COMPUTER-MEDIATED CORRECTIVE FEEDBACK AND LANGUAGE ACCURACY IN TELECOLLABORATIVE EXCHANGES

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Recent studies illustrate the potential that intercultural telecollaborative exchanges entail for language development through the use of corrective feedback from collaborating partners (Kessler, 2009; Lee, 2008; Sauro, 2009; Ware & O'Dowd, 2008).

We build on this growing body of research by presenting the findings of a three-month-long research project that explored the impact of peer feedback on the development of learner accuracy. Our aim was to study participants' attention to form and the relative effectiveness of error correction strategies. In order to do so, we organised an e-mail exchange between seventeen post-secondary learners of Spanish and German. Data consist of exchanges between the five dyads who completed the full three-month project. As suggested by Vinagre and Lera (2008), analysis of these data indicate that despite frequent use of error correction, the use of remediation led to a higher percentage of errors recycled and was more conducive to error recycling in later language production.

INTRODUCTION

Over the last forty years, a great deal of research has been conducted into the use of new technologies to facilitate the language development of participants in intercultural telecollaborative exchanges (Brammerts, 1996; Kotter, 2002; Little, Ushioda, Appel, Moran, O'Rourke & Schwienhorst, 1999; Vinagre, 2005; Woodin, 1997). Most of this research has focused on the importance of participants communicating in authentic contexts with native speakers of the language they are learning in order to develop fluency in the foreign language. However, less attention has been paid to the development of accuracy in the foreign language by instructors who employ communicative approaches where there is more often emphasis on fluency and authenticity, less on attention to form. However, introducing a focus on form in these exchanges is crucial, especially for those students with intermediate or higher levels of competence in the foreign language. Students who learn a foreign language, especially at university, are expected not only to communicate with native speakers but also to develop a command of the language that will allow them to use it correctly in their future working environments. Moreover, students involved in these types of exchanges often feel that they do not improve their language competence unless some form of feedback has been provided by their partners or the teacher. Thus the impetus for researchers to examine the potential that peer feedback in online exchanges may entail for the development of language accuracy (Dussias, 2006; Kessler, 2009; Lee, 2008; Muñoz, 2008; O'Rourke, 2005; Pellettieri, 2000; Sauro, 2009; Sotillo, 2006; Vinagre & Lera, 2008; Vinagre & Maíllo, 2007; Ware & O'Dowd, 2008). We build on this growing body of research by presenting the findings of a three-month-long e-mail project designed to explore the impact of peer feedback on the development of language accuracy. Our aim was to study participants' attention to form and the relative effectiveness of error correction strategies in online collaborative projects. In order to do so, we replicated the study by Vinagre and Lera (2008) and organised an e-mail exchange between post-secondary learners of Spanish and German to discover whether their findings concerning participants' attention to form in online intercultural projects through the use of corrective feedback were limited to their particular context as university learners of English and Spanish or whether they extended beyond that context.

CORRECTIVE FEEDBACK AND SECOND LANGUAGE ACQUISITION

Research regarding error correction and its implications for second language learning is sometimes contradictory. Some studies suggest that positive evidence alone is sufficient for adult second language learning (Krashen, 1977, 1994), whilst others consider positive evidence to be insufficient for second language learning to occur (Long, 1983, 1996). The term "positive evidence" can be defined as the set of grammatical sentences the language learner has access to by observing the language production of others; it refers to the information available to the learner regarding which strings of words are grammatical sentences of the target language. As regards negative (corrective) feedback, whether it takes the form of explicit correction, recasts or negotiation of form, most studies seem to indicate that it facilitates the development of the learners' second language (Chaudron, 1977, 1986; Lyster, 2001; Lyster, Lightbown & Spada, 1999; Lyster & Ranta, 1997; Morris, 2002, 2005; Myles, 2002; Panova & Lyster, 2002). There is general agreement that some attention to grammar through the use of corrective feedback in communicative online environments is necessary to foster language acquisition. Most studies that examine how online collaborative interaction can foster the development of learners' grammatical competence are based on the application of Long and Robinson's (1998) interaction hypothesis. According to these authors, negotiation for meaning elicits interactional modifications and corrective feedback, including recasts and noticing, which "increase input comprehensibility without denying learners' access to unknown L2 vocabulary and grammatical forms" (p. 22). Corrective feedback has also been identified as a focus-on-form procedure. Long (1991, p. 46) defines focus-on-form as "…overtly draw[ing] students' attention to linguistic elements as they arise incidentally in lessons whose overriding focus is on meaning or communication." According to Morris (2005, p. 3), the support for focus-on-form is based on different claims about second language acquisition. First, L2 learners acquire new linguistic structures while attending to those forms in contexts where the primary goal is the message. Second, L2 learners benefit from the opportunities that take place during communication to give specific attention to form. Third, focus-on-form can draw students' attention to linguistic forms whilst communicating, and such focus can occur when a learner provides corrective feedback in response to his partner's errors. Other authors suggest that "…in naturalistic as well as in formal contexts, feedback is one of the most important stimuli to learning" (Little & Ushioda, 1998, p. 96); "it is through giving feedback that learners' metalinguistic awareness is most tellingly sharpened and refined" (Little et al., 1999, p. 52). Bartram and Walton (1991, p. 81) mention that "the active involvement of students in the process of dealing with errors is important [because] it stimulates active learning," whilst for Hyland (1990) error correction, when carried out selectively, develops learners' awareness.

From a sociocognitive perspective, corrective feedback should be embedded in a social context in which students work together collaboratively to solve problems or carry out tasks (Nassaji & Swain, 2000). From this perspective, factors that influence students' attention to form include the nature of the collaboration (Swain, 2000), the type of task (Storch, 2001), student proficiency (Leeser, 2004), personal learning style (Lee, 2006) and length of task discourse (Williams, 1999). Most of these studies focus on students' attention to form within formal instruction settings, whilst very few studies have been carried out that analyse students' attention to form in online environments. However, analyses of synchronous and asynchronous network-based discourse (Barker & Kemp, 1990; Dam, 1995; Kelm, 1996; Schwienhorst, 1998; Warschauer, 1996a, 1996b) have shown that students who are used to collaborative activities tend to be more receptive to receiving feedback which, in turn, can foster language learning.

Attention to Form in Asynchronous Online Exchanges

Attention to form in online exchanges has been the focus of a considerable amount of research in recent years. Some of the reasons that would explain this increase in interest refer to earlier studies which stressed the importance of providing students with grammatical error feedback as a means of contributing to second language development. Stryker (1997), for example, found that students demanded formal grammar instruction when grammar was eliminated from content-based instruction. In the same article,

the author suggested that students should use self-correcting techniques as a way of developing responsibility for their learning and use of the target language. Chavez (2002) points out that students often consider the "real" part of language learning to involve the study of grammar. Lee (2004) suggested that computer-mediated communication should balance linguistic fluency and accuracy.

Recent studies that focus on language development through the use of corrective feedback in asyncronous exchanges include Vinagre and Maíllo (2007), Ware and O'Dowd (2008), Vinagre and Lera (2008) and Kessler (2009). Vinagre and Maíllo (2007) focused on one-to-one partnerships in which participants provided corrective feedback on one another's errors via e-mail. Ware and O'Dowd (2008) reported on a weekly asynchronous discussion project whereby participants were to provide corrective feedback as either e-tutors or e-partners on their partners' use of the target language. Kessler (2009) analysed student-initiated attention to form in the collaborative construction of a wiki and its effect on accuracy. These studies suggest that students favour the inclusion of a focus on form as part of their exchanges and that corrective feedback may facilitate reflection and language development. Teachers, in turn, need to ensure that students are capable of offering corrective feedback adequately. Finally, the findings of Vinagre and Lera (2008) are presented in some detail below, since one of our aims in this paper is to replicate their study.

Vinagre and Lera (2008)

This study presents the findings of a year-long e-mail exchange between learners of English at Nebrija University in Madrid and learners of Spanish at Trinity College Dublin during the academic year 2005-2006. The authors aimed to find out whether mutual error correction led to development in language competence. Using both qualitative and quantitative approaches, the authors presented data from the students' e-mail content. Following James' proposal (1998, pp. 236-237), they identified three different types of corrective feedback: (a) feedback (informing learners there is an error and leaving them to discover it and repair it by themselves); (b) correction (providing treatment or information that leads to revision); and (c) remediation (providing learners with information that allows them to revise or reject the wrong rule they were operating with, thereby inducing them to revise their mental representation of the rule and avoid recurrence of this type of fault).

As regards instances of recycling/re-use of the corrections, 20 instances of recycling errors were found of which 3 (15%) occurred after correction and 17 (85%) after remediation. Thus, 85% of error recycling took place after remediation, whilst 15% occurred after correction. As regards the types of errors that were corrected, 10% of all recycled errors were spelling errors, 15% of all recycled errors were lexical errors and 75% of all recycled errors were morphosyntactic errors. The students focused on lexical and orthographical aspects for correction, whilst the vast majority of syntactic structures were treated by remediation. In their final conclusion the authors suggested that remediation, as opposed to correction and feedback, seemed to be more effective in fostering linguistic development.

PROJECT DESCRIPTION AND PARTICIPANTS

In an attempt to verify these findings, we organised a three-month-long e-mail exchange between seventeen post-secondary learners of Spanish at the University of Applied Sciences Emden/Leer (Germany) and seventeen post-secondary learners of German at the Language Centre of the University of León (Spain). However, for various reasons the final number of students was reduced to ten and the results presented in this study are based on the data analysis of the five dyads who completed the full three-month project.

In age, the German group ranged from 20 to 25 years, whereas the Spanish participants ranged from 21 to 28. The German group consisted of 3 female students and 2 male students. In the Spanish group there were 4 female students and 1 male student. All pairs had an A2 level in the *Common European Frame of Reference for Languages*, except for one dyad whose language proficiency level was a B2.

The students at both institutions were given the same general guidelines on e-mail tandem learning, which explained the importance of reciprocity and mutual help for the success of the exchange (see Appendix A). In addition, other relevant aspects were addressed: e-mail frequency (two a week), topics to be discussed (personal and culture-related such as customs and traditions, university life, going out, music, cinema and television, art and literature, idioms, slang and colloquial expressions, politics, holidays, stereotypes, traditional cuisine, festivals and a free monthly topic to be negotiated with the partner) and tasks to be carried out jointly (error correction). E-mails were to be written half in German and half in Spanish and students were given specific guidelines with regard to error correction which included an error classification table. The Spanish students were given Gaßdorf's proposal (1998) for the classification of German errors, whilst the German students were given Steveker's proposal (2002) for the classification of Spanish errors. The main reason for doing this was that error types are different in these languages and we wished to help students by providing them with a classification of errors that would facilitate error recognition and correction. Steveker (2002) divides errors into three main categories: lexical, grammatical and special. Lexical errors are divided into orthographic (also accentuation), wrong word choice, wrong expression and gender error. Grammar errors are equally divided into the following categories: relation errors (for instance, between the subject and the verb), wrong word building, article omission or wrong use, wrong pronoun choice, wrong tense choice, wrong word order in the sentence, and wrong construction. Finally, he mentions special errors and this category includes wrong use or omission of a punctuation mark, surplus words and word omission. The author offers abbreviations and examples for each subcategory.

Gaßdorf (1998) divides errors into sixteen types: case error, gender error (relating to the masculine, feminine and neutral article in German), tense error, wrong use of an auxiliary or modal verb, wrong word order, wrong conjugation, wrong tense stem, wrong word, wrong expression, wrong preposition, reflexive pronoun omission, wrong spelling, word omission, wrong use of a connector or pronoun, unnecessary error, and punctuation error. The author also gives abbreviations for each error type.

Finally, the students kept a language learning diary[1] in which they were to refer to their experiences in the exchange, in addition to recording information about three main aspects: new vocabulary encountered, recycling of errors, and cultural issues.

We placed special emphasis on the importance of the diary as an instrument to foster reflection and assess language and culture development, and participants were encouraged to send their diary to the coordinator in Germany once a month. A more detailed account of this aspect of the study can be found in Muñoz (2008).

METHOD

As previously mentioned, our aim was to replicate Vinagre and Lera's (2008) study in order to find answers to the following research questions:

1. What strategies did the online partners use to foster attention on linguistic development? In what ways, if any, do they differ from those suggested in the study by Vinagre and Lera?

2. What error types were more frequently made by the students in each group?

3. Was remediation, as opposed to correction and feedback, more effective in fostering the development of language accuracy since it encouraged recycling of errors?

In order to answer these questions, data was gathered from a triangulation of instruments, including content from 199 e-mail messages, language learning diaries, self-evaluation questionnaires and personal interviews. Frequency and type of language used was analysed for personalised correction strategies and feedback strategies (James, 1998) and errors were classified according to Fernández (1997, pp. 44-47) into four main categories: lexical, grammar, discourse and spelling errors (see the Typology of errors

made by the students in Appendix C). As part of their personalised error correction strategies, students used different types of typographical conventions, as can be seen in Table 1 below:

Table 1. *Typographical Highlighting*

Typographical highlighting	Emden	León
Colours	3	3
Equals sign (=)	1	1
Underlining	1	1

One dyad selected the paragraphs that contained errors, marked the errors in red and wrote the corrections next to them. Another underlined the errors and wrote the correct version in brackets. The third dyad listed the errors at the end of each message, wrote an equals sign next to the error and then provided the correction. The fourth dyad marked the errors in red and wrote the corrected version at the end of the message. The last dyad used brackets when a word was missing, bold type to signal errors and wrote the corrected version at the end of each message. From the thirteenth message onwards, this last dyad changed the correction method and signalled errors with asterisks. This change was due to the fact that the German participant had started using a new computer programme.

Once feedback strategies were analysed and errors categorised, we looked for samples of recycling of errors in subsequent e-mail messages and in the language learning diary. At the end of the e-mail exchange participants were given a self-evaluation questionnaire to complete that consisted of 54 questions (see Appendix D). The questionnaire, which included open and closed questions, contained two main parts: the first dealt with demographic and contextual information and students were asked about their name, age, level of proficiency in other foreign languages, their studies, whether they had any acquaintances or friends who spoke the L2 or whether they had been to a country where the L2 was spoken; in the second part of the questionnaire students were asked to assess the online exchange. In order to do so they had to reflect about the development of their exchange and write about their worries and goals before taking part in the project, as well as providing a definition of what tandem meant to them and explaining what they had learnt during the exchange. Furthermore, they were asked about the content of the guidelines and encouraged to offer suggestions in order to improve future exchanges. The students were also invited to take part in a personal interview which took place at their respective learning sites and was conducted by the coordinator in Germany. This interview, which was recorded and conducted in the participants' mother tongue, consisted of 13 questions dealing with error correction and the online exchange itself. Nine participants (5 German and 4 Spanish) were interviewed.

FINDINGS AND DISCUSSION

In order to answer our first research question, we analysed the types of correction techniques used by the participants in their e-mails. We found that the German participants provided 680 correction samples and 75 remediation samples, whereas no feedback samples were found. Their Spanish counterparts provided 712 correction samples, 62 remediation samples and no samples of feedback. Therefore, the participants used only two out of the three types of correction techniques mentioned by James (1998), namely correction and remediation, whereas three were found in Vinagre and Lera's study (2008) (feedback, correction and remediation). Although this difference may seem significant, we do not believe it is very relevant since Vinagre and Lera only found one instance of feedback in their study (2008, p. 331). Although we are not entirely sure why participants tended to favour the use of either correction or remediation rather than feedback, there is a possibility that it may be linked to the participants' educational background; whereas some of the German participants seemed to think receiving feedback equally helpful, this was not the case with the Spanish participants, who mentioned that having to rely on

feedback alone when self-correcting their language production was not sufficiently helpful. They felt that more specific help either in the form of correction or remediation was needed.

As regards the second research question (i.e., error types most frequently made by the participants in each group) we found the following. The German group made a total of 774 errors, which, according to the error classification proposal adapted from Fernández (1997) (see Appendix C), would be categorised as follows: 108 (13.9%) were lexical errors, 452 (58.4%) were grammatical errors, 195 (25.1%) were spelling errors and 19 (2.4%) were discourse errors. The Spanish group made a total of 760 errors, which can be classified as follows: 147 (19.3%) were lexical errors, 490 (64.4%) were grammatical errors, 104 (13.6%) were spelling errors and 19 (2.5%) were discourse errors. A comparison between the two sets of results can be seen in Figure 1 and in Table 2. We observed a very high percentage of grammatical errors in both groups, (mean score of 90.4 per student in the German group and 98 in the Spanish one); the German participants made more spelling errors than their Spanish counterparts, whilst we found more lexical errors in the Spanish group. The number of discourse errors remained the same in both groups.
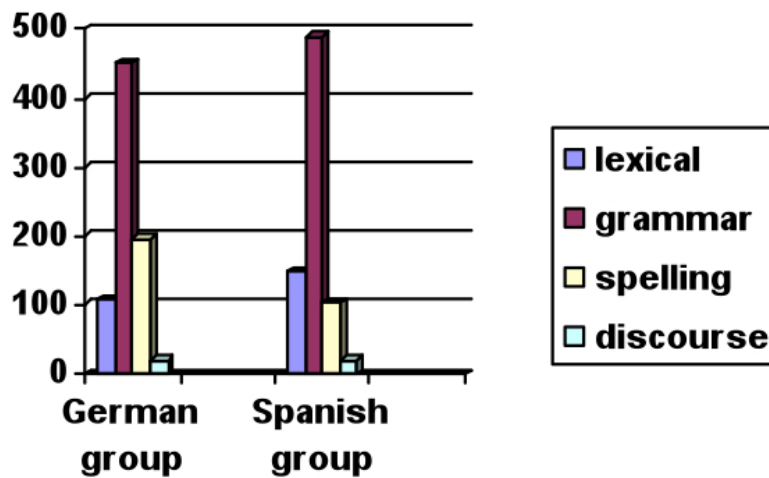

Figure 1. Total categorisation of errors.

Table 2. *Frequency of Errors Made by Participants*

	Total errors			Lexical		Grammatical		Spelling		Discourse	
	Total	Mean	SD	Total	Mean	Total	Mean	Total	Mean	Total	Mean
German participants	774	154.8	166.2	108 (13.9%)	21.6	452 (58.4%)	90.4	195 (25.1%)	39	19 (2.4%)	3.8
Spanish participants	760	152	183.2	147 (19.3%)	29.4	490 (64.4%)	98	104 (13.6%)	20.8	19 (2.5%)	3.8

We will now consider the most representative error sub-categories included in each of the three main categories. In the German group, out of 108 lexical errors, 29 belonged to the sub-category (1.2.1) "lexeme with seme not interchangeable in the context" and 36 errors were "lexical items which result from L1 interference" (1.1.3). Regarding grammar errors, 99 errors belonged to the sub-category (2.2) "concordance": 43 for gender, 32 for number, and 24 for person. In addition, 54 errors were due to the ungrammatical use of a preposition (2.3.5.1) and 36 errors were due to the use of the wrong verb tense (2.3.4.2). In the spelling category, we found 60 instances owing to the omission of an accent (4.2).

The Spanish group made a total of 147 lexical errors, out of which 63 were classified in the sub-category (1.2.1) "lexeme with seme not exchangeable in the context" and 27 were due to the creation of a non-existing word in German (1.1.2). As regards grammar errors, 99 belonged to the sub-category (2.4.1) "word order," 49 errors were due to the wrong use of a preposition (2.3.5.1) and 33 were due to the omission of a preposition (2.3.5.1). We also found a total of 143 errors that belonged to the sub-category (2.2) "concordance," out of which 79 were case errors and 36 were errors in gender concordance. In the spelling category there were 31 errors due to the omission of a letter (4.6) and 29 due to failure to write the first letter of nouns in capitals (4.8).

These findings revealed in detail those aspects that the participants found most problematic in their language learning. In this respect, the category "grammar errors" was the one in which most errors belonged. Within this category, the highest percentage of errors in both groups was due to problems with concordance (21.9% in the German group and 29.1% in the Spanish group). Additionally, the findings differed in each group; in the German group the second highest percentage of errors was due to the ungrammatical use of a preposition (11.9%) and the third to the use of the wrong verb tense (7.9%), whereas in the Spanish group the second highest percentage was due to problems with word order (21.9%) and the third to problems with the use of prepositions (16.7%).

The category with the second highest number of errors differed in each group; thus, the German participants made more spelling errors (195) than their Spanish counterparts (104). However, the Spanish participants made more lexical errors (147) than their German counterparts (108). Becoming aware of those linguistic aspects that are language-specific and particularly problematic for the participants can be extremely useful for the teacher, who may decide to use some face-to-face sessions to focus on them.

As regards other findings concerning error types, in question 27 of the final questionnaire, participants were asked about the kinds of errors they had usually corrected. Table 3 shows the results of the participants' answers to this question:

Table 3. *Type of Errors Corrected (According to the Participants' Answers to the Questionnaire)*

Error type	German participants	Spanish participants
Lexical	3 (60%)	3 (60%)
Spelling	3 (60%)	5 (100%)
Grammatical	5 (100%)	3 (60%)
Expression	3 (60%)	2 (40%)
Style	1 (20%)	0
Cultural	0	0
Sociopragmatic	0	0
Others (specify)	0	0

These answers suggest a fairly close correlation between the participants' perceived ideas about the type of error they corrected most often, the frequency of error type made by learners and the type of error recycled in each group. Thus, the German group responded that they had mostly corrected grammar errors and we can observe that these were the most prevalent errors in the Spanish group, whereas the Spanish group reported that they had mostly corrected spelling errors, which we found to be the second highest category in the German group after grammar errors. None of the participants corrected discourse or other error types and neither did they recycle them. When it came to error recycling, the German participants recycled a total of 31 errors, out of which 25 (80.6%) were recycled after receiving correction and 6 (19.3%) were recycled after remediation. The types of errors recycled were as follows: 2 (6.4%) lexical

errors were recycled after correction, 25 (80.6%) grammar errors were recycled—19 (61.3%) after receiving correction and 6 (19.3%) after remediation—and 4 (12.9%) spelling errors were recycled after receiving correction. The German participants did not recycle any discourse errors. Figure 2 illustrates the percentage of errors recycled by the German participants.
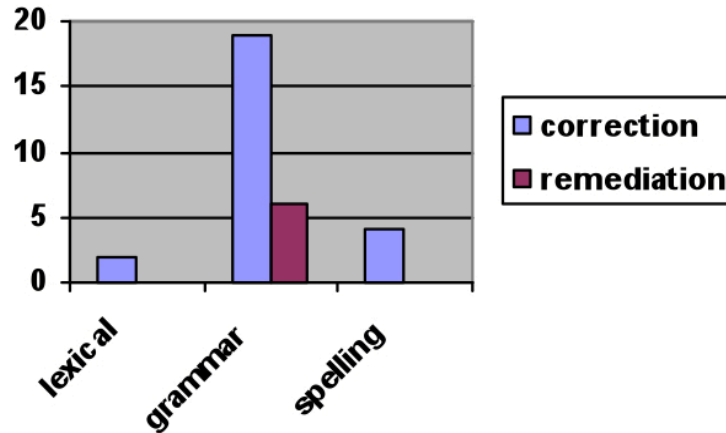

Figure 2. Percentages of error recycling by the German participants.

Forty-seven errors were recycled by the Spanish participants, out of which 36 (76.5%) were recycled after receiving correction and 11 (23.5%) after remediation. The types of errors recycled were as follows: 12 (25.5%) were lexical errors, out of which 8 (17%) were recycled after correction and 4 (8.5%) were recycled after remediation; 27 (57.5%) were grammar errors, out of which 21 (44.7%) were recycled after correction and 6 (12.8%) were recycled after remediation. Finally, there were 7 (17%) spelling errors recycled after correction. None of the discourse errors was recycled. Figure 3 shows the percentage of errors recycled by the Spanish participants.
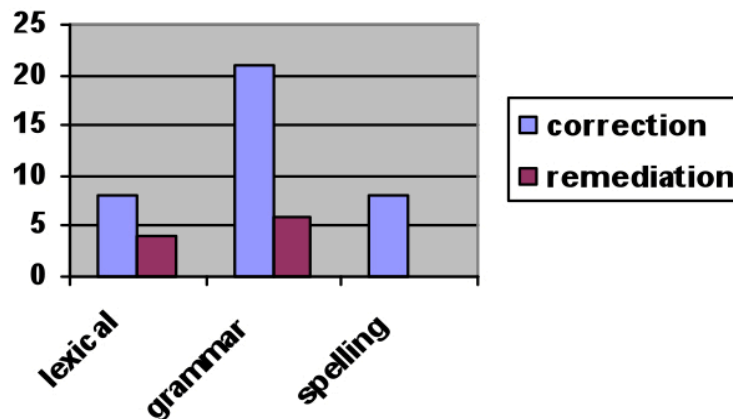

Figure 3. Percentages of error recycling by the Spanish participants.

These results would seem to indicate that the German participants' perceptions that they had mostly corrected grammar errors (all five participants reported that they had done so) were accurate and indeed their Spanish counterparts recycled no fewer than 27 grammar errors (57% of all errors recycled by the group). Similarly, the German participants' perception that they had corrected a similarly large number of lexical and spelling errors (3 participants out of 5 reported doing so) is reflected in the Spanish participants having recycled 12 lexical errors (25.5%) and 7 spelling errors (17%). Both these percentages are significantly lower than that for the recycling of grammar errors.

As regards the Spanish group, their perceptions concerning the type of error they corrected most frequently did not match the German group's recycling activity. Thus, the Spanish participants responded that they had mostly corrected spelling errors (all 5 participants reflected this). However, the German participants recycled only 4 spelling errors (12.9% of all errors recycled). The highest percentage of recycling was that of grammar errors (25 errors recycled, 80.6%) despite the fact that the Spanish participants mentioned correcting grammar errors rather less (only 3 participants stated that they had corrected grammar errors). Both groups' results, however, are inconclusive, since it is possible, for example, that although only 3 Spanish participants mentioned correcting grammar errors, those 3 participants may have corrected a larger number of grammar errors, thus contributing to their counterparts' success in recycling this type of error.

At first glance, these findings would appear to contradict the conclusions reached by Vinagre and Lera (2008) concerning research question three (i.e., that remediation, as opposed to correction and feedback, was more effective in fostering linguistic development since it encouraged recycling of errors), since a greater amount of recycling was observed after receiving correction than remediation. However, a more detailed analysis would indicate that a higher percentage of errors was recycled after receiving remediation as opposed to correction. Thus, in the German group, out of 680 correction samples, 25 were recycled (3.6%), whereas out of 75 remediation samples 6 were recycled (8%). Similarly in the Spanish group, out of 712 correction samples, 36 were recycled (5.1%), whereas out of 62 remediation samples, 11 were recycled (17.7%), as can be seen in Table 4. Therefore, the higher amount of recycling observed after correction appears to be due primarily to the fact that participants were exposed to a far greater amount of correction samples (i.e., more error correction samples were observed than remediation samples). Remediation—when used by the participants—seemed to be more effective and conducive to error recycling.

Table 4. *Results of Error Recycling by Participants*

	Correction		After Correction		Remediation		After Remediation	
	Totals	Mean	Total	Mean	Total	Mean	Total	Mean
German participants	680	136	25 (3.6%)	5	75	15	6 (8%)	1.2
Spanish participants	712	142.4	36 (5.1%)	7.2	62	12.4	11(17.7%)	2.2

In question 26 of the final questionnaire participants were also asked about what correction method—feedback, correction and remediation—they had negotiated and used during the exchange, whether they had found it useful and whether they had continued to use it until the end of the project. Participants did not specify which of the three methods they had used, but they wrote some relevant comments. One dyad wrote that they had corrected the errors without explaining them. Another dyad answered that they had corrected sentences which made no sense. A third dyad mentioned that they had highlighted the errors and explained them. Two dyads wrote that they had copied the part of the message with errors in it and sent back the correct version. Of these, one dyad wrote the correct word in brackets after underlining the wrong word and the other highlighted the error in a different colour and wrote comments with the corrections when necessary. Thus, according to the participants' responses, three dyads (60%) had used correction to offer feedback to their partners and two dyads (40%) had used remediation throughout the entire exchange. This would appear to be consistent with the correction and remediation figures and percentages found in the data.

Finally, we examined the content of the participants' language diaries for recycling of errors. In general, the use of the learning diary as a tool to encourage recycling of errors was not highly successful, since only two participants (one German and one Spanish) recycled errors and they only recycled a very small number (6 in total). Thus, one German female participant recycled 4 errors she had referred to in her diary, which can be seen in Table 5:

Table 5. *Errors Recycled by a German Participant in Her Diary*

Errors recycled	Type of error
gracias <u>por la corrección</u>	2.3.5.1 Incorrect use of preposition
quedamos <u>para comentar lo que nos pasó</u>	2.5.2.2.2 Selection of conjunction (nominal)
buenas <u>tardes</u>	2.2.1 Gender concordance
la autocaravana	2.2.1 Gender concordance

One Spanish female participant recycled 2 errors which she had also written in her diary—"lieber" and "unterhalten"—and she added the following comment: *Ich spreche mit mir ≠ wir unterhalten uns, oder wir sprechen miteinander* [I speak to myself ≠ We talk, or we speak to each other]. See Table 6 below:

Table 6. *Errors Recycled by a Spanish Participant in Her Diary*

Errors recycled	Type of error
lieber	2.5.2.1.2 Selection of conjunction (Adjectival)
unterhalten	1.2.1 Lexeme with common semes not interchangable in the context

In this respect, the information gathered in their learning diaries about error recycling was extremely disappointing, since the participants had been encouraged repeatedly to recycle the errors corrected by their partner in their learning diary, but only two had done so. Moreover, some of the participants' reactions to having to write a learning diary were very negative, as can be observed in their answers to question 36 of the final questionnaire in which they were asked whether they had found the learning diary useful. One participant found it useful but also very hard and admitted to having toyed with the idea of giving up the project because of the learning diary. Two participants stated that the idea of the diary was good; a third student wrote that the part relating to vocabulary was, in her opinion, unnecessary, although possibly useful for the coordinator in Germany to know which words they had learnt. A fourth participant considered it a compilation of the new words that had appeared throughout the exchange. A fifth participant replied that he had not found the diary useful at all. A sixth participant wrote that he had not used the diary at all and four other participants left the question unanswered. Thus, only four participants found the diary useful and, out of those four, one thought about giving up the project because it was difficult to keep and another did not find it entirely useful.

The participants' general impression was that having to write the learning diary was highly time-consuming. One of the reasons which may explain this is the fact that, although the teachers tried to facilitate this task by giving participants very detailed instructions, it is possible that too many questions were asked which led to the participants feeling overwhelmed by the amount of writing required. Another factor that should also be considered is that the participants did not seem to understand the use of the diary as a tool for self-reflection that might facilitate autonomous learning. This is reflected in a comment by one student who answered that the learning diary was not especially useful, except perhaps for the coordinator of the project. In this sense, exactly what participants are expected to write in the diary will

need to be revised for future projects, whilst a more in-depth and detailed explanation of the possible benefits of writing a learning diary will need to be included in the induction sessions.

CONCLUSION

The quantitative and qualitative findings of this study indicate that participants in this collaborative exchange were willing to contribute to peer correction throughout the e-mail exchange and used different strategies and correction techniques to foster attention to linguistic form. The students also demonstrated an ability to participate autonomously and to provide their partners with corrections, either in the form of correction or remediation (as mentioned by Vinagre & Lera, 2008), although these did not consistently result in recycling of errors. However, as suggested by Vinagre and Lera (2008), it would seem that participants in this study, despite ostensive use of error correction and a higher number of errors recycled after receiving correction, in fact recycled a higher percentage of errors after using remediation. Other findings drawn suggest that students favoured the integration of a focus on language form into their online exchanges, although they were not always capable of providing accurate metalinguistic explanations. Thus, in future telecollaborative projects with a focus on form, it would be important to explain to the students the difference between feedback, correction and remediation in induction sessions, whilst helping them improve correction skills and providing examples. Both remediation and correction seem to foster development of linguistic accuracy, whereas we are uncertain as to the effectiveness of feedback when it comes to achieving the same goal.

We learned that the importance of the language learning diary as a tool for self-reflection should be explained in depth in the induction sessions. Furthermore, aspects to be written about in the diary, when a focus on language form is considered to be one of the main goals of the exchange, should be limited to error correction and recycling, leaving other aspects open to negotiation between the partners. Finally, online activities should be fully integrated within the contact classes and offer additional opportunities to encourage students to reflect on the linguistic problems that may have arisen throughout the course of the exchange.

One final aspect we have not researched in this study is Vinagre and Lera's (2008) suggestion that students tended to use correction mostly in order to address misspellings and lexical problems, whereas they provided remediation (including detailed explanations and examples) to deal with more complex morphosyntactic errors. In this respect, the question of whether students tend to use a specific type of correction to address grammatical errors of a particular nature is one that we shall leave for future research.

APPENDICES

Appendix A. Tandem Learning by E-mail Guidelines[2]

Spanish-German

Coordinator in Germany: Beatriz Muñoz Vicente

Coordinator in Spain: Nicole Hämmerle

1. What is this project about?

This project consists of pairing native speakers of Spanish with native speakers of German so that they can help each other with their foreign language learning (German/Spanish). It follows the conventions of the International E-mail Tandem Network funded by the Commission of the European Union since 1994. You can find more information about the International E-mail Tandem Network at http://www.slf.ruhr-uni-bochum.de. Tandem learning can take place face to face or over the Internet (online). In this project we will use e-mail as our Internet tool.

Tandem learning implies collaboration with another learner whose mother tongue you are learning. The main objectives of this mode of learning are:

- Learn about the partner and his/her culture;

- Help each other improve your knowledge of the foreign language;

- Exchange information about the suggested topics;

- Correct each other's work according to the guidelines suggested in section 11;

- Practice the language in an authentic communicative situation.

2. What are the principles behind tandem learning?

- The principle of reciprocity: you need to contribute equally and benefit mutually from this collaboration. "I help you learn you help me learn and this way we understand each other better."

- The principle of autonomy: each partner is responsible for his/her own learning process. "I am responsible for my own learning."

3. What Internet tools do you need?

You only need an e-mail account and access to the Internet at least twice a week.

If you wish to open an account in German you can do so at http://www.yahoo.de or http://www.gmx.de.

4. Why learn a language via E-mail?
Several characteristics/aspects of e-mail make this medium ideal for language learning.
Messages are sent and received in a matter of minutes. Communication is fast and up to date. You have first hand access to a person who speaks the language you are studying.

Certain commands such as *Reply* or *Attach* document facilitate the exchange of corrections and other material you would like to share with your partner.

5. Which language should you use?

It is important that both partners write in both German and Spanish. This will give you both a chance to write as well as read in the language you are learning. Reading your partner's messages in German will give you a model to follow and a feeling of how German is used by native speakers. Writing will give you

a chance to put into practice what you know and discover areas in which you may have difficulties. For the same reasons your partner needs to write messages in Spanish and read your messages in Spanish too. It is therefore important that you make sure you use both languages in your e-mail exchange either by taking turns or by writing half the message in German and the other half in Spanish.

6. What do you need for active learning?

A dictionary: Have a dictionary with you every time you write an e-mail in German. This way you will enhance your knowledge of vocabulary by using new words/ expressions different from the ones you already know. You can also use online dictionaries such as http://www.pons.de or http://www.leo.org.

A diary: Writing a diary about how your tandem exchange develops is essential, since it will help you evaluate how much you are learning and will allow you to make decisions regarding your own learning.

In your diary, you can write about ALL aspects concerning the exchange, but three aspects should be considered regularly and described in detail:

- Vocabulary: Make note of the new words you learn, either from your partner or from the use of the dictionary.

- Errors: Make note of the errors your partner corrects for you and write down a few sentences with the corrected version so that it is easier for you to avoid them in the future.

- Culture: What aspects related to your partner's culture and way of life have you learned about? Compare them with your own and give your opinion briefly.

The diary must be handed in to the coordinator in Germany once a month since it will be used to assess your language learning progress.

7. What should you write about?

The following is a list of the tasks that you will need to carry out together. Please remember that you should write at least two messages per week written half in German and half in Spanish. Corrections will be done in your mother tongue.

Don't forget to send a copy of all your messages to: tandem.distancia@yahoo.de writing Emden/León in the subject box.

1. Week starting November 12th

> a) Personal details (Name, age, studies, hobbies, interests, place of origin). Important! In this e-mail you need to discuss with your partner how you are going to correct each other (100 words).

> b) What do you usually do at university? What are your plans for this weekend?

> Very important: From now on you'll need to include in each message the corrections you have carried out on your partner's previous messages. Corrections will be offered in Spanish by the Spanish speakers/German by the German speakers.

2. Week starting November 19th

> Describe the place where you live (geographical location, size, what makes it special, etc.) Choose one of the favourite places in your city or village and describe it (100 words).

3. Week starting November 26th

> a) What do young people do when they go out? (100 words).

> b) Read the message you have received from your partner and compare what he/she says about his/her country with what you do in yours (100 words).

4. Week starting December 3rd

    a) Visit your partner's university's Web page and tell your partner your opinion about it. Would you like to study at that university? Justify your answer (100 words).

    b) Look for information about the city where your partner studies and guess what are the city's main problems (100 words).

Don't forget to send your learning diary to the coordinator in Germany.

5. Week starting December 10th

    a) Check the glossary of student language you'll find in the ADIEU page (*Akademischer Diskurs in der europäischen Union*). You have to work with the section entitled Spanish university in German. Send your partner a document with ten expressions you consider may be useful for him/her. He/she will send you a short story written in Spanish which includes all the terms/expressions you sent. You'll do the same with the list of terms your partner will send you.

    b) Write at least 8 colloquial expressions which may be useful should your partner decide to study a semester in a Spanish university. You can have a look at those which appear in the section on student jargon.

6. Week starting December17th[3]

    Our life is punctuated by holidays and celebrations of all kinds. Every country and every region has its own special days in addition to holidays which we may share in common. In Spain we have, of course, Christmas and Easter as our main religious holidays; we also have other religious holidays (All Saints Day, Corpus Christi, etc.). We celebrate father's day, mother's day, birthdays, weddings and so on and we take our main holidays in the summer (July/August). Some towns or regions have special celebrations. Valencia, for example, has the Fallas in March, Pamplona celebrates Los Sanfermines in July, etc. and there are many other feast holidays.

    a) Compare at least two national or regional holidays of your countries (100 words).

    b) Say what festivities you prefer and how you celebrate them (100 words).

7. Week starting January 7th

    a) Tell your partner what you did over Christmas (100 words).

    b) Look for some information on the Web about a German city you would like to visit. Tell your partner what you have found out about that city and why you would like to visit it (100 words).

8. Week starting January 14th

    a) Free topic you have to negotiate with your partner.

    b) Write a short text about your conclusions on this free topic.

Don't forget to send your learning diary to the coordinator in Germany.

9. Week starting January 21st

    a) Write about music, literature or art and discuss your opinions and ideas about it (100 words).

    b) Tell your partner the plot of the last book you have read or of the last film you have seen. Explain why you would (wouldn't) recommend the book or film (100 words).

10. Week starting January 28[th4]

a) Ask your partner to explain to you which are the most important parties in current Spanish politics, the role they play and the main differences between them.

b) Imagine that you wish to found a new party. Formulate in Spanish and German the five most important principles in their program.

11. Week starting February 4th

a) Tell your partner about your eating habits: when and with whom you usually have your meals, what you tend to drink and what is your favourite dish (100 words).[5]

b) Send your partner the recipe of your favourite dish: ingredients, duration and cooking instructions.

12. Week starting February 11th

a) Say goodbye to your partner. Write to him/her and give your opinion about what you thought of the exchange, what you liked best and least, what you have learned concerning grammar, vocabulary, the culture of his/her country, etc.

Don't forget to send your learning diary to the coordinator in Germany.

NOTE: Be polite and respectful when you express your opinion but do give your point of view and disagree when necessary. Do justify your ideas / remarks to make the exchange more interactive and productive. Be open to receive some positive criticism from your partner too! Your attitude towards the exchange should always be active; you are learning by helping someone else to learn at the same time!

8. How can you organise the e-mail messages you receive?

You can decide on the method which is most convenient to you:

- Write in your notebook;
- File the messages in a folder for future reference;
- Regularly use the self-assessment material facilitated by the coordinator;
- Regularly check if you are achieving the goals you and your partner have established.

9. About the writing process

The best way to learn how to write is by writing. For this reason this project is an ideal opportunity to improve your writing skills. Here are some useful tips:

- Write down words or expressions you like the sound of.
- Do not be afraid to correct each other, it is not rude since your aim is to learn.

Note down in your language learning diary any new expressions that you hear or read. If you have the time, you can write a short text and try to reproduce what you have read or heard.

Before you start writing your messages, you might want to ask yourself the following questions:

- What would I like to write?
- How can I express what I wish to write?
- What order will I follow?
- Is there any information my partner already knows about this topic?
- What should I write to him/her about (what is this week's topic?)

- What would I like to learn about him/her?

- Is this written correctly?

10. About errors

Errors are an integral part of the learning process. Everybody makes mistakes and it is very important that we can learn from them. In order to do so you will need:

- To make sure that you always revise your texts before sending them to your tandem partner (many small mistakes can be easily identified and corrected if you re-read the text carefully).

- Identify your error: What type of error is it? (spelling, grammar, vocabulary, punctuation, etc.).

- Jot down your errors and corrections. What errors do you make most often? Why? (possible reasons: lack of vocabulary, you don't use the spell checker, you don't know certain grammar rules, you translate literally from one language to the other, etc.).

- Make a list of your most frequent errors and use it as a check-list every time you write a text (for example: check subject-verb concordance, subject-adjective concordance, etc.).

11. How to correct your partner's writing

- Think about what you would like your partner to correct in your writing and do the same.

- Do not try to correct everything. Pick the most important mistakes (make it no more than ten), the ones that prevent understanding or sound awkward (too foreign) to you.

- Negotiate the way you are going to correct each other (using capital letters, colours, directly on the e-mails by clicking on reply button, etc). It is important that you come to an agreement with your partner so that you always correct each other in a manner that works for both of you.

- Write comments with your corrections. You can also ask questions or suggest other ways of expressing something. You can also provide contextualised examples to help your partner to remember expressions or colloquial usage of the language.

- Remember that in order for both of you to benefit from the exchange you should both **take the task of correction seriously**.

- Correcting your partner's mistakes will help develop your ability to assess your own writing.

- Pay careful attention to your partner's mistakes and way of formulating things in German so you can learn even more about the way German language works.

- It is not advisable to mix the new messages you write to your partner with the corrections based on previous messages, since your primary objective is to communicate and discuss a particular topic. Mixing corrections with new information can make this process more difficult.

- Encourage your partner. In addition to your corrections, it is important to let him/her know about those aspects in which he/she is improving.

- Remember that making mistakes is considered a sign of progress in the process of learning a new language.

RECYCLE ERRORS! Make sure you include some of the corrected errors in the following messages you write. If you include the errors your partner has corrected in the following e-mails you send to him/her, it is more likely that you will not make them again in the future. This aspect is crucial for the assessment of your own learning progress.

References

Most of these guidelines have been taken from the guide that appears in the article by Vinagre and Lera (2008). In addition, the following references have been used:

- Brammerts, H. and Kleppin, K. (eds.), 2001, Selbstgesteuertes Sprachenlernen im Tandem. Ein Handbuch. (Forum Sprachlehrforschung). Tübingen: Stauffenburg.

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- Roza, M.B., (coord.), 2001, Guía tándem. Metodología tándem para la enseñanza y el aprendizaje de lenguas en el ámbito escolar. Centro de Profesores y Recursos, Gijón.

- Vinagre, M., and Maíllo, C. (2007). "Focus on Form in On-line Projects: Linguistic Development in E-mail Tandem Exchanges." In C. Periñán, (Ed.) Revisiting Language Learning Resources. Cambridge: Cambridge Scholars Press.

Appendix B. Language Learning Diary

- Date:

- Name:

- Name of tandem partner:

- Language:

- Message number:

- Received:

- Topic:

→**Vocabulary:**

1. My tandem partner has used a series of expressions in German/Spanish—words, idioms, fixed phrases, etcetera—that I have found very interesting. In future e-mails I'll try to use the following expressions (include a minimum of five):

2. In the message sent by my partner I have found expressions in German/Spanish—words, idioms, fixed phrases, etc—that I did not know. What have I done in order to understand them? (You can tick more than one answer):

    a) I have looked them up in the dictionary

    b) I have asked my teacher

    c) I have asked my partner

→**Errors:**

3. What errors did my partner correct? The following is a list of all the errors my partner corrected (in order to do this, the best thing is to copy and paste the structure from the e-mail received).

    a) vocabulary errors:

    b) grammar errors:

    c) spelling errors:

    d) discourse errors:

4. Have I recently revised the vocabulary and structures found in the e-mails I received?

5. Could I have avoided some errors? If so, how?

6. Did I manage to recycle some of my errors? If so, which?

→**Culture:**

7. This is what I have learned about my partner and his/her country:

Appendix C. Typology of Errors Made by the Students (Categories Modified from Fernández, 1997)

1. LEXICAL ERRORS	Examples (correct form in brackets)
1.1 **Form**	
1.1.1 Use of a similar signifier	Campana (campaña); agradecer (agradar); fördern (fordern); Gram (Gramm)
1.1.2 Formation of a non-existing form	Examinación (examen); medical (médico); malignosa (maligno); Nord (Norden)
1.1.3 Lexical items which result from L1 interference	Servietta (servilleta); various (varios); promenades (paseos); affektiert (gefühlvoll); fidel (lustig); graziös (anmutig)
1.1.4 Gender	El escena (la escena); una viaje (un viaje); la color (el color); die Baum (der Baum); der Buch (das Buch); der Problem (das Problem)
1.1.5 Number	La ola era suave (Las olas eran suaves); Hicimos mucha fotografía (Hicimos muchas fotografías); Ich habe einen Problem mit deiner beiliegenden Datei (Ich habe ein Problem mit deinen beiliegenden Dateien)
1.2 **Signified**	
1.2.1 Lexemes with common semes not interchangable in the context	Faltar-quedar; aprender-estudiar; tener-estar-haber; ir-volver-venir-andar; geben-sein; lernen-studieren; verschieden-unterschieden; lernen-kennenlernen
1.2.2 Changes in words derived from the same root or stem	Califato (califa); un visitado (una visita); das Frühstücken (das Frühstück); der Polizei (der Polizist)
1.2.3 Inappropriate register	
1.2.4 Ser-Estar (To be)	Ellos son en mi país (Ellos están en mi país); Estábamos viajeros (Éramos viajeros)
1.2.5 Periphrasis	Limpiar el cuerpo (lavarse); punto de vista (mirador)
1.2.6 Others	Tienda de compañero (tienda de campaña); dar la campana (dar la hora); eine Entscheidung nehmen (eine Entscheidung treffen)
2. GRAMMAR ERRORS	Examples (errors underlined; correct form in brackets)
2.1 **Paradigm**	
2.1.1 Gender (formation)	Trabajadoro (trabajador); el artisto (el artista); la reya (la reina); Franzos (Franzose); die Kunde (die Kundin)
2.1.2 Number (formation)	Profesors (profesores); lunas de mieles (luna de miel); Laufers (Läufer); Mause (Mäuser); Konzerts (Konzerte)
2.1.3 Verbs	Cojó (cogió); invitieron (invitaron); podemus (podemos); habst (hast); gefällst (gefällt)
2.1.4 Others (person, determiners)	Ello (él); nos (nosotros); a ello mismo (a sí mismo)
2.2 **Concordances**	
2.2.1 Gender	Muchas luces apagados (muchas luces apagadas); la ambiente frío (el ambiente frío); Letztes Samstag bin ich ins Kino gegangen (Letzten Samstag bin ich ins Kino gegangen); ich habe einen Problem (ich habe ein Problem)
2.2.2 Number	Otro razones poderoso (otras razones poderosas);

	problema<u>s</u> social (problema social); Es gibt <u>Party</u> in den Diskos (Es gibt Parties in den Diskos)
2.2.3 Person	Vosotros est<u>án</u> cansad<u>o</u> (Vosotros estáis cansados); Lleg<u>aron</u> mucha gente (Llegó mucha gente); Ich <u>wird</u> ein bisschen über mich schreiben (Ich werde ein bisschen über mich schreiben)
2.2.4 Case	Später gehen wir zu <u>eine</u> Platz (Später gehen wir zu einem Platz)
2.3 **Use of lexical categories**	
2.3.1 Article	
2.3.1.1 Use/omission	Hay ___ cosa que (Hay una cosa que); Estudió <u>la</u> biología (Estudió biología); en <u>una</u> otra ciudad (en otra ciudad); in Dezember (im Dezember); nach dem Weihnachten (nach Weihnachten)
2.3.1.2 Selection el/un; la/una; der/ein; die/eine	Nació en <u>el</u> pueblo de Cataluña (Nació en un pueblo de Cataluña); Era <u>un</u> día mejor de las vacaciones (Fue el mejor día de las vacaciones); Ich studiere an <u>der</u> spanischen Uni (Ich studiere an einer spanischen Uni)
2.3.2 Other determiners (selection): *Este* instead of *ese* or *aquel*	
2.3.3 Pronouns	
2.3.3.1 Full pronominal function/omission of 'man' in an impersonal structure	__ pasamos bien (lo); a nosotros __ gusta más España (nos); Einmal hat ___mir in Deutschland über dieses Buch erzählt (man)
2.3.3.2 Grammaticalized or lexicalized 'se'/omission of the pronoun in a reflexive verb	No tenías ganas de comer<u>se</u> (comer); Ich habe ___über Emden informiert (mich)
2.3.3.3 Wrong selection of pronoun	Diese Woche habe ich <u>dich</u> noch nicht geschrieben (dir)
2.3.4 Verbs	
2.3.4.1 Past tense	Se cayó pero no le pas<u>aba</u> nada (pasó); Früher <u>hat</u> er viele Freunde (hatte)
2.3.4.2 Other forms	Hemos seguido a <u>viajar</u> (viajando); Que lo pas<u>as</u> bien (pases); Ich muss alle Nächte <u>gearbeitete</u> (arbeiten)
2.3.4.3 Verb omission	Mir ___es gut (geht)
2.3.5 Prepositions	
2.3.5.1 Incorrect use/omission	Es la costumbre <u>de</u> japonesa (Ø); Miro__ mis hijos (a); Busco <u>a</u> unos libros (Ø); Es dauert eine Stunde <u>zu die</u> Küste (an die); Am Sonntagabend fuhr Peter mit dem Auto bis ___ die Stadt (in)
2.3.5.2 Idiomatic values	Va <u>de</u> pie o <u>con</u> coche (a, en); Aprenden <u>en</u> memoria (de); <u>mit der Hand</u> gemacht (handgefertigt)
2.4 **Sentence structure**	
2.4.1 Word order	Coreanos libros leo (Leo libros coreanos); Para mi creo que demasiado hay vacaciones aquí (Creo que hay demasiadas vacaciones aquí); In Spanien <u>es gibt</u> zwei wichtige Parteien (In Spanien gibt es zwei

	wichtige Parteien); (...) und <u>habe ich</u> keine Zeit ((...) und ich habe keine Zeit)
2.4.2 Omission of elements (not included in other sections)	Voy a _____ de mi amiga (casa de); Finalmente conseguí _____ que se llama Carmen (saber)
2.4.3 Excess/surplus of elements (not included in other sections)	Y <u>donde</u> cerca de la costa (Ø)
2.4.4 Incorrect use of elements (not included in other sections)	<u>Noch</u> gibt es eine Kathedrale (Außerdem)
2.4.5 Functional change	Era un día ni frío ni <u>calor</u> (caliente); Me levanté <u>frescamente</u> (fresca)
2.4.6 Negative sentences	Yo <u>también no</u> fui (tampoco); Nunca <u>no</u> he estado (Ø); Ich bin <u>nicht</u> Deutscher (kein)
2.5 **Sentence relations**	
2.5.1 Coordination	
2.5.1.1 Omission of conjunction	Queremos salir____ no podemos (y); Ich gehe zum Strand ____ins Kino (oder)
2.5.1.2 Polysindeton (repetition of conjunction)	
2.5.1.3 Wrong conjunction	Hemos comprado siete <u>sino</u> ocho libros (u)
2.5.2 Subordination	Die Wahrheit glaube ich viel Unterschiede haben (Ich glaube die Wahrheit ist, dass wir viele Unterschiede haben)
2.5.2.1 Adjectival	
2.5.2.1.1 Omission of conjunction or surplus of same	Era la primera vez _____ salía al extranjero (que); Son los días <u>que</u> muy tranquilos de mi vida (Ø)
2.5.2.1.2 Selection of conjunction	Era mi amigo <u>quien</u> me cae muy bien (que); Pensamos a los musulmanes <u>los que</u> han construido (quienes)
2.5.2.1.3 Verb concordance	Cuando no <u>habré</u> guerras (habrá)
2.5.2.2 Nominal	
2.5.2.2.1 Omission of conjunction or surplus of same	No saben____ yo quiero (que); Pienso que es muy importante <u>que</u> conocer (Ø)
2.5.2.2.2 Selection of conjunction	Me preguntaron <u>que</u> te vas (si)
2.5.2.2.3 Verb concordance	Llamó para decirlos que no nos <u>apetece</u> irnos a cenar (apetecía)
2.5.2.3 Adverbial	
2.5.2.3.1 Omission of conjunction or surplus of same	Por _____ en aquel día me fui
2.5.2.3.2 Selection of conjunction	<u>Pues</u> echaba de menos a mi familia el tiempo pasó muy rápido (Aunque); <u>Wann</u> ich in Kaiserslautern war, hatte ich kein Fahrrad (Als)
2.5.2.3.3 Verb concordance	Si tengamos tiempo (tenemos); Como <u>que hayamos</u> decidido (habíamos)
3. DISCOURSE ERRORS	
3.1 **Global consistency**	
3.2 **Co-reference: deixis and anaphora**	
3.3 **Tense and aspect**	
3.4 **Linkers**	
3.5 **Punctuation**	

4. SPELLING ERRORS	
4.1 **Punctuation** (this includes those errors that result from not knowing punctuation rules; it excludes punctuation whose purpose is to show separation of ideas, which is included in the discourse section)	
4.2 **Accents**	Llegue (llegué); pelicula (película)
4.3 **Separating/linking words**	Cumple año (cumpleaños); sillama (si llama); Rad Fahrer (Radfahrer)
4.4 **Change in letter order**	Madurgada (madrugada); cominucar (comunicar); Statd (Stadt); wiel (weil)
4.5 **Phoneme confusion**	
4.5.1 e/i	Decedió (decidió); catastrofi (catástrofe)
4.5.2 o/u	Ocopado (ocupado); descolpar (disculpar)
4.5.3 b/p	Balabra (palabra); pello (bello)
4.5.4 x/g	Algien (alguien); surguió (surgió)
4.5.5 k/z	Bacillas (vaquillas); tocé (toqué)
4.5.6 r-r/l	Ejempro (ejemplo); feriz (feliz); cuelpo (cuerpo)
4.5.7 r/r	Boracho (borracho); ocurió (ocurrió);
4.5.8 s/z	Cemáforo (semáforo); ocación (ocasión)
4.5.9 s/ss	Bischen (bisschen)
4.5.10 a/ä	Lauft (läuft)
4.5.11 u/ü	Mussen (müssen)
4.5.12 ü/u	Nür (nur)
4.5.9 Others	Ninos (niños); cerenonia (ceremonia); deverdido (divertido)
4.6 Omission of letters or surplus of same	Fa-cinado (fascinado); mo-struo (monstruo); tre-nta (treinta); nich (nicht)
4.7 **Confusion of grapheme for the same phoneme**	
4.7.1 b-v	Estube (estuve); bino (vino)
4.7.2 g-j	Extrangeros (extranjeros); mugeres (mujeres)
4.7.3 c-z	Empezé (empecé); onze (once)
4.7.4 qu-c	Quando (cuando); quarto (cuarto)
4.7.5 h	-asta (hasta); -echo (hecho)
4.7.6 Others	Emfermedad (enfermedad); esceso (exceso)
4.8 **Capitals**	escorial (Escorial) Lope de vega (Vega); Warm (warm), informationen (Informationen)

Appendix D. Self-Evaluation Questionnaire[6]

This questionnaire is going to provide us with very useful information about the exchange. In order to obtain as many details as possible, we would be very grateful if you could answer the following questions as honestly as possible. Thank you very much for your cooperation.

Personal information

1) Student name:

2) Name of e-tandem partner:

3) Age (optional): If you do not wish you tell us your age, are you

- under 20

- between 21 and 30

- between 31 and 40

- between 41 and 50

- between 51 and 60

- 61 or over

Language information

4) Mother tongue/s:

5) Other spoken language/s spoken (please specify level: poor, average, good, very good)

Language	Listening	Reading	Speaking	Writing
English				
German				
French				
Italian				

6) How long have you studied German?

7) Why do you study German?

8) Have you ever been to a German-speaking country? (If the answer is "no," please proceed to question number 9).

   a. Where and how long?

   b. What did you do exactly?

- Erasmus

- Work

- Internship

- Holiday

- Other (please specify):

Education and professional background

9) Do you have any previous studies or did you acquire some professional training before you studied this degree? (If the answer is "no," please proceed to question number 10).

    c. What did you study?

    d. When did you finish your studies?

10) What are you currently studying? What year are you in?

Language skills

11) How good are you at

(1 = excellent; 5 = poor)

- reading and understanding texts?
- listening and understanding native speakers?
- speaking?
- writing texts or letters?
- doing grammar exercises?

12) What do you find most difficult? (You can choose more than one answer).

- speaking
- listening
- reading
- writing

13) In your opinion, how do you learn best? (You can choose more than one answer).

- alone
- with the teacher
- with the whole class
- in small groups or pairs
- at home
- in other ways:

14) How often do you practice German? (Please specify number of hours).

- every day
- only during the week
- only at the weekend
- only in the German class

Final assessment of the online exchange

Before the exchange

15) What fears or doubts did you have before starting this e-tandem exchange?

16) What kind of objectives did you have?

- linguistic

- cultural

- professional

- other:

17) How would you explain e-tandem briefly?

18) Have you ever taken part in a face-to-face/distance-learning exchange? (If the answer is "no", please proceed to question number 19).

If the answer is "yes":

- Was it face-to-face or distance-learning?

- What language did you use?

- When did it take place and how long did it last?

- What topics did you discuss with your partner?

19) What aspects of the e-tandem exchange have you liked the most?

20) What aspects of the e-tandem exchange have you liked the least?

21) What have you learned?

22) What aspects can be improved in the exchange?

23) What piece of advice would you give someone who may be interested in participating in this type of exchange?

24) How can you benefit from the exchange?

Corrections

25) At the beginning of the exchange you were given a document explaining the three most commonly found types of correction. Did you take them into account when correcting your partner?

26) What conventions (method) did you use to correct each other? Was it useful? Did you use the same until the end of the exchange?

27) What type of error did you correct most often and why?

- Lexical

- Orthographic

- Grammar

- Discourse

- Style

- Cultural

- Socio-pragmatic

- Other (please specify)

28) Did you take into account point number 10 of the guidelines (*About errors*) when composing your messages?

29) Did you take into account point number 11 of the guidelines (*How to correct your partner's writing*) before writing your messages?

30) Did you read your partner's corrections before replying to his/her message?

31) Did you make a list of mistakes you made most often?

General guidelines

32) At the beginning of the exchange you were sent a document by e-mail with the general guidelines, which included 11 points concerning the exchange (principles, technical requirements, topics, correction types and conventions, etc.) Did you find any aspect that was not clear?

33) What do you think of the topics suggested in point 7 (*What should you write about?*)?

Which one did you like best? Which one did you like the least? Which one would you delete from the list? What other topics would you include in the list for future projects?

34) Did you follow any of the recommendations included in point 9 *(About the writing process)*?

35) Before you started writing to your partner, did you take into account any of the questions suggested in point 9?

In the guidelines we included two appendices:

- A language-learning diary template
- Gaßdorf's (1998) proposal for error correction

36) Was the language-learning diary useful? What sections would you exclude and which would you add?

37) Did you classify your errors according to Gaßdorf's (1998) proposal?

General questions on the conventions/method used to correct your partner

38) Did you visit the e-tandem Web page?

(http://www.slf.ruhr-uni-bochum.de/etandem/etindex-de.html)? If so, did you find the information useful?

39) Did you write your messages half in Spanish and half in German? In which proportion did you use both languages?

- You wrote each message in one language.
- You wrote each message half in Spanish half in German (50 / 50).
- Other options:

40) How did you organise your messages?

- I saved them and filed them in a folder on my computer.
- I printed them and kept them in a portfolio.
- Other options:

41) What resources did you use to compose your messages?

- German monolingual dictionary: which one/s?

- Bilingual dictionary (German-Spanish): which one/s?

- Internet pages: which one/s?

- Reference books: which one/s?

- Asked your teacher

- Asked your classmates

- Class notes

- Other (please specify)

Other aspects

42) Did you experience any of the following:

- Technical problems

- My partner took a long time to reply

- My partner did not write as often as he/she should

- Our relationship was cold and superficial

- I had problems understanding him/her

- The instructions in the guidelines were not clear

- The topics suggested were not clearly stated

- Other problems (please specify):

43) Would you have preferred to participate in a face-to-face e-tandem exchange? Please elaborate.

44) Were you motivated? If the answer is negative, what did you do to overcome your lack of motivation/problems?

45) Do you think that a distance e-tandem exchange can also have some disadvantages? Please elaborate.

46) Have you achieved your learning objectives? Please write a percentage (0% = not at all,

100% = completely) to indicate your level of satisfaction in terms of fulfilling the following objectives:

- linguistic

- cultural

- professional

- other:

47) Did you change your objectives throughout the project?

- I did not have any objectives

- No

- Yes

If your answer is "yes", please continue:

I gave up the following goals:

I had to face up to new goals:

The following goals changed throughout the exchange:

48) What have you learned from a personal, linguistic, professional and cultural perspective?

Do you think this tandem experience will have any effects regarding your future learning experiences?

49) I have learned mostly:

- vocabulary
- grammar
- intercultural aspects
- fluency when writing in German
- to overcome my fear of writing
- to understand written texts

50) Has your attitude to language learning changed in any way? Please justify your answer:

- towards my mother tongue:
- towards the foreign language:

51) Do you think that your (learning) relationship with your tandem partner has become more personal? Please justify your answer. If the answer is "yes", when did you realise that was the case and how did you notice? Do you think that having a more personal relationship with your partner helped you to:

- ask questions
- correct each other
- negotiate
- clarify misunderstandings
- other (please specify):

Please, provide any other information you may consider of interest relating to your e-tandem experience.

52) In general, do you regard the exchange to be a positive or negative experience? Please justify your answer.

53) Would you like to participate again in this kind of project? Please justify your answer.

54) Are you going to keep in touch with your e-tandem partner?

Thank you very much again for your cooperation and enthusiasm!

Based on: Roza et al. (2001), Vinagre (2005), and Tandem Fundiazoa.

NOTES

1. The guidelines for the language learning diary have been included in Appendix B.

2. This is a translation of the guidelines given to the students since the ones used in this exchange were in Spanish and German. Most of the content of this document is a translation of Vinagre and Lera's (2008) guidelines on etandem exchanges. Other sections of this document have been modified according to the goals of this exchange.

3. Taken from: http://www.slf.ruhr-uni-bochum.de/tandem/esp/0305-esp.html

4. Adapted from: http://www.slf.ruhr-uni-bochum.de/tandem/esp/0302-esp.html

5. From: http://www.slf.ruhr-uni-bochum.de/tandem/esp/0306-esp.html

6. This is a translation of the post-questionnaire given to the students since the ones used in this exchange were in Spanish and German.

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