociocognitive and sociocultural perspectives, interactionist perspectives, and studies dealing with focus-on-form. While sociocognitive and sociocultural perspectives have stressed the role of (a) intercultural communication and exploration (Belz, 2003; Firth & Wagner, 1997; O'Dowd, 2003, 2006), (b) the cultural influences on online communication (Thorne, 2003), and (c) the concept of literacy as applied to digital communication tools (Chen, 2006), the interactionist perspective shifts its attention to the role of negotiation of meaning in building communicative or intercultural competence (Ware & O'Dowd, 2008).

Chapelle (1997) linked the design and the evaluation of CALL tasks within SLA. She stated that researching the kind of language that the learner engaged in during a CALL activity should be one of the priorities of instructed CALL SLA. This approach underpinned the analysis of synchronous written interaction (Pellettieri, 2000), MOO-based synchronous exchanges (Kötter, 2003), peer-to-peer exchange in chat (Blake, 2000; Blake & Zyzik, 2003; Peterson, 2009; Smith, 2005; Tudini, 2003) and, among other areas, e-mail tandem (Greenfield, 2003; O'Dowd, 2003).

The role of attention to linguistic form (Long & Robinson, 1998) similarly motivated an important body of research in foreign language teaching. Form-focused instruction is seen as the treatment of linguistic form in the context of communication activities (Ellis, Basturkmen, & Loewen, 2002), rather than the attention to declarative knowledge of grammatical or lexical nature per se. While there are different focus-on-form applications, namely planned versus incidental attention to form, and even a variety of form-focused activities labeled as focus on form and focus on forms, which stresses the need to teach linguistic forms isolated from communicative activities (Laufer & Girsai, 2008), the essential idea behind form-focused instruction is that communicative language teaching is insufficient for foreign language learning. At this point, attention to form attracted a renewed interest from SLA researchers.

The role played by the use of feedback to make students aware of their errors has fostered a great deal of research in foreign language teaching. On the one hand, feedback has been claimed not to play any role in the students' acquisition of the second or foreign language (Krashen, 1979, 1984; Truscott, 1996). On the other hand, the analysis of students' progress across time has revealed that feedback fosters their positive progression with statistically significant results on some occasions (Chandler, 2003; Ellis, Sheen, Murakami, & Takashima, 2008; Ferris, 1995, 1997; Ferris & Roberts, 2001; Lalande, 1982; Robb, Ross, & Shortreed, 1986; White, Spada, Lightbown, & Ranta, 1991), which seems to be in line with Schmidt's (1995, 2001) strong version of the noticing hypothesis, where noticing is a prerequisite for intake. Although the area remains largely under-researched in the field of online communication (Loewen & Erlam, 2006; Sachs & Suh, 2007; Sauro, 2009), various authors have explored the role of feedback in connection to attention to form (Appel & Mullen, 2000; O'Rourke, 2005). However, this has been done from different perspectives, ranging from very generic group feedback in the context of asynchronous collaborative process writing (Greenfield, 2003) to more specific accounts, including corrective feedback in synchronous text-based chat using both recast and metalinguistic information experimental conditions (Sauro, 2009). There is evidence that online language learners prefer feedback that focuses on concrete language items or episodes (Blake, 2000; Ware, 2005; Ware & O'Dowd, 2008), which supports a modified interactionist hypothesis (Levy & Kennedy, 2004; Ware & O'Dowd, 2008) where focus on form and feedback can complement each other in the context of online communication practice that adapts to the needs and real-life demands of learners (Warschauer, 2000).

While Belz (2006) has investigated how learners can notice their own patterns of use and trace their own language output, which forces learners to survey their own communication, most of the research in the area has concentrated on feedback that involves interaction with peer learners. Ware and O'Dowd (2008) examined the effect of experimental conditions in providing feedback and found that learners are more likely to offer feedback to their peers if they are explicitly instructed to do so. This finding prompts researchers to re-examine the concepts of autonomy and reciprocity in tandem learning. Ware and O'Dowd (2008) developed a taxonomy of LREs which included morphosyntactic, lexical, and affective categories. The first type of LRE was further subdivided into specific feedback or commentary feedback. O'Rourke (2005) investigated tandem feedback in MOO, real-time text, and classroom-based conversation environments. His findings suggest that interlocutors do not show any tendency to focus on formal aspects of problematic utterances and that traditional research frameworks of discourse such as Varonis and Gass's (1985) are to be modified in the context of online communication analysis. Although research in CMC lacks the maturity of more traditional SLA studies, there is room to suggest that CMC and traditional classroom activities may demand different analytical tools that embrace the peculiarities of communication exchanges in both contexts.

The influence of task type and topic on the type of feedback elicited has been researched from different angles. Blake (2000) concluded that, in the context of synchronous CMC chat, jigsaw tasks promoted more productive negotiations than information gap tasks. According to him, lexical confusions are the most common form of negotiation. Smith (2004) found that language learners in his study engaged in negotiated interaction when they were presented with unknown lexical items during the course of task completion. Smith (2005) also investigated the relationship between negotiated interaction and learner uptake in the context of synchronous CMC chat. He investigated 24 intermediate learners and concluded that there is no relationship between learner uptake and lexical acquisition. Yilmaz and Granena (2010, p. 33) have shown that LREs occur during task-based synchronous CMC and that "through meaning negotiation learners focus on form". They found that the nature of the task had an impact on whether the LREs were explicit, in 81% of the dictogloss-related LREs, or implicit, in the case of 75% of the jigsaw-related LREs. As regards the content of the feedback, Murphy (2010) found that learners exposed to elaborative feedback during Web-based reading scored higher than those receiving feedback which merely indicated the right answer.

Despite the emergence of these new forms of CMC, the use of both forums and wikis for the development of online second language process writing in combination with the provision of feedback remains unexplored. In the following sections we will account for an experience which examined the role of peer, native-speaker feedback in the context of an online collaborative writing task which comprised the use of both forums and a wiki.

METHODOLOGY

Participants

The collaborative experience which is described here was completed by 20 students (age range 19-21, 15 female and five male students). The participants were 10 dyads, each comprising a British student and a Spanish one, taking the course *Gramática Inglesa* (Descriptive English Linguistics) at the *Universidad de Jaén* (Spain) and different Spanish language courses at the Language Centre, University of Leeds (UK), respectively. Their level of foreign language competence can be described as intermediate, as all of them have, at least, a B1 level in the Common European Framework of Reference for Languages (Council of Europe, 2001). These pairs carried out the experience for three months during the academic year 2008/2009. The dyads remained intact throughout the online collaborative writing task.

Online Collaborative Writing Task

The task that the Spanish and British students had to carry out was the writing of a tourist brochure in the

foreign language with the assistance of a peer by means of an online collaborative task. As explained before, this genre was selected in order to suit the task to the interests of the British and Spanish students (Warschauer, 2000), since both groups of students were studying subjects related to the tourism field and found it interesting to work on a genre which they were likely to use in their future careers (Diez-Bedmar, 2008). In other words, these students were highly motivated to have this unique opportunity to interact with a native speaker of the foreign language, improve their language skills in that language, and apply them to the tourism field.

The online writing task designed for the development of the students' collaborative experience was created using *Moodle*, a Course Management System (CMS), also known as a LMS or a Virtual Learning Environment (VLE), a free Web application that educators can use to create online learning sites (see [Appendix A](#) for a screenshot). *Moodle* enables the design of language learning experiences by integrating different communication tools and technologies, such as forums, wikis, instant messages and a wide variety of other learning activities (Sánchez-Tornel & Pérez-Paredes, 2008). The sub-tasks or activities in which the online collaborative writing task was further subdivided reflected each of the stages which are normally followed when writing, namely pre-writing, writing and post-writing (Hedge, 1988; Seow, 2002; Sun & Feng, 2009). To allow students to develop their skills during the pre-writing stage, a number of forums were designed (See Table 1 for details). In the case of the writing and post-writing stages a wiki was implemented. As can be seen, the forums were more process-oriented, whereas the wiki was more product-oriented and where learners wrote their final version of the brochure which eventually was used by their peers to provide feedback.

The resulting online collaborative writing task consists of nine stages—or sub-tasks—through which each student is in contact with his/her peer for twelve weeks at the most. Besides the first two stages, where students are provided with an agreement document as well as their peer's information, and the final stage, at which each student uploads his/her final text (i.e., the finished tourist brochure), the other six stages are distributed as follows and have different interaction patterns:

Table 1. *Distribution of the Main Stages in the Online Collaborative Writing Task*

Stage name of collaborative task	CMC Interaction pattern
3. Ice-breakers: meeting each other	Forum
4. Choosing a monument to write about	Forum
5. Brainstorming	Forum
6. Looking for information	Forum
7. Glossary	Collective glossary
8. Paragraphing and writing	Wiki

Table 1 shows that each stage requires students to use language in different ways before delving into the writing of the tourist brochure. As a consequence, students are guided through the typical writing as a process stages so that they can later write the brochure by using the input from the previous pre-tasks. This is the reason why students were encouraged to complete the stages one after the other (for an average of 10 to 12 days each; except for the wiki, which was envisaged to take longer), even though they had access to all stages from the very beginning of the online collaborative writing task to cater for the students' time needs. In fact, each dyad was engaged in each stage for a different number of days.

Apart from these stages, the virtual platform also offered students practical reference information. Thus, on the left-hand side of the screen (see [Appendix A](#)), students were provided with links to monolingual, bilingual and specialized dictionaries online, as well as Web pages related to tourism. On the right-hand

side, each student could check the deadlines for the various stages, the updates he/she had from his/her peer, the participants which were connected at that same time to the platform and the email address of the technician responsible for resolving any problems posed by the functioning of the virtual platform.

Once the virtual platform had been piloted by the researchers to highlight any technical problems, and the problems found had been solved, a seminar was conducted at both universities to inform students of their opportunity to undertake an online writing task with native students of their target language, collect their signed agreement documents, and be shown how to use the virtual platform and proceed with the online writing experience. During this seminar, students were advised to use their foreign language instead of their native language; Spanish in the case of the British students, and English in the case of the Spanish students. Similarly, students were encouraged to provide their peers with as much feedback as they considered convenient—or were asked for by their peers—and as detailed as possible in order to improve their peers' texts. In fact, the instructions for each subtask reminded the students to provide feedback to their peers at least once, as can be seen in [Appendix B](#). Finally, students were advised to follow the guidance offered at the beginning of each forum and the wiki, so that they could become familiar with the purpose of each stage (See Appendix B). When the students had enrolled in the virtual platform after the seminar, the last step consisted in the establishment of the pairs who would work together during this online task. All the participants in the study had at least a B1 level in the foreign language, which means they were capable of expressing their opinions.

Quantitative and Qualitative Analyses

Quantitative Analysis: Data Extraction

For the purposes of this paper, two corpora were compiled with the Spanish and the English students' contributions to the forums, on the one hand, and the wiki, on the other. Since the first research question is 'What amount and type of feedback do English peers provide for Spanish students in the context of an online writing task?', and the second is 'How do Spanish students react to that feedback, as seen in their linguistic behaviour or written output?', each corpus was further subclassified into the language produced by the Spanish students and that provided by the English ones. Thus, the first corpus consists of the 6,230 words that the Spanish students contributed to the four forums (Table 1) and the 3,050 words written by the English peers. Therefore, the total 9,280 words constitute a 'peripheral type' of learner corpus (Nesselhauf, 2004, p. 128), since it does not include the students' final brochures, but rather the students' asynchronous interactions while doing the pre-writing tasks. The second corpus is composed of the contributions to the wikis. As was the case with the forum corpus, it was further subdivided into those contributions made by the Spanish students and the ones by the English peers. The Spanish students' section constitutes a 'more typical' learner corpus (Nesselhauf, 2004, p. 128), since the 9,002 words which the Spanish students wrote correspond to the versions of the tourist brochure handed in by the Spanish learners, that is, the product of the writing process. The second subcorpus consists of the feedback that the English students provided their Spanish peers with (1,121 words). In total, 10,123 words have been analyzed in this second corpus.

The compilation of these two corpora enabled us to examine the contexts in which the students' interactions took place on a textual level as well as to explore relationships between textual features and the feedback provided by the learners, an analysis of great interest which allows us to gain better methodological understanding of the analysis of learner feedback in CMC.

Qualitative Analysis

The qualitative analyses described below sought to explore the nature of the English students' feedback provided to their Spanish peers when undertaking an online collaborative task, as well as the effect of such feedback on the Spanish students' writing. The basic unit of description and analysis adopted was the LRE, as defined by Swain and Lapkin¹ (1998, p. 326) and used in recent studies such as Ware and

O'Dowd (2008). In fact, Ware and O'Dowd's (2008) classification of LREs into morphosyntactic, lexical and affective, and the further subclassification of morphosyntactic LREs into specific or commentaries (Ware & O'Dowd, 2008, p. 47-48), was used to conduct a pilot study with five dyads, the purpose of which was to analyze if Ware and O'Dowd's classification of LREs would suit the examination of our data. Once we had independently classified the LREs in our data, it was clear that some LREs could not be coded following the original classification. As a result, a further expanded classification of LREs was designed to cater for all the LREs in our learner corpora. In the new expanded taxonomy not only morphosyntactic, but also lexical LREs, were divided into specific and commentary types, as seen in the interactions² below:

Morphosyntactic LRE, specific:

Spanish student's text: "... as its name suggest..."³

English peer's LRE: "... as its name suggests..." (pair 4)

Morphosyntactic LRE, commentary:

Spanish student's text: "The ones in the top which corresponds to..."

English peer's LRE: "aquí, 's' es usado para la singular" ['s' is used here for the singular] (pair 6)

Lexical LRE, specific:

Spanish student's text: "... for the bulk of the edifice"

English peer's LRE: "building" (pair 9)

Lexical LRE, commentary:

Spanish student's text: "The finds included several coffins..."

English peer's LRE: "findings - finds is too informal" (pair 5)

Affective LREs were also further subclassified into those in which the students used metalanguage in a broad sense and those which were goal-oriented, namely, those which were provided at the end of the Spanish students' texts to encourage the peer to continue on doing the task or keep in touch for the sake of the successful completion of the writing task:

Affective LRE, metalanguage, commentary:

English peer's LRE: "wow MUYYYYY BIEN, es excelente" [wow, VERRRRRY GOOD, it's excellent] (pair 4)

Affective LRE, goal-oriented:

English peer's LRE: "I hope you understand my correction" (pair 29)

Apart from these LREs, the pilot study conducted on our data revealed that some LREs contained information on more than one of the three aspects outlined above. Therefore, compound LREs were introduced in the taxonomy, as can be seen in [Table 2](#), and these are exemplified and explained below:

Table 2. *Compound LREs*

Compound LREs				
Specific	Morphosyntactic + lexical	Morphosyntactic + affective	Lexical + affective	Morphosyntactic + lexical + affective (M/L/A)
Commentary	Morphosyntactic + lexical	Morphosyntactic + affective	Lexical + affective	Morphosyntactic + lexical + affective (M/L/A)

Morphosyntactic and lexical LRE:

Spanish student's text: "... such as the one we are centre on, the Blackpool Tower."

English peer's LRE: "no podemos decir solo CENTRE, tenemos que decir centering or focussing on" [one cannot only say CENTRE, we must say *centering* or *focusing on*] (pair 1)

In this case, the English peer provides the Spanish student not only with an alternative for the word centre (i.e., lexical), but also cautions the Spanish student about the use of the preposition in the prepositional verb (i.e., morphosyntactic).

Morphosyntactic and affective LRE:

English peer's LRE: "Hola [name] - Es muy bueno! Hay uno o dos palabras, pero todos es bueno. Importante - es it's history - no es his history. Es Paul, pero los cathedral no es masculino." [Hi there [name]- It's very good! There are one or two words, but it's all right. Important: it is *it's history* not *his history*. Paul is ok but cathedral is not masculine] (pair 4)

In the example above, the English student congratulates the Spanish one on the text (i.e., affective) and also corrects the use of the possessive adjective 'his' (i.e., morphosyntactic).

Lexical and affective LRE:

Spanish student: "if we have in account"

English peer's LRE: "Esto es gramaticalmente correcto, pero 'if we remember'/'at the time of' es mejor" [This is grammatically correct, but 'if we remember'/'at the time of' sounds better] (pair 6)

The English student's (incorrect) claim in his LRE that the expression 'have in account' is correct is the affective part in the compound LRE, whereas the suggestion of 'if we remember' or 'at the time of' corresponds to the lexical part of the LRE. Finally, the last type of compound LRE is the one which includes morphosyntactic, lexical, and affective information. Let us consider:

Spanish student: "As an anecdote we could mention that the real reason of building this abbey was because of redemption"

English peer's LRE: "Esto es gramaticalmente correcto, pero 'redemption' es muy general. Quizá sería preferible decir 'the real reason for building this abbey was because Edward wanted redemption.'" [This is grammatically correct, but 'redemption' is far too general. Perhaps it is preferable to say 'the real reason for building this abbey was because Edward wanted

redemption.'] (pair 6)

Thus, the English peer provides feedback on the use of the word 'redemption' (i.e. the lexical part of the LRE), corrects the use of the preposition "of" (morphosyntactic part), and acknowledges that the Spanish student's sentence was grammatically correct (affective).

The second research question, namely the effect triggered by the English peers' feedback, demanded a learner corpus-based classification of those effects. In other words, we analyzed how Spanish students used the feedback provided by their peers. In order to answer this question, the brochure was used to check what feedback was incorporated into the students' texts.

After the pilot study, the following classification was made (Table 3):

Table 3. *Effects of Peers' LREs*

Effects of peers' LREs					
Morphosyntactic and lexical LREs			Affective LREs		
Feedback is ignored	Learner asks for clarification	Feedback is acknowledged	Feedback is partially used	Acknowledgement	No reaction

Different types of LREs had different effects on the Spanish students. Regarding morphosyntactic and lexical LREs, students either ignored, acknowledged, partially used LREs or asked for clarification, as can be seen in that order in these examples:

No reaction:

Spanish student's text: "The name Big Ben actually refers not to the clock-tower itself, but to..."

English peer's LRE: "itself is not needed here"

Spanish student's final version: "The name Big Ben actually refers not to the clock-tower itself, but to..." (pair 10)

Learner asks for clarification:

English peer: "Gracia, pero no estoy totalmente seguro que tenemos que hacer. El fase 8 es un wiki??" [Thanks. But I'm not totally sure what we're supposed to do. Is stage 8 a wiki??] (pair 4)

Feedback is acknowledged:

Spanish student's text: "... are 23 feet square"

English peer's LRE: "... are 23 square feet"

Spanish student's final version: "... are 23 square feet" (pair 4)

Feedback is partially used:

Spanish student's text: "Taking in mind the disposition..."

English peer's LRE: "Bear in mind that the disposition..."

Spanish student's final version: "Bearing in mind the disposition..." (pair 15)

In the case of affective LREs, the only effects on the Spanish students were either the Spanish student's acknowledgement of the English peer's words/corrections, or the lack of a visible reaction on the part of the student, as exemplified below:

Acknowledgement:

English peer's LRE: "I have tried to correct things that you said to me"

Spanish student: "Thanks!!!" (pair 5)

Lack of visible reaction:

English peer's LRE: "I hope you understand my correction!!!"

Spanish student: no reaction (pair 7)

RESULTS

Forum Posts

These forums reflect our process approach to writing. The number of LREs varies in each of the forums: 10 LREs were found in the *Choosing a monument* and *Brainstorming* forums, seven in *Looking for information* and four in the *Meeting each other* forum.

Regarding our first research question, although nine out of ten native speakers did provide feedback in the forums, the mean of LREs for the four forums analyzed is 3.1 LREs per pair. This indicates that even when feedback was required by the instructors, participants failed to comply with the instructions. Some pairs outperformed others, with English peers in pairs one and five offering 11 and nine LREs respectively to their non-native peers. The native speaker in pair three provided no feedback at all to his peer, while the remaining native speakers either offered one or two LREs in the four forums altogether.

The other two forums, *Meeting each other* and *Looking for information* yielded four and seven LREs respectively, which points to the fact that providing feedback is not disconnected from the subject matter and the type of task of the pre-writing tasks. The lower number of LREs in the case of *Meeting each other* may be due to the main aim of this forum (i.e., an ice-breaker). Accordingly, learners may have perceived that there was a clash between the pragmatic nature of the forum itself and the very fact of providing linguistic feedback on the other. *Choosing a monument* and *Brainstorming* yielded 10 LREs each, and stand out as more feedback-sensitive forum-tasks than the other two forums.

Apart from the amount of feedback provided, a key aspect in our study is the analysis of the type of feedback offered by the English native speakers to their Spanish peers. In the four forums altogether we were only able to find 31 LREs, including 28 affective goal-oriented LREs, two simple Lexical specific LREs, and one Compound Morphosyntactic/Lexical/Affective Commentary LRE. [Table 4](#) summarizes these findings:

Table 4. *Types of Feedback in All Four Forums*

Type of feedback	Number of LREs	LRE words	% discourse English speakers devoted to LREs
Affective goal-oriented	28	462	15.0%
Simple Lexical Specific	2	142	4.6%
Morphosyntactic/Lexical/Affective Commentary	1	15	0.5%

Affective goal-oriented LREs in the *Meeting each other* forum show different long-term collaboration goals on the part of the British students such as:

“no te preocupas este proyecto de momento, tenemos mucho tiempo” [don't worry, we have plenty of time to finish this project] (pair 1).

In the *Choosing a monument* forum, affective goal-oriented LREs focus on:

The appropriateness of the choice by the Spanish native speakers:

“Pienso que es una elección muy Buena” [I think it's a very good choice] (pair 2);

The degree of familiarity of the English native speaker with the chosen monument:

“Hola [name], Lo siento que no he resonado mas pronto - desfase horario! [...] No conozco el castillo de husting” [Hi there [name]. I'm sorry I didn't get back to you earlier. I am not familiar with Husting Castle] (pair 5);

Or a combination of both:

“Pienso que Westminster Abbey es un bien elección. El edeficio es muy interesante y hermoso. [...]” [I think Westminster Abbey is a good choice. The building is very interesting and beautiful...] (pair 6).

In *Brainstorming*, the number of LREs remained the same as in the previous forum. The affective goal-oriented LREs included:

General goal-oriented feedback:

“Como va su presentaion?” [How is your presentation going?] (pair 1);

Doubts about the way to proceed:

“Gracia, pero no estoy totalmente seguro que tenemos que hacer. El fase 8 es un wiki?[...]” [Thanks but I'm not 100% sure what we're supposed to do. Is stage 8 a wiki?] (pair 1).

Messages to keep the partnership alive and effective:

“Puedes escribir pronto porque necesito terminar mi proyecto en el martes 14th, gracias.” [Can you write back soon? I need to finish my project on Tuesday the 14th. Thanks] (pair 10).

Some of these feedback LREs are not immediately related to the forum-specific task but rather to the

more general task goals. In the *Looking for information* forum, the number of LREs decreased as compared with the previous forum. The goal-oriented LREs included:

General feedback on the quality of the work so far:

“Pienso que su presentacion es fantastic” [I think your presentation is fantastic] (pair 1);

Suggestions to improve:

“Tengo una sugerencia; quizás si ponerías el parte sobre el turismo al fin sería mejor?” [I have a suggestion: perhaps if you put the tourism section at the end, it would be better?] (pair 5).

Simple lexical specific LREs:

“Mas información. El seccion fondo es ‘brickwork’ and ‘Anston limestone.’ El torre es ‘cast iron’. El reloj es 55 metres altura. [...]” [More information. The “seccion fondo” is brickwork and “Anston limestone” The tower is “cast iron”. The clock is 55 metres high...] (pair 10).

This learner has captured the essence of collaborative feedback. He has read his peer’s previous posts, identified problem lexical areas and provided specific feedback that can be of great use to his peer.

There is one Compound M/L/A LRE where the English native speaker seems to praise his peer’s efforts while also offering morphosyntactic and lexical feedback:

“la lengua que utliazas es muy complicado...pienso que vas a tener un bien nota” [The language you use is complicated. I think you will get a good grade] (pair 1).

This is an illustration of the difficulties in assessing the types of LREs when they are not simple replacements of text or they involve commentaries and interaction with a peer learner.

The second research question in this paper entailed the analysis of the type of effects on the Spanish peers. The data show that morphosyntactic/lexical feedback was acknowledged and incorporated. Goal-oriented, affective feedback, however, was either responded to positively in 10 LREs or had no effect in 18, yielding only one request for clarification. Although the amount of LREs of non-affective nature is low and only applies to one of the pairs, it is interesting to highlight that this feedback was promptly acknowledged by the Spanish peer. As regards goal-oriented feedback, 58% of the LREs triggered no language-based reaction, while in 35.4 % of the LREs the student thanked his/her peer for the feedback provided.

Lastly, we looked at research question number 3. Thus, we analyzed LREs in terms of length, that is, in terms of the amount of words provided in each LRE individually. Altogether, 619 words were used in all the LREs in the forums, with *Choosing a monument* leading the count with 258 words, *Brainstorming* immediately after with 233 words and followed by *Looking for information* with 78, and *Meeting each other* with 50 words. This word count also allowed us to calculate a ratio which expresses the relationship between the number of LRE words in a forum and the number of individual LREs in that forum. *Choosing a monument* yielded a ratio of 0.03, followed by *Brainstorming* with a ratio of 0.04, *Meeting each other* with 0.08 and *Looking for information* with a ratio of 0.09, which confirms that certain subject-matters and collaboration goals are more likely to trigger feedback LREs and larger word counts than others.

Similarly, we have considered the number of LRE words in each of the ten pairs. [Figure 1](#) shows these results:

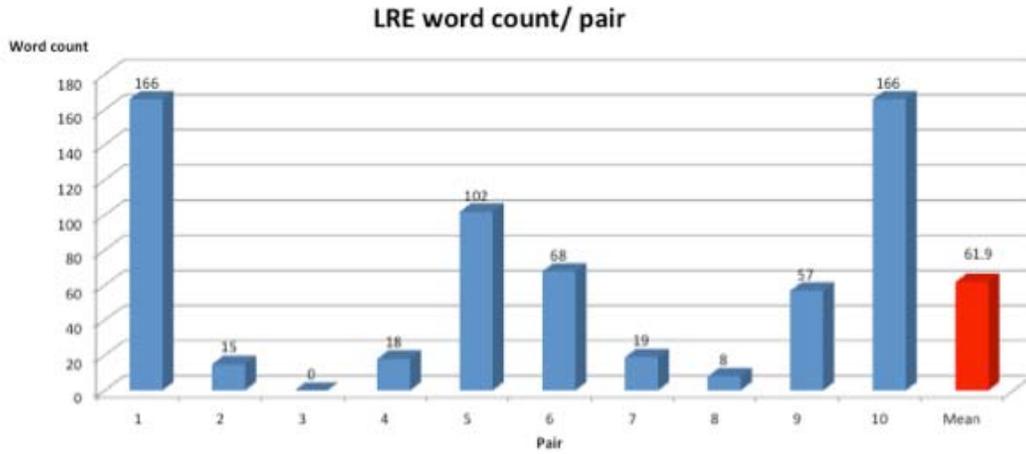


Figure 1. Numbers of LREs words per pair.

Figure 2 shows the mean of words used in LREs by the ten pairs:

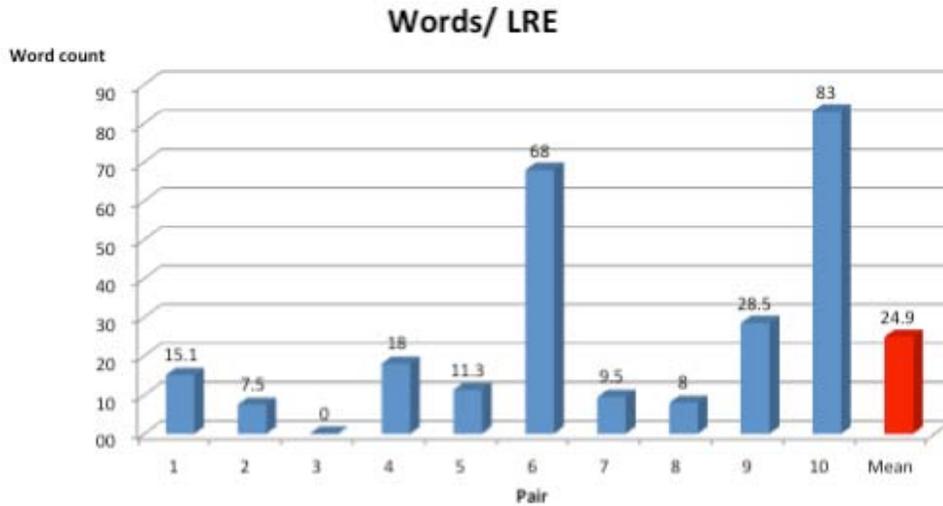


Figure 2. Mean of words in LREs per pair.

Figures 1 and 2 show that while the English native speaker in pair one used 166 words in his LREs, the English native speaker in pair five only used 102 words for the same amount of LREs. Interestingly, the English native speaker in Pair 10 employed the same amount of words as his counterpart in pair one, this time only on two LREs. This finding shows that measures that rely on one single indicator may fail to offer a complete picture of the phenomena under scrutiny or, at least, need to be complemented by others.

In the case of forum-based communication, the number of posts per forum is an indicator of the activity of the pair as well. Table 5 shows this information:

Table 5. *Number of Posts Per Pair*

Pair	No. of posts
1	24
5	19
2	15
8	11
10	11
4	10
9	10
7	9
6	5
3	2

Pairs one and five were the most active pairs in the sample, with 24 and 19 posts respectively, followed by pair two with 15 posts and pairs eight and ten with eleven posts each. This seems to be an indication that more posts will generate more LRE feedback, which concurs with the findings expressed above. However, Table 6 shows that writing more posts does not necessarily imply more words:

Table 6. *Words Written by the Spanish Peers in Each of the Forums*

Pair	Meeting each other	Choosing a monument	Brainstorming	Looking for information	Total words
1	149	415	196	186	946
2	229	348	47	81	705
3	0	0	0	0	0
4	0	184	136	66	386
5	375	520	173	299	1,367
6	40	334	70	36	480
7	38	235	73	124	470
8	234	202	379	20	835
9	450	435	105	92	1,082
10	162	170	128	12	472

This time pair five leads the count with 1,367 words, followed by pair nine with 1,082 words and pair one with 946.

As for the number of days of activity (Table 7), it takes the most productive pair, number 1, longer to complete their tasks, that is, 78 days; 60 days in the case of pair 5, 62 in the case of pair two, and 67 in the case of pair 11. Pair eight completed their writing task in just 28 days while pair three spent just three days working on their forums, so it makes sense that their output was highly insignificant.

Table 7. *Number of Days of Activity for Each of the Forums*

Pair	Forums			
	Meeting each other	Choosing a monument	Brainstorming	Looking for information
1	27	43	3	5
2	26	26	7	3
3	0	0	1	1
4	0	6	9	1
5	15	27	6	12
6	1	33	1	1
7	1	7	7	11
8	19	3	3	3
9	11	38	28	1
10	4	33	27	3

Pair eight offered the same amount of LREs as pair 10 in less than half the number of days, which points to the fact that the number of days that a forum is active is not a reliable indicator of feedback output in terms of LREs.

Once the results obtained regarding the three research questions have been provided for the students' interactions in forums, the findings revealed in the data in the wikis will be provided in the same order.

Wikis

Regarding the first research question, the results obtained when analyzing the students' interactions in the wiki reveal that the 10 English students offered their Spanish peers a total of 219 LREs. As can be seen in Table 8, the mean of LREs is 21.9, which ranges between zero LREs in the case of pair eight and 53 LREs provided by the English peer in pair five.

Table 8. *Number of LREs Per Pair*

Pair	LREs in wikis
1	31
2	23
3	22
4	32
5	53
6	25
7	19
8	0
9	4
10	10
Mean	21.9

When analyzing the types of LREs provided by the English students, it becomes clear that morphosyntactic specific LREs are more frequently used (56%), followed by the use of lexical specific LREs (14%), and compound morphosyntactic and lexical specific LREs (10%). If simple LREs are considered, it can be seen that there is a tendency to just provide a substitute language item for the aspect of the language which is considered incorrect, instead of providing more extended feedback. In fact, the percentages of simple LREs are as follows: morphosyntactic specific (56%), lexical specific (14%), lexical commentary (9%) and morphosyntactic commentary (7%). In the case of compound LREs, there is a preference to use specific LRE types when the aspects of language being corrected are morphosyntactic or lexical (10.4% of the LREs, either simple or compound), and the percentage decreases to 0.45% when commentaries are used. When affective feedback is provided, specific LREs are not used at all, and various words are employed in commentaries, much like when feedback is provided for the use of language in general (simple metalanguage specific LREs).

As our second research question was ‘How do Spanish students react to that feedback, as seen in their linguistic behaviour or written output?’, the data in the wikis revealed that there are some effects which are related to morphosyntactic and lexical aspects, and others which focus on affective feedback. To begin with those dealing with morphosyntactic or lexical aspects, both in simple and compound LREs, the effect which is most commonly found is that by means of which Spanish students attend and apply their peers’ feedback (76.8%). Secondly (12.7% of the cases), the Spanish students’ option was to ignore the feedback. Sometimes, this behavior may have been triggered by incorrect feedback. For instance:

Spanish student’s text: “Its base is hidden by the building which houses Blackpool Tower Circus.”

English peers’ correction: “It’s base is hidden by the building which houses Blackpool Tower Circus.”

Spanish student’s final version: “Its base is hidden by the building which houses Blackpool Tower Circus.” (pair 4)

The third type of effect involves the partial correction of the aspects pointed out in the LREs (6.8%). Table 9 shows the percentages of each of the effects in our data.

Table 9. *Types of Feedback Effects*

Feedback ignored	Incorporated	Affective No reaction	Affective Thanks	Partial correction
12.7 %	76.8%	3.1%	0.45%	6.8%

When students received affective LREs, their most frequent behavior was the lack of language-based reaction (3.1% of the cases) and only in 0.45% of the cases students thanked their peers.

The results obtained concerning the third research question, related to the role played by other variables, are presented here. First, the total number of words which English students employed in their feedback was 1,121. As a result, the mean of words per LRE is 4.9, again showing important differences between pairs. Thus, pair eight has the lowest mean of words per LRE, followed by pair four (2.37) and pair 10 (1.47), while pair six shows the highest (10.68). Table 10 shows the mean number of words used per LRE in wikis.

Table 10. *Mean Number of Words Used Per LRE in Wikis*

Pair	Mean words/LREs in wikis
1	3.9
2	3.3
3	3.0
4	2.3
5	6.8
6	10.6
7	4.7
8	0.0
9	8.2
10	2.7
Mean	4.9

As regards the number of words per LRE type, LREs which are lexical commentaries involve a higher number of words (33.5%), followed by morphosyntactic specific (26.74%) and morphosyntactic commentaries (20.20%). The lowest number of words per type of LRE is seen in metalanguage specific LREs (0%), since they do not trigger any words at all (0%). As revealed in our data, in the case of lexical LREs, commentaries are those which involve the highest number of words, whereas in the LREs related to morphosyntax, the specific LREs are the ones with a higher number of words (Table 11). In fact, our data show that students tend to use the specific type more often, without making any comment on the feedback they are providing.

Table 11. *Types of Feedback in Wikis*

Type of feedback	Number of LREs	LRE words	% discourse English speakers devoted to LREs
Morphosyntactic specific	121	180	1.9%
Morphosyntactic commentary	15	136	1.5%
Lexical specific	28	44	0.4%
Lexical commentary	20	226	2.5%
Meta commentary	5	55	0.6%
Goal-oriented	3	32	0.3%

Finally, it is interesting to point out here that the context in which these LREs and interactions took place was a wiki which each pair shared and used as they considered appropriate. As a consequence, each wiki was active for a different number of days and consisted of a varying number of drafts by the Spanish student and a varying number of LREs provided by the English peer: 4.9 days is the mean number of days when the students used the wiki, with values ranging from one day (pair eight) to 14 (pair nine), although the wiki was available to them all since the very start of the task. However, students used the wikis at the very end of the collaborative writing experience, when the deadline was approaching, which determined the amount of days when the wiki was used. Closely related to the days of activity of the wiki is the number of LREs provided by the English peers, since it was expected that the more days the wiki was active, the more LREs would be provided by the English peers. However, our data reveal that, contrary to

expectations, the pair which used the wiki for more days (i.e., pair 9), was the pair in which the English student provided the lowest amount of LREs, if the lack of LREs in couple eight is not considered. Therefore, it seems that there is not a pattern which determines a relationship between the number of days of wiki use and the number of LREs provided, as it can also be seen in the fact that pairs one and two used the wiki for three days each, but in the first one 31 LREs were provided, and in the second one 23 LREs were offered.

DISCUSSION

Our research addresses online communication which integrates different technologies and interaction types, mainly, forum and wiki CMC. This gave us the chance to explore, for the first time in the academic literature, how peer feedback manifested itself in two different communication modes, forum and wiki, which were parts of an online collaborative writing task for the same sample of learners, and what the effect of this feedback was in both settings. This discussion will be divided into three subsections, namely the types of LREs in forums and wikis, the types of effects on the Spanish students after feedback and, thirdly, some methodological considerations.

Types of LREs in forums and wikis

In light of our data, providing feedback, or failing to do so, cannot be attributed exclusively to the peer-group variable. In the 4-forum set altogether, all the pairs but number three were able to provide and process feedback. In the wiki stage, the same percentage was found, only that this time pair eight was providing and processing no feedback whatsoever, possibly due to the fact that the Spanish student wrote her material in the wiki too close to the deadline and did not allow enough time for her peer to react. Secondly, it seems that despite the opportunities that forum-based communication offered for the negotiation of meaning and the provision of feedback, in quantitative terms, that is, in terms of the number of feedback LREs, learners probably felt that the forum was not the place to do this, and opted for giving feedback in a wiki-context which, paradoxically, is less *friendly* for the interchange of ideas. The nature of the task to be conducted in the wiki (i.e. the provision of appropriate feedback during the actual writing of the brochure) may have been regarded as a more information gap task, where lexical and morphological information is somehow demanded by the learner and provided by the peer.

Our results may suggest that if a researcher is looking for feedback of a morphosyntactic or lexical nature, a wiki may provide learners with plenty more opportunities to find it in the context of the type of multi-stage writing promoted in our experience. Our data show that the forum is preferred by learners when it comes to offering feedback which is focused neither on morphosyntactic nor on lexical LREs, but rather on feedback-related, goal-achieving messages. This is confirmed by Kessler and Bikowski (2010), who found that interaction is favoured by flexible learning environments. Our finding confirms theories which highlight the ecological nature of technology (Postman, 1993), that is, the fact that the use of technologies influences people in such deep, personal ways that their use even in educational settings is conditioned by social customs. In this context, learners seem to have used forums primarily as communication platforms to establish bonds with their peers, finding affective, goal-oriented feedback more suitable despite the explicit instructions from the instructors to provide feedback on their peers' language use. In fact, affective, goal-oriented feedback is provided in the wikis mainly when the English peer wants to make sure that his/her peer will carry on working in the platform or feels that the communicative channel has broken down due to the lack of interaction by the Spanish learner. In other words, this type of feedback is provided when there is a lack of participation of the Spanish student in the wiki because s/he fails to correct aspects which have been pointed out or including more data. See, for instance:

English peer's LRE: "es muy bien y muy interesante de leer... y la lengua que utilizas es muy bien. si necesitas cambiarlo otras vez no hay problema... voy a hacer el mio ahora" [It's very good and very interesting to read...and the language you use is very good. if you need to change

this again, there is no problem. I am going to do mine now] (pair 1)

As suggested by O'Dowd (2003, p. 139), successful intercultural communication rests upon abilities such as "building up a personal relationship ... sensitivity to their partners' needs and communicative style, and their capacity to produce engaging" communication. This was found in the affective, goal-oriented feedback provided by the English speakers to their Spanish peers in instances such as this:

English peer's LRE: "ahhhhh ok.....yo veo. gracias. buena suerte con su trabajo.y cuando estas completo, puedo tambien leerlo para ti" [Ahhhhh ok.....I see. thanks. good luck with your work and when you have finished, I can read it for you] (pair 1)

As seen in the example above, the type of feedback provided resembles more the type of encouraging and real-life interaction that takes place in successful social and professional networks. Similarly, our data corroborates Kol and Schcolnik's (2008) finding that in the forum their EAP "students did not discuss the texts, rather, they used the forums to react to the ideas, the new information ..." (p. 61).

This appears to only clash with Ware and O'Dowd's (2008) finding that learners are more likely to provide feedback if they are instructed to do so. In our data, this is the case only if, for morphosyntactic and lexical feedback, instructions are accompanied by computer interaction, i.e. a forum or a wiki, which is perceived as feedback-prone or information-demanding by the learners.

These insights into the type of feedback preferred by learners in the forum and the wiki stages are of great interest in the development of online communication tasks, which can subsequently benefit from a multi-purpose feedback orientation which reflects learning experiences which not only focus on form, but also on creating rich opportunities for the negotiation of meaning (Barbour & Collins, 2005; Cummings, Bonk, & Jacobs, 2002; Wu & Hiltz, 2004).

Types of Effects of the Feedback on the Spanish Students

When considering the effects of the feedback on the Spanish students, they varied according to the type of interaction in which learners were involved. In the cases in which students receive morphosyntactic or lexical LREs in the forums, they attend the linguistic aspects pointed out. When they were working on the wiki, three effects were observed, namely their ignoring the LREs, their incorporation, and the partial use of the feedback. Students were conscious that the final product of the collaborative writing experience, the tourist brochure, would be evaluated by the teacher and would add marks to their final grade in the course, and therefore only used their peers' feedback when they felt it was correct and useful (see Methodological considerations below). On the contrary, the forums were perceived as a more *friendly* environment in which students interact with their peers not only to do their task, but also to establish a bond.

This defining characteristic of forums also leads to the higher number of affective LREs. Consequently, the number of effects posed by affective LREs was higher in forums than in wikis. In other words, the Spanish students' main interest is to receive their peers' morphosyntactic or lexical feedback in the wiki, so that they could correct those aspects which they have not used properly and, thus, improved their use of the language to obtain a higher mark in their course, *Gramática Inglesa*. Although incidental learning (Hulstijn, 2003) might have taken place, the students' focus on form, rather than on meaning, might indicate that intentional learning took place on most occasions. The Spanish students' partial correction of their peers' suggestions in morphosyntactic and/or LREs may also point to the students' intentional learning, since they checked their peer's comments in dictionaries and/or grammars when they felt it was necessary.

Affective LREs in both interaction types triggered the same types of effect in decreasing order of frequency: either students did not show any language-based reaction or they thanked their peers. While

the lack of language-based reaction in the wikis may be explained by the short amount of time devoted to the writing task in the wikis, the pressure of the deadline, and the interest in correcting the drafts with the peers' feedback, the high number of occasions in which Spanish students did not react to their peers' affective feedback in the forums was unexpected. Similarly, thanking their peers was not a common practice among our students, especially in the wikis, probably due to the same reason as stated before.

METHODOLOGICAL CONSIDERATIONS

Our research also sheds light on methodological issues of interest for the analysis of feedback in online communication. One of these affects the unit of analysis itself, that is, how to approach the analysis of LREs. Due to the variety of taxonomies regarding the analysis of LREs (e.g. Blake, 2000; Ellis, Basturkmen, & Loewen, 2001; Lyster & Ranta, 1997; Smith, 2003, 2005; Varonis & Gass, 1985; Ware & O'Dowd, 2008), we decided to use Ware and O'Dowd's since it had been used in a context similar to ours. Therefore, drawing on their taxonomy, we have expanded it so that all the LREs in our data could be coded and examined. However, the most interesting discovery which emerges from our data is related to the ratios which affect LREs per number of words. We have found that the ratios which express the relationship between the number of LRE words and the number of LREs, and the number of posts per pair, both predict quite successfully the suitability of a particular sub-task, i.e. a forum, as a feedback trigger. On the contrary, the active days of a particular sub-task is not a good predictor of feedback providing for both forums and wikis. In the forums, we found that the number of LREs is not constant across all four forums, which opens up an interpretation of this fact in terms of forum subject matter and the type of task required as key explanatory factors. This finding may lead us to tentatively conclude that the more negotiation of meaning is implied in the writing task, the more chance there is for native-speaker feedback and language learning (Long & Robinson, 1998). Figure 3 shows that the pattern that governs the provision of feedback is independent of the number of words written by the Spanish peers:

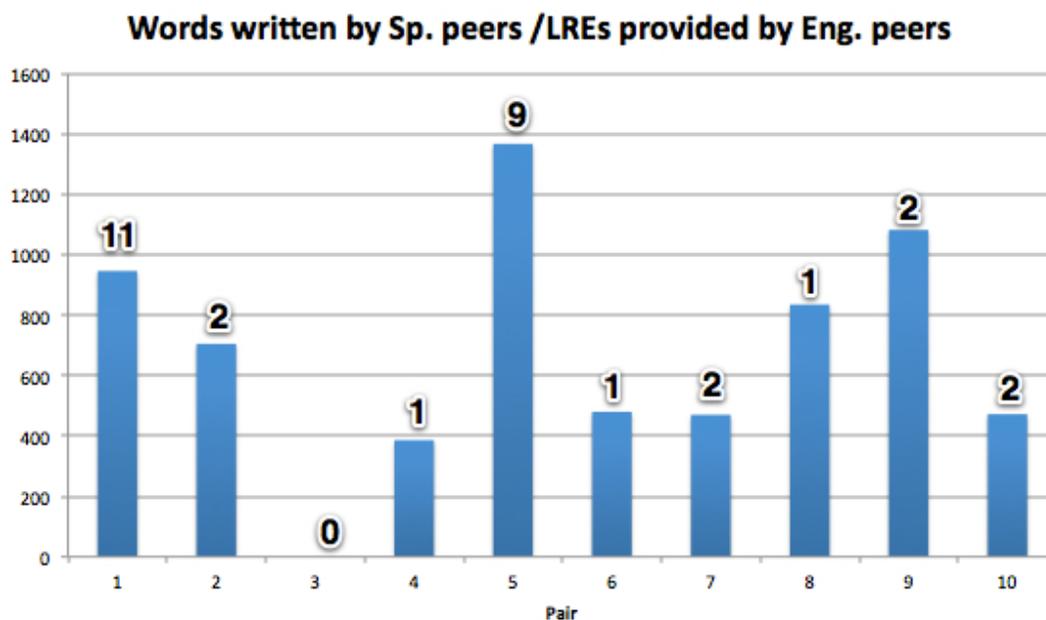


Figure 3. Words written by Spanish peers and number of LREs.

The number of words written by the Spanish learners does not seem to determine a matching pattern in the provision of feedback. This finding should be taken tentatively and future research should look at this

more closely and establish conclusions based on non-inferential statistics. In a similar way, the number of LREs provided in the wiki stage was not determined by the number of words written by the Spanish peers in their draft version, as seen in those draft versions with the highest number of words (i.e., 1,126 and 1,876) that triggered 22 and 23 LREs respectively, whereas the highest number of LREs was given to a text with 1,116 words. On the contrary, a text with 476 words triggered 32 LREs.

The quality of the feedback provided by the English peers is, in general terms, appropriate. English students specify where the problems are and use specific and/or commentaries to improve their peers' brochures. However, two types of situations are worth pointing out. First, the cases in which the Spanish student notices that the feedback obtained is not accurate, as shown in the section on wikis above, and decides not to use it for his/her brochure or only partially use it. Second, some affective LREs provided by the peers congratulating the Spanish students for the specialised vocabulary they are using, even recognising on some occasions that they had to look words up to check that the specialised words were the correct ones. These two scenarios lead to a crucial issue: the distinction between being a native speaker of a language and mastering it. In both cases, the Spanish student feels that his/her knowledge of the foreign language is somehow better than that of the native speakers, which makes them feel more confident (Kessler, 2009) and fosters their language learning process in general.

CONCLUSION

Although the results of this paper are to be taken cautiously due to the number of participants ($N = 20$), given the university background in which the online collaborative experience took place, and the students' culture-of-use (Thorne, 2003), interesting conclusions may be drawn.

Regarding the effect of feedback on the learners, we can conclude that, although morphosyntactic and lexical feedback is largely acknowledged and incorporated, the Spanish peers in this experience seemed to only accept it when they perceived it as correct without further follow-up or discussion. Feedback of an affective nature failed to promote further discussion, perhaps due to intercultural dynamics. These effects varied, however, in the forums and the wiki stages, the forums triggering more thankful responses than the wikis. This difference may stem from the fact that, whereas the forums were viewed as a friendlier environment in which to establish bonds with peers in order to facilitate collaborative work in the wikis, students were more interested in the final product (i.e. their brochures) when attending to their peers' comments in the LREs in the wikis. The pressure for time when working in the wiki may have also played an important role in the (almost non-existent) effect of affective LREs. Further research will be necessary to confirm these findings in new contexts.

While the LRE appears to be a valid working unit of analysis in the study of peer feedback, it remains to be seen more conclusively how it relates to other measures of activity like the number of words per LRE, the total number of running words per post/wiki or even the life cycle in terms of days of a given activity. Our data suggest that similar results are found when using words per type of LRE or types of LRE to analyze the feedback provided, although the use of the former may lead to contradictions such as the higher percentage of words in commentary LREs, as opposed to that in specific ones (see section Wikis above). Future research should concentrate on the analysis of all of these variables and their effect on peer feedback in order to gain further knowledge on which conditions are more likely to promote successful peer-feedback. A replication of our study with a larger number of subjects coming from a more varied array of backgrounds would certainly contribute to a better understanding of the role of peer feedback in online communication and would help teachers and researchers make a more efficient use of CMC tools.

Similarly, although the effect of the feedback provided by peer students was carefully analyzed in terms of observable language behavior, that is, discourse restructuring, an intercultural perspective together with attitudinal questionnaires may shed light on factors that could not possibly be taken into account in the context of this analysis.

Appendix A. A snapshot of the virtual platform

The screenshot shows a virtual learning environment interface. At the top, the title is "Writing as a process and as a product in Computer-mediated Communication". Below this, there's a header for "UM - E-learning Platform" with a student image and the word "LEARN". A navigation menu on the left includes sections for "People", "Administrations", and "Activities". The main content area features a banner for "online collaborative writing" with logos for "UNIVERSIDAD DE JAEN" and "UNIVERSITY OF LEEDS". Below the banner, there's a "Topic outline" section with 10 numbered phases:

- Fase 1. Conformidad de participar (dar email, autorización, etc.) / Participation agreement
- Fase 2. Asignación de compañero / Peer information
- Fase 3. Romper el hielo / Ice-breakers: meeting each other
- Fase 4. Elección de monumento / Choosing a monument to write about - Stage 4. Deciding on the building/monument/culture town to be described in the tourist brochure
- Fase 5. Writing I
- Fase 6. Writing II
- Fase 7. Writing Stage 3. Glossary
- Fase 8. Paragraphing and writing process
- Fase 9. Document upload
- Fase 10. Upload your final activity here.

Below the outline, there's a large text box with the following text: "This is the final and most crucial stage of the whole activity. We expect you to write your contribution and read your partner's and give feedback on areas such as text cohesion and coherence, grammaticality, style, vocabulary choice, etc." A small note above it defines "Wiki" as a page or collection of Web pages designed to enable anyone who accesses it to contribute or modify content using a simplified markup language.

On the right side, there's a "Calendar" for April 2009, a "Online status" section showing "Last 5 minutes" with the user "Pascual Pérez-Paredes", and a "Messages" section stating "No messages waiting". A warning icon is also present with the text: "In case of problems with the platform, please contact: mls@ara@umaj.es".

Appendix B. Guidelines for forums and wikis

FORUMS

Meeting each other

This is the place to introduce yourself to your partner. This stage is an opportunity for you to get to know each other before starting working hard! You may have common hobbies, interests, worries, and so on. You may have been to the same places on holidays! How long have you been studying the foreign language for? Have you ever been to Spain/England? Why don't you use the forum to find it out?

Choosing a monument to write about

At this stage you need to decide which building/painting/sculpture/town you will describe in your tourist brochure. After you have done so, write a 300-word text explaining to your peer why you have chosen such building/painting/sculpture/town.

Include the following information:

The reasons why you have chosen that building/painting/sculpture/town

Why you like it (artist? Period? You've been there?)

The aspects you would like to focus on

The aspects which will be difficult to describe

Where you will look for the necessary information

If you could not describe that building/painting/sculpture/town, which is your second option? Why?

Read your partner's contribution and reply at least once to it giving him/her your own opinion on the suitability of the election.

Brainstorming

At this sub-stage you need to think about the aspects which will be included in your description. For instance, if it is a building, you need to think about the location, the architect, the style, the materials employed, the decoration (if any), etc.

Please, write the necessary keywords and relate them under appropriate headings. If you have a scanner and you prefer to draw your brainstorming, feel free to do so.

Read your partner's contribution and reply at least once giving him/her your own opinion on these keywords.

Looking for information

Any tourist brochure needs to be well-informed. Therefore, bibliographical information is needed to proceed with the writing task. You may want to have a look at the library catalogue, online resources, etc. In case you had any doubt on bibliographical information, please contact your instructor. Once you have the appropriate references, write the bibliography that you will use below.

Reply to your partner and tell him/her your impressions on the suitability of these sources.

WIKI

Paragraphing and writing process

This is the final and the most crucial stage of the whole activity. We expect you to write your contribution and read your partner's and give feedback on areas such as text cohesion and coherence, grammaticality, style, vocabulary choice, etc.

In order to write a good description you need to think about how you are going to organize all the information that you have in the text.

Brochure

Once you are done with the brochure, this is the site in which you should update your files in order to send it to the teacher.

NOTES

1. A language-related episode (LRE) is a part of a dialogue where learners “talk about the language they are producing, question their language use, or correct themselves or others” (Swain & Lapkin 1998, p. 326).
 2. Translations of LREs in Spanish are provided. They are intended to show the type of interaction which students were engaged in but do not attempt to reproduce the type of mistakes therein.
 3. Please note that the examples of the students' writing are verbatim transcriptions from the learner corpora.
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