PEER FEEDBACK ON LANGUAGE FORM IN TELECOLLABORATION

Paige D. Ware

Southern Methodist University

Robert O'Dowd

Universidad de Léon, Spain

We performed a two-phase, year-long research project that explored the impact of peer feedback on language development. We investigated specifically how and when postsecondary learners of English and Spanish provide corrective feedback on their partners' use of the target language in weekly asynchronous discussions by assigning them to one of two conditions: e-tutoring, in which students were asked to provide peer feedback on any linguistic form they perceived as incorrect; and e-partnering, in which students were not required to provide peer feedback but could do so on their own initiative. We examined the frequency and type of language use by coding the feedback for language-related episodes (Swain & Lapkin, 1998) and for feedback strategies (Ros i Solé & Truman, 2005). The findings indicate that students in both conditions preferred an inclusion of feedback on form as part of their exchange, but such feedback only occurred when explicitly required in the e-tutoring condition. Pedagogical implications include the need to situate peer feedback on form within current models of telecollaboration and to assist students in using feedback strategies such as reformulations, which do not rely on a deep understanding of the target or native language grammar.

INTRODUCTION

Online communication tools have been taken up eagerly by the foreign language teaching community. An early focus on within-class communication among foreign language students was quickly followed by a second stage of network-based language teaching in the late 1990s in which language students were linked with learners in other contexts to form international partnerships (Kern, 1995, 1996; Tella, 1991; Warschauer, 1997). Goals of such partnerships, often called telecollaboration, include assisting students' linguistic and pragmatic development and intercultural awareness (Belz, 2003; Kern, Ware, & Warschauer, 2004; Thorne, 2006). In recent years, research has explored in greater depth how different configurations of telecollaboration, from real-time chatting to videoconferencing, have impacted students' language development through online interaction with peers using the target language (Bauer, deBenedette, Furstenberg, Levet, & Waryn, 2006; Belz, 2003; Belz & Kinginger, 2003; Belz & Vyatkina, 2005; Dussias, 2006; Kern, 1996; Kinginger, 1998; Kinginger & Belz, 2005; Lee, 2004). A smaller number of studies within this paradigm (Belz, 2006; Lee, 2006; Levy & Kennedy, 2004; Sotillo, 2005) have focused on the value of having students actively reflect on language form for linguistic development in telecollaborative exchanges.

We build on this growing research base by reporting on a two-phase, year-long research project that explores the impact of peer feedback on language development. We investigated specifically how and when post-secondary learners of English and Spanish provide corrective feedback on their partners' use of the target language in weekly asynchronous discussions by assigning them to one of two conditions: e-tutoring, in which students were asked to provide peer feedback on any linguistic form they perceived as incorrect, and e-partnering, in which students were not required to provide peer feedback but could do so on their own initiative. We examined the frequency and type of language use by coding for language-related episodes (Swain & Lapkin, 1998) and for feedback strategies (Ros i Solé & Truman, 2005), both of which are discussed in detail in the methods section.

LITERATURE REVIEW

Research on language use in telecollaboration has drawn on several areas of applied linguistics research. With this in mind, we review both sociocultural and interactionist interpretations of telecollaborative language learning, and we pay particular attention to how a focus on form has been integrated into online exchanges to date.

Sociocognitive and Sociocultural Perspectives

Researchers have studied a range of issues in synchronous and asynchronous exchanges, such as intercultural exploration and understanding (Belz, 2003; Furstenberg, Levet, English, & Maillet, 2001; Liaw, 2006; O'Dowd, 2003, 2006), the role of the instructor (Belz & Müller-Hartmann, 2003; Müller-Hartmann, 2006; O'Dowd and Ritter, 2006; Ware & Kramsch, 2005), cultural patterns of use (Kramsch & Thorne, 2002; Thorne, 2003), and the influence of socioinstitutional contexts on students' participation patterns and attitudes toward online correspondence (Belz, 2002; Ware, 2005). Much of this research has yielded rich analyses of language development, including the acquisition of pronouns of address (Belz & Kinginger, 2003; Kern, 1996), the development of modality and expressions of appraisal (Belz, 2003), the development of null-overt subject use and gender agreement (Dussias, 2006), and the acquisition of modal particles (Belz & Vyatkina, 2005).

Interactionist Perspective

Research examining how online interaction can contribute to learners' grammatical competence and syntactic complexity stems from the literature base of task-based learning, focus on form, and negotiation of meaning in second language acquisition. These studies are often based on the application of Long and Robinson's (1998) interaction hypothesis to online environments. This hypothesis proposes that negotiation of meaning in interaction exposes learners to input that is both linguistically and interactionally modified. Such input is expected to draw learners' attention towards grammatical form and to push them to modify their own output. Negotiation of meaning is seen as a natural and automatic process as interlocutors seek to understand and clarify each others' utterances.

Studies in the interactionist tradition have tended to focus on synchronous online interaction, for example, MOO's (Multi-User Domain Object Oriented applications) and chats, either between students within the same classroom (Blake, 2000; Pellettieri, 2000; Smith, 2005) or between native speakers and learners of the target language (Dussias, 2006; Kötter, 2003; Lee, 2004, 2006; Tudini, 2003). Lee (2004) demonstrated that native speakers of Spanish assisted non-native speakers in composing their ideas and in improving their grammar, although she found that language proficiency, computer skills, and age also impacted the nature of the interactions. In a later study using the Blackboard virtual learning platform (2006), Lee focused on open-ended and goal-oriented tasks in synchronous interactions between native speakers of Spanish and American students of Spanish as a foreign language. She found that the Spanish native speakers provided mostly recasts and focused mainly on lexical rather than syntactical errors. Tudini (2003) examined Italian language learner interaction in native Italian Web-based chat rooms and found that negotiation sequences in synchronous interaction occurred in over 9% of total turns and that language learners received both implicit and explicit feedback on their language from their native speaker interlocutors. In short, work in the interactionist tradition has shed much-needed light on how real-time written interaction can support language development in online interactions. However, it focuses mainly on interactions involving negotiation of meaning, not on additional ways that students can support one another when attending to form.

Focus on Form

Focus on form in online interaction is considered important for several reasons. First, Lee (2004) and Levy and Kennedy (2004) have argued that computer-mediated communication should balance fluency and linguistic accuracy. Second, studies of foreign language students in the US have found that students

often consider the "real" part of language learning to involve the study of grammar (Chavez, 2002) and that a focus on culture takes away from the primary goals of classroom instruction (Kubota, Austin, & Saito-Abbott, 2003). In a study of telecollaboration by one of the authors (Ware, 2005), many students cited their preference for focusing on language.

The noticing of language forms can occur through ongoing interactional support provided during the normal flow of conversation (Foster & Ohta, 2005) and in explicit feedback in electronic tandem (e-tandem) partnerships (Appel & Mullen, 2000; Brammerts, 1996; O'Rourke, 2005). Foster and Ohta (2005) provide an example of how the cognitivist approach of the interactionist tradition can be combined with a sociocultural lens to explore data on oral negotiated interaction among English and Japanese learners. They found that students helped one another not only through negotiation of episodes that focused on clarifying meaning, but also through assistance in formulating their messages even when a communication breakdown did not occur. This type of interaction draws students' attention to language form by providing opportunities to discuss language choices, to play with language, and to notice the difference between their own linguistic formulations and those of native speakers. Research on the e-tandem approach focuses on one-on-one partnerships in which learners provide feedback on one another's errors whether or not they impede meaning. These take place either outside of a traditional classroom (Brammerts, 1996) or within a classroom (O'Rourke, 2005). Students can refer to L2 structures and vocabulary that were used earlier by their partners and reuse them in other situations and contexts.

More recent work has examined how telecollaboration can help students to actively notice, process, and discuss specific language forms and functions (Belz, 2006; Dussias, 2006; Levy & Kennedy, 2004). For example, Dussias (2006) compared the linguistic gains of U.S. students of Spanish in a treatment group who were each paired in telecollaborative partnerships with students in Spain against the gains of U.S. students in a control group who performed the same tasks with non-native speaking peers. She found greater gains in the treatment group in overt-null subjects, gender agreement, and communicative fluency.

Belz (2006) proposed using learner corpus analysis to assist learners in examining their own patterns of error and in tracing their language development. In a study of "stimulated reflection," Levy and Kennedy (2004) examined how teachers used online communication tools to engage their students in reflection on form. Students of Italian engaged in audio-conferencing with various interlocutors including classmates and Italian native speakers. The recordings of the audio interaction and the shared screen content were then analysed together by the teacher and students with a focus on grammar, vocabulary, pronunciation, and register. The sessions served to focus on the process of interaction in the L2 and to encourage learners to reflect on the accuracy and complexity of their target language and on their communication strategies, including social appropriateness.

A focus on the social aspects of language use stems from the potential of telecollaboration to provide opportunities for students to see language and culture as two sides of the same coin (Belz, 2003; Furstenberg et al., 2001; Kern, 1996; Thorne, 2003, 2006; Ware & Kramsch, 2005). Therefore, the tasks given to the students during both phases of this study focused on highlighting the link between language and culture and on developing learners' intercultural awareness (see Appendices A and B).

Our study contributes to the above research base by examining peer feedback and attention to language form in asynchronous writing. It is theoretically grounded in a sociocultural approach that views language learning as embedded in a particular sociocultural context (Lantolf, 2000). This implies that any study of focus on form in an online intercultural exchange must take into account sociocultural factors such as the attitudes of each set of learners to the culture of their interlocutors and issues of face and communication breakdowns that regularly occur in intercultural interaction. Sociocultural issues identified as particularly relevant in this study included cultural differences in the techniques used by Spanish and North American students to correct their partners and how previous experiences of formal language learning shaped students' attitudes towards the importance of a focus on form in online intercultural exchange.

METHODOLOGY

Background Information

This two-phase study investigated the integration of peer feedback on language into classroom-based adult foreign language learning using qualitative and quantitative methods. We examined the type and frequency of language-related episodes, feedback strategies students used to focus on morphosyntactic forms, and students' attitudes toward the presence or absence of an explicit focus on language in their online interactions. Students were assigned to one of two conditions:

- *e-tutoring*, in which they were asked to provide corrective feedback to their partners on language errors or, in the absence of errors, to provide suggestions for language improvement such as different wording or increased vocabulary. Students in this condition received training from their teachers in how to provide such feedback and suggestions (see Appendix C).
- *e-partnering*, in which students were not explicitly encouraged or trained to provide corrective feedback to their partners. Instead, they were told that they could provide feedback or suggestions if they chose to or if their partners asked them to do so.

Research Questions

The following questions guided our study:

- 1) What are the types and frequencies of language-related episodes in each of the two online conditions of e-partnering and e-tutoring?
- 2) What feedback strategies did participants use when integrating a focus on morphosyntactic form into their online interactions?
- 3) What were the attitudes of the participants in each condition toward the presence or absence of a focus on language form in their online interactions?

Stages and Procedures

To answer these questions, the research was conducted in two phases (Table 1).

Phase I		
E-tutoring	2 U.S. students & 11 Spanish	8 weeks
	students	
E-partnering	2 U.S. students & 11 Spanish	8 weeks
	students	
Phase 2		
E-tutoring	14 U.S. students & 14 Spanish	8 weeks
	students	
E-partnering	22 U.S. students & 22 Chilean	10 weeks
	students	

Table 1. Organization of the Two-Phase Study	tion of the Two-Phase Study
--	-----------------------------

Phase I

Phase I took place during the spring semester of 2006 as a monolingual online exchange in English between 22 EFL students in Spain and 4 post-secondary students in the US. Conducting this pilot phase in only one language allowed us to control for the effect of instructor, syllabus, classroom, and semester as we explored the potential for conducting a larger follow-up study involving more students and instructors. In this first phase, we randomly assigned 22 post-secondary advanced EFL students (ages 19-22) at a university in Spain to either the e-tutoring or e-partnering condition. All of the students were in the same language course conducted by the second author. Their online partners were a cohort of four post-

secondary students (ages 19-21) enrolled in a small university in the US. Two of the U.S. students were required to provide weekly feedback to 11 Spanish students in the e-tutoring condition, and two were asked to provide feedback only when solicited by their EFL partners in the e-partnering condition.

The four U.S. students met weekly with the first author to discuss the tasks and to review the research protocol, so the pilot phase functioned not as a typical classroom telecollaborative project, but as a small controlled experiment, in which the four U.S. students were responsible for maintaining the distinctions between the control and treatment groups. All students completed the same task cycle (see Appendix A) using a course management system called *Moodle*, an open source platform similar to commercial course management systems such as *Blackboard* and *WebCT*, that allows for data storage, file sharing, and asynchronous and synchronous interaction (Robb, 2004).

Phase II

Phase II, in the fall of 2006, was a shift from the more tightly controlled design to an implementation phase, in which we examined the presence or absence of peer feedback on form in a condition more typical of bilingual classroom-based telecollaborative projects. The same two conditions were established: e-tutoring and e-partnering. In the e-tutoring condition, 14 students who were enrolled in an advanced Spanish grammar course at a university in the US were matched with 14 students in the second author's Advanced EFL course in Spain. These 28 students were assigned to the e-tutoring condition for eight weeks. In the e-partnering condition, 22 U.S. students enrolled in an advanced Spanish conversation course were paired with 22 students enrolled in an advanced EFL course in Chile. They participated in the e-partnering condition for 10 weeks. The differences in the lengths of the exchanges were due to differing institutional constraints at the three universities.

The students in each telecollaborative project were required to write at least 300 words in each language weekly. In both projects, students were placed into pairs (one native English speaker and one native Spanish speaker), and these pairs remained constant for the duration of the exchange. Students in the e-tutoring condition were allowed to choose among different tasks (see Appendix B), and students in the e-partnering condition wrote on themes related to movies they watched as part of their coursework. All students in Phase II communicated in asynchronous interactions on *Blackboard*, a widely used, licensed, password-protected course management system.

Data Collection and Analysis

Language Related Episodes

The data sources were a database of weekly online transcripts, surveys that provided descriptive information on students' attitudes, and student-produced writing such as language reflection essays and term papers. To answer the research questions related to the frequency and type of corrective feedback and feedback strategies the students used (i.e., questions 1 and 2), language-related episodes (LREs) were used as a unit of analysis. These are described by Swain and Lapkin (1998) as "any part of a dialogue where the students talk about the language they are producing, question their language use, or correct themselves or others" (p. 326). The online written dialogue was coded for any evidence of writing that focused on language use including mechanics, vocabulary, grammar, style, and other types of corrections and feedback. The total number of words written in the LREs was divided by the total number of words to provide the percentage of writing that focused on language in the LREs. The LREs were categorized as three types of feedback: morphosyntactic, lexical, and affective (see Table 2).

In addition to these three categories, we further sub-coded the morphosyntactic LREs using a coding scheme of Ros i Solé and Truman (2005). Sub-codes for lexical items and affective feedback were not needed because no apparent patterns emerged within those categories. Feedback in the morphosyntactic LREs, however, was provided in two ways: *specific feedback*, in which partners provided the correct answer for mistakes or made suggestions for improving style and syntactic complexity, and

commentaries, in which partners not only corrected or pointed out errors but also provided extended metalinguistic commentaries justifying the suggested revisions (see Table 3).

LRE Code	Examples From Interactional Data	
Morphosyntactic	a. "We use the word transport as a verb, and transportation is the noun."	
	b. "I can see why you thought it could be used there, but if the two sentences it	
	connected had been about the same subject, then it would have worked, but they	
	are two completely different sentences and should be separate."	
Lexical	"Also 'dumb' is like saying she becomes stupid. If that's what you meant, fine, but	
	it may be better understood if you said 'dumbfounded' or 'speechless."	
Affective	"Anyways, I thought now would be a good opportunity to tell you about some of	
	your English. Overall it sounds very nice and can be read smoothly. There are just	
	a few changes you should make."	

Table 2.	Examples	of Coding	for LREs
----------	----------	-----------	----------

Table 3. Examples of Coding for Feedback Strategies

Specific Feedback	 a. "Instead of 'Forest fires every year devastate north Spain' you should say 'Forest fires devastate northern Spain every year' (order of words)." b. "Instead of saying 'In add,' say 'In addition."" c. "'She changes of topic' should be said like 'she changes the topic' or just 'she changes topic.""
Commentaries	"I don't know if I told you about the trick of using 'FANBOYS' or not Adding commas and semicolons in long sentences makes the sentence more understandable and easier to read. This is when you should use commas in a sentence, when you have any of the FANBOYS: For, And, Nor, But, Or, Yet, So."

All transcripts in the e-tutoring and e-partnering conditions of both phases were coded using these categories. To analyze the attitudes of the participants to an absence (or presence) of a focus on form (i.e., research question 3), we used traditional qualitative research methods (Bogdan & Biklen, 1998; Erikson, 1986) including interviews and surveys, which were structured around these areas: background information concerning experience with the target language and with technology, preference for task types in the exchange, perceptions of the usefulness of partners' feedback, self-reported increased use of new forms, and level of interest in online exchanges.

FINDINGS

Frequency and Type of Language-Related Episodes

Phase I

Analysis of the data from Phase I in which students interacted only in English reveals that a much greater percentage of LREs occurred in the e-tutoring condition, in which the students were asked to provide feedback on their partner's language whether it was solicited or not (see Table 4). This is not surprising as those students had been asked to provide such feedback, while it was optional for students in the e-partnering condition. We did not expect, however, so few LREs in the e-partnering condition because student surveys had earlier revealed their preferences for having at least some focus on form.

Condition	Total number of words across all interactions	Total number of words related to LREs	Percentage of words related to LREs
E-tutoring	68,015	9,159	13.5%
E-partnering	53,367	1398	3%

Table 4. Percentage of Total Interactions Related to Language Form in Phase I

Phase II

The results of Phase I led us to expect that students in the e-partnering condition of the second phase would most likely not provide or elicit feedback unless explicitly directed to do so by their instructors. Analysis of the data for Phase II confirmed these expectations in that only the students in the e-tutoring condition tended to provide language-related feedback (see Table 5). Again, while this finding is not surprising, note that students in the e-partnering phase also indicated in their final surveys a preference for having a language focus. Given this preference, why they did not actively elicit such language feedback is unclear to us; possible explanations include a real or perceived lack of time, reluctance to switch the focus from fluency and conversation, lack of confidence in knowing what feedback to provide, or discomfort with taking on a role they might see as more fitting for a teacher.

Condition	Total number of words across all interaction	Total number of words related to LRE's	Percentage of words related to LREs
E-tutoring			
(Spain-US)	112,126	16,511	14.7%
E-partnering			
(Chile-US)	171,457	567	0.003%

Table 5. Percentage of Total Interaction Related to Language Form in Phase II

In our analysis of the *type* of feedback provided (see Table 6), students assigned to the e-tutoring condition of the bilingual exchange in Phase II of our project put a major focus on morphosyntactic LREs and a secondary focus on affective moves such as praise and mitigation. Lexical items received the least emphasis.

Table 6. Focus of LREs in E-Tutoring Bilingual Forums

Focus	Number (percentage) of words in English forums	Number (percentage) of words in Spanish forums
Morphosyntactic LREs	8,110 (77.1%)	4,075 (68.0%)
Lexical LREs	968 (9.2%)	749 (12.5%)
Affective LREs	1,441 (13.7%)	1,168 (19.5%)
Total	10,519 (100%)	5,992 (100%)

While the English forums included a slightly higher focus on morphosyntactic LREs and the Spanish forums a slightly higher focus on lexical LREs, both forums have an overall higher focus on

morphosyntactic LREs. The results also show that the students in both conditions produced affective feedback at a higher rate than they produced lexical feedback.

Students' Strategies for Focusing on Language Form in Online Discussions

Based on the coding categories from Ros i Solé and Truman (2005), the most frequent type of feedback provided by the U.S. students to the Spanish students in Phase I was that of *commentaries* (provision of metalinguistic explanations). This was also the case in Phase II as can be seen in Table 7.

Focus	Number (percentage) of words in morphosyntactic LREs in Spanish	Number (percentage) of words in morphosyntactic LREs in English	Total number (percentage) of morphosyntactic LREs
Specific Feedback	1,625 (39.9%)	7,663 (94.5%)	9,288 (76.2%)
Commentaries	2,450 (60.1%)	447 (5.5%)	2,897 (23.8%)
Total	4,075 (100%)	8,110 (100%)	12,185 (100%)

Table 7. Feedback Strategies Used in the Morphosyntactic LREs in Phase II

An interesting distinction emerged between the morphosyntactic LREs written by the U.S. students (in English) and those written by the Spanish students (in Spanish). The Spanish students used more metalinguistic commentaries (60.1%) than did the American students (5.5%). When the American students did provide commentaries, the accuracy and depth of their explanations tended to be limited and not quite accurate, as in these two examples:

" ... 'is visited' is passive voice, and is generally frowned upon in the English language. Also we say during weekends because it is a period of time."

"Many of the verbs in English are followed by 'to' or take the 'ing' ending as you talked about. The 'ing' form can be used in multiple tenses as well, such as: 'I was playing soccer' and 'I am playing soccer."

Additionally, the students in the US did not seem as well versed in metalinguistic knowledge or terminology as their EFL partners in Spain. When his partner requested feedback on phrasal verbs, for example, this student in the US tried to be helpful but was unsure how to proceed:

"I am not totally sure what you mean by phrasal verbs. If you give me a few phrases of phrasal verbs and then your own I can correct them again for you. I just looked phrasal verbs up on the internet, are they verbs like, add up, and act up etc. I haven't taken grammar in a really long time but if you give me an example I can make up a few phrases. I can also make up some incorrect ones and you can try to fix them."

In stark contrast to their U.S. peers, however, the Spanish students were much more familiar with metalinguistic terminology and explanations. They provided significantly more commentaries (60.1% of the total), most of which were accurate, even if sometimes only partial, explanations as these examples demonstrate:

"Y por fin cuidado con el verbo 'saber' que es irregular: 'sepa' al subjuntivo y 'supieron' al pretérito" [And finally be careful with the verb 'saber' because it is irregular: 'sepa' in the subjunctive and 'supieron' in the preterit.]

"Cuando dices 'querréis' sería queréis ya que es el verbo querer en tiempo presente. Yo quiero, tú quieres ... vosotros queréis. Sólo llevaría dos erres en el condicional: querriáis." [When you say 'querréis' it would be 'queries' because it's the verb querer in the present tense. I want, you want. It would only have two rr's in the conditional: querriáis.]

The Spanish students' greater familiarity with metalinguistic terminology may be related to their participation in foreign language classes throughout elementary and secondary education. In contrast, students in the US often only take two or three years of language before post-secondary education. While the mismatch in students' access to the language *about* language did not impede their attempts at providing feedback, more research would be needed to determine if shared terminology and grammatical awareness might enhance the type of feedback provided and the manner in which it could be acted upon.

Turning to the code of *specific feedback*, the American students relied mostly on this strategy (94.5%), whereas the Spanish students used it less frequently (39.9%). Almost all instances of specific feedback took the form of reformulations of their partner's original message, which parallels the findings in Lee's (2006) study on synchronous interaction among learners. In the case of asynchronous interaction, however, students would first restate the original phrasing, then indicate how it might be better expressed. A typical episode, for example, would be initiated by the non-native speaker in the form of a generic request for feedback, which would be coded as an "affective LRE": "I'm looking forward to learning more through these emails with you. Please tell me about anything that doesn't sound quite right to you!"; "Well, I'm sorry if I have mistakes, I would like to hear your suggestions to how the text can be improved." Subsequently, the native speaker would choose several specific areas from the non-native speaker's message on which to provide feedback and then offer *specific feedback*:

"Everything you wrote was really good, but I have a few suggestions. Instead of saying 'To put out the fires more or less 1,200 soldiers have been deployed in Galicia region' you can say 'About 1,200 soldiers have been deployed in Galicia region to put out the fires.'. Instead of 'Forest fires every year devastate north Spain...' you should say 'Forest fires devastate northern Spain ever year' (order of words)."

To end the episode, the non-native speaker would either provide a general acknowledgement of the advice or simply request more feedback on the new message, once again coded as an affective LRE ("Thank you for correcting my english [sic] mistakes, it really helps me.").

In the lexical LREs, feedback tended to come in two forms, either by providing a definition with examples or by exemplifying the word's use in different contexts:

"When you say 'of the taste' you should say 'with the taste.' Also 'dumb' is like saying she becomes stupid. If that's what you meant, fine, but it may be better understood if you said 'dumbfounded' or 'speechless.""

"Cuando dices que vistéis una peli sería el personaje principal ya que no es una persona sino un actor que hace de esa persona." [When you say that you saw a movie, it would be 'the main character' since it's not a 'person' but rather an actor who acts out this person.]

Such reformulations, with a secondary focus on vocabulary, were more time-efficient for the students, and they were less likely to lead to inaccurate explanations of grammar. Using these reformulations, their target partners could use the strategy of noticing (Schmidt, 1993) to compare their own original writing against the more "native-sounding" rephrasing.

Participant Attitudes Toward Presence or Absence of Focus on Language Form

The role and status of grammar in foreign language education among the different groups of learners in this study differed slightly. Spanish students taking an English philology degree at the university in this study tended to attribute considerable importance to the grammar aspects of their language courses

despite their open preference for day-to-day class activities based on the development of communicative skills and intercultural awareness. Informal comments by students often gave the impression that while a language was best learned by practicing speaking and listening, the *real business* of language learning in educational contexts involved the study and mastery of grammatical forms and vocabulary: "Teachers only just do the textbook or give us photocopies. I think there should be more grammar from which to take notes. And apart from that there should be interesting exercises from which we can learn." Clearly reflecting these attitudes to language learning, many of the Spanish students who had participated in online exchanges in the past had complained of the lack of a clear focus on elements of form in their collaborative work.

In contrast, students in the United States who were assigned to the e-tutoring condition in which they were asked to provide corrective feedback were initially hesitant to write commentaries about their partner's language use. In the U.S. students' institutional context, online learning is frequently a part of their regular university coursework, and students often participate in student-based discussion boards as part of their out-of-class coursework. These boards are often informal spaces for sharing ideas, and most evaluative feedback remains the role of the course instructor, so the U.S. students' concerns centered mainly on fears of transforming their online conversations into less informal sessions.

At the end of Phase I, Spanish students assigned to both the e-tutoring and e-partnering conditions of the exchange reported seeing their participation not only as an opportunity to get to know and understand members of the target culture, but also as a way to improve their English and be exposed to informal English language from native speakers. Many of those students who had been assigned to the e-partnering condition were disappointed when the American partners did not explicitly provide language feedback and concluded the exchange with feelings of frustration:

"No, she's too polite [to comment on grammar]. But I prefer it if she does because if they don't correct you, you can't improve. It [participating in an exchange] is useful because you see how language works but it's not enough because you can't improve your writing because they don't say to you what you are doing wrong."

Interestingly, in the second phase of our study, surveys distributed at the end of the exchange found no significant differences between the two conditions of e-tutoring and e-partnering in student attitudes toward language feedback (see Table 8).

	Condition*	Disagree (%)	Neutral (%)	Agree (%)
Writing to native speakers should be a part of all	E-tutoring	4.3	13.0	82.6
language classes.	E-partnering	0	11.1	88.9
When writing to native-speaking peers, it is	E-tutoring	8.7	26.1	65.2
important to include a focus on grammar.	E-partnering	14.8	14.8	70.4
I prefer my partners to be primarily conversation	E-tutoring	65.2	26.1	8.7
partners without a strong focus on grammar.	E-partnering	51.9	14.8	33.3

Table 8. Student Attitudes Toward Language Feedback in Phase II

*Note. E-tutoring, n = 23; e-partnering, n = 27.

Clearly, both groups of students strongly favored writing to native speakers as part of their language classes. Both groups of students also favored including grammar in the exchange. Students' attitudes differed slightly in the degree to which they believed a grammar focus was important. Those students who had participated in the e-tutoring condition tended to favor a stronger focus on grammar than those in the e-partnering condition. Although the survey indicated no clear consensus as to why, we speculate that the

e-tutoring group had concrete, positive experiences with the language focus, whereas for the e-partnering group, the question was hypothetical because they had primarily focused on conversational fluency.

In summary, students in the e-tutoring condition who did receive feedback on the accuracy of their writing spoke very positively about this feature of the exchange. These students highlighted the difference between focusing on form with their online partners compared to the traditional grammar focus in their contact classes with their teachers. They mentioned, for example, that the corrections they received from their online partners made a greater impact on their learning than normal classroom feedback and that the corrections were experienced in a more personalized and unthreatening manner:

"In class you write down notes about grammar and vocabulary and it stays in your notebook. With an exchange partner she corrects and the information stays with you You learn more from mistakes in the forums than from reading rules from the blackboard Maybe it's more interesting by the net. You are chatting so you are enjoying. If the teacher gives me a corrected essay, I just read it and that's all."

"My partner helped me with sentence structure because in his emails I saw how he wrote and I try to learn with his emails and another thing was the vocabulary, because I want to write something and he had already written another words and it was very useful."

Students viewed online correction as a more contextualized way of learning about grammar and vocabulary. From the students' perspective, the discussion forums provided them with a springboard for reflecting on language form that differed from the classroom-based style to which they were accustomed, and they appreciated the newer style.

DISCUSSION

Several findings that are worthy of further discussion and analysis emerge from the data. First, note that the limited focus on feedback (3% in Phase I and 0.003% in Phase II) in the e-partnering conditions of these asynchronous exchanges replicates the findings from similar research on synchronous interactions. In his extensive study of a MOO-based synchronous tandem exchange between students of German and English, for example, Schwienhorst (2000) found that even though students were *encouraged* to correct their partners' grammatical errors, as was the case with our e-partnering condition, very little evidence of error correction appeared in the transcripts¹. The author suggested that this was due to the students perceiving the point of the activity as being primarily one of communicating and establishing relationships with their online partners. Focusing on grammatical corrections was considered of only secondary importance to the learners.

Several explanations are possible for the primary focus on morphosyntactic LREs and secondary focus on affective LREs during the exchange. First, because the students had more time to compose their messages in asynchronous forums, they were able to look up vocabulary instead of relying on synchronous negotiation of meaning to clarify unfamiliar terms. With the extra time available to read, interpret, and respond to messages, they were better positioned to infer vocabulary from the larger context of the message. Students might also have understood "grammar" to exclude a focus on vocabulary and thereby focused their attention on morphosyntactical forms, even though they were told to focus on whatever aspects of language they deemed important, including lexical items. Another possibility is that because all of the students were in advanced language courses, they might not have had any immediate difficulty understanding the gist of the messages, thereby eliminating the need to negotiate meaning.

The higher proportion of affective LREs than lexical LREs suggests that students in telecollaborative exchanges might not feel comfortable providing corrective feedback (Lee, 2004) and therefore want to mitigate or contextualize their language-related feedback. Students in this study used various ways of talking about the process of focusing on language, including offering praise on one another's use of the

target language, mitigating the importance of their language-related comments, and thanking one another for the language-related feedback:

"*Concerning* your grammar, you did a great job in this forum! There are only a very few mistakes that I saw and they were very small."

"With this phrase, the only problem is ... "

"The sentence is just a little awkward ... "

Attempts to engage in grammar correction as sensitively as possible through the use of praise and mitigation strategies were well received by the participants. Belz's (2003) findings were similar in that the American students in her study used positive appraisal with their German partners. Comments from the Spanish students in their interviews and portfolios confirmed that such affective strategies were appreciated and a key factor in the success of the exchange: "I found her very helpful, she was really nice to me and I'm very grateful. The corrections have helped me not to commit so many errors when writing. And I think if a native speaker corrects you, you'll pay more attention since they do it in an informal way."

Finally, in relation to students' strategies for focusing on form, it is important to note that individual students were differently equipped to provide accurate feedback. As mentioned earlier, the Spanish students as a general rule used greater metalinguistic terminology and typically provided more substantive feedback than the American students. Even so, the feedback students provided was often considerably less complete than what a trained teacher could provide. In short, the feedback was sometimes very well intentioned but misleading.

Pedagogical Implications

The findings of this study raise several issues for instructors and researchers interested in exploring an explicit focus on peer feedback on language form in online exchanges. First, our research indicates that language learners do appreciate their partners' active attempts to provide them with individualized feedback. However, even though they favor this aspect of telecollaboration, they do not integrate it into their online interactions unless given explicit directions to do so by the language instructor. To counteract this avoidance of focusing on form, teachers may therefore have to go further than merely encouraging students to correct their partners. Strategies could include dedicating sufficient class time to modeling effective feedback strategies and requiring that parts of students' portfolios or final essays be dedicated to reflecting on how error correction was dealt with during their online interaction.

In our study, students claimed that they used the online discussions to notice how their partners used language and then re-used that language themselves later. However, we found little evidence of this reuse within the transcripts themselves, as was also the case in the empirical work in the e-tandem tradition by Little et al. (1999) and Schwienhorst (2000). We speculate that, from a student's perspective, online exchanges are likely "*forward-oriented*" toward the next message containing new information, unlike, perhaps, teacher-directed class assignments that can be iterative products that are revised multiple times for accuracy (and a grade). Therefore, we would suggest that teachers structure carefully sequenced tasks so that they build on the previous interaction.

We have evidence that the feedback provided by peers is often limited in scope or accuracy. The limitations of peers' metalinguistic comments may well be an indication that peer feedback, in the sense of asking students to provide accurate explanations of their native language grammar, may not be an appropriate use of telecollaboration. A more effective frame for peer feedback in telecollaboration could be to request that language learners provide one another with reformulations as they tended to do naturally both in our asynchronous study and in the synchronous one conducted by Lee (2006). In this

way, the online forum can serve as an alternative type of language learner reflection journal, in which students document what they notice about the target language.

Instructors can use transcripts, or as Belz (2006) suggests, a learner-based corpus stemming from the transcripts, as a starting point for reflecting on language use and form. To give students ample opportunities to reflect on their online interaction and to study new linguistic structures and lexical items, using portfolios and learner diaries as proposed by researchers in the e-tandem tradition (Little et al., 1999) are invaluable. Learner' diaries, for example, can be used by students to maintain an ongoing record of their experiences of the online exchange and to reflect on what they are learning, both culturally and linguistically, from their interaction with their partners. When teachers use portfolios as part of the evaluation process for telecollaboration, students also have an opportunity to show how they have benefited from their exchange using presentations in which they demonstrate their use of the feedback.

Limitations and Recommendations for Future Studies

Until more studies are undertaken that can replicate our findings with different groups of students across other online learning contexts, our conclusions are limited to this particular context of Spanish and English post-secondary learners. Because the two cohorts of EFL learners were located in Spain and in Chile, there are potential sociocultural factors at the national and institutional levels (e.g., different emphasis placed on language or culture at the tertiary level, different secondary educational experiences with English, etc.) that might have affected the students' interactions. Second, measures of student uptake of and acquisition of particular language forms are needed to determine whether the online feedback has an impact on either language learning or metalinguistic awareness beyond the positive evaluation given to it by the participants in this study. A final limitation is the difficulty of attributing effects to any single factor, such as the use of asynchronous instead of synchronous forums, the type of in-class instruction used, or the assignment to e-tutoring or e-partnering. What this study does provide is rich descriptive data on how peer feedback on form plays out under two types of telecollaboration, those of e-tutoring and e-partnering.

Opportunities for future research are multiple. As mentioned previously, strong measures are needed to examine if and how specific language forms are taken up and acquired in the short and long term as the result of peer feedback in asynchronous writing. For example, in a recent example of learner uptake in synchronous chat, Smith (2005) cautions that a "diminished role" (p. 33) is possible for uptake in online contexts because he found no relationship between uptake and the acquisition of lexical items. Similar rigorous methods need to be applied to asynchronous contexts and to other aspects of language use such as morphosyntactic complexity. This could be done using a pre- and post-test design targeting specific items or through researcher-derived instruments that monitor the ongoing progress of individuals on items specific to the interactions of each partnership.

Research is also needed that continues to explore the role of task type in promoting attention to language form along with intercultural learning (Müller-Hartmann, 2000). To create a greater number of online sequences that involve either negotiation of meaning or peer feedback on language, specific tasks may need to be adopted that enhance the amount of negotiation between partners or reflection on language use (Lee, 2006; Pellettieri, 2000). Finally, more research needs to investigate the extent to which foregrounding a focus on language form might impact the ways in which students establish working relationships with their partners and grapple with intercultural learning online.

CONCLUSION

Taking into account the quantitative and qualitative findings of our research project, the students clearly favored an integration of language form into their online exchanges, but they were not always equipped with a strong enough understanding of the structure of their native languages to provide quality metalinguistic explanations. Therefore, telecollaborative projects that intend to have a language focus

need to borrow both principles and techniques from various models of online exchange, with special emphasis given to the role of the instructor. Instructors must not only make clear their expectations that students provide feedback, but they must also provide examples of when and how to provide feedback. Students will learn how to work with their partners in the second language in a sensitive and efficient way when course instructors provide their students with appropriate training and awareness-raising activities in their contact classes. For this reason, the principle of carefully integrating and linking contact classes with online activities as proposed by intercultural telecollaborative models (e.g., Belz, 2003; Furstenburg et al., 2001; Thorne, 2006) is highly recommended for an approach that integrates peer feedback on language form.

NOTES

1. Although asynchronous computer mediated communication (ACMC) and its synchronous equivalent (SCMC) may differ in some ways, these forms of communication share many key characteristics that justify taking into account research findings from both contexts in the area of online foreign language learning research. Both ACMC and SCMC, for example, are text-based forms of communication that provide learners with a level of anonymity that would not usually be possible in face-to-face learning contexts. The fact that both are text-based also means that learners have the opportunity to focus on the written form of their own and their partners' output to a greater extent that they would in oral forms of interaction. This can encourage learners to reflect on accuracy and content, especially when extracts of interactions from either form of CMC are saved, printed, and reflected on by learners and teachers at a later point. Nevertheless, it is important to recognize that the immediate nature of SCMC may lead learners to engage more regularly in negotiation of meaning to resolve misunderstandings that arise in their interactions. In ACMC, learners usually have more time to reflect on their partners' texts and to decide what was meant without actually needing to ask them to clarify or reformulate their ideas.

APPENDICES

Appendix A. Tasks for Phase I

Date	Tasks
	(Task 1) Introductions:
1: February	This task involves getting to know your partner and their local culture. You should create background texts on two themes: 1) Personal biographies describing who you are (100-150 words) and 2) An introduction to life in your town and university taking into account the aspects which be of particular interest to someone from the other culture(400-500 words). Students should (in the following week) respond to their partners' texts, asking questions and making comments on the original posts.
	Also this month, post your first draft of your film review so your Spanish and American partners can make suggestions for improvements.
2: March	(Task 2) Both the United States and Spain have experienced periods of incredible economic growth and social change over the past 15-20 years. Even if you are too young yourself to remember what life was like in your country 15 years ago, the media is constantly reminding us about how life has changed so dramatically. In relation to this, you have two 'sub-tasks' to do this month: Firstly, discuss with your partner how life has changed in your country for young people in recent years. How have young people's lifestyles changed? What are their 'new' interests and hobbies? What are the main worries and problems of your generation? Are young people better off now than 15/20 years ago? (Students should write a minimum of two posts on this part of the task.)
	(Task 3) Each group will find on our platform a set of graphs and statistics which show developing attitudes of your society to certain topical issues, such as immigration and the death penalty. Describe the graphs to your partner and then compare how these different issues are viewed in the USA and Spain. (Students should write a minimum of two posts on this part of the task.)
3: April	(Task 4) In this round you have the opportunity to carry out an ethnographic interview with your partner(s) on the topic of your choice. (This involves two separate interviews: One in which the American student interviews the Spanish partners and a second where the Spaniards interview their American partner.) The two interviews do not need to be based on the same theme. You can choose any topic related to your partner's culture which you are particularly interested in (e.g. the education system in the other country, the issue of immigration etc etc). In each interview you should send three 'rounds' of questions to your partners finding out about their attitudes and experiences in relation to your theme. Each round of questions should expand on the responses you receive from your partner.

Advertisement Adaptation	Choose an advertisement (for example about Coke or some other product aimed at young people) and write an adaptation of the script in your target language. You can change the content as well as the language style, so that the ad is appropriate for the other culture. Your partners should comment on the language, style, and cultural appropriateness.
Listening	Suggest that your partner listen to a song or radio station in Spanish or English and use that as a basis for talking about music in your life, in your generation. A useful website: http://www.multilingualbooks.com/online-radio-spanish.html You can also use other websites to download songs or podcasts
Translation Help	Choose a short text (song lyrics, article, letter, etc.) in your native language and translate it into your target language. Without seeing the original text, your partner needs to correct the translation to make it as appropriate and "natural-sounding" as possible. Discuss the errors your partner made in their translation and try to explain why it "sounds wrong."
Creative Expression	Express yourself in a creative genre (poem, song, story) and share it with your partner; have your partner comment on the way you are using Spanish and/or provide you with tips on making it more colloquial, more formal, or more culturally relevant
Idiomatic Expressions	Compose a text (or texts) in which you use at least 5 idiomatic expressions that your partner has asked you to explain and have your partner help you make sure you are using the appropriately useful website: http://www.caslt.org/research/spidiom.htm
Other	You and your partner can propose a different activity as one of your four choices.

Appendix B. Sample Tasks From the E-Tutoring Condition in Phase II

Appendix C. Suggestions for Language-Related Commentaries

1) Distinguish between "global errors" and "local mistakes": *Local mistakes* are typically small mistakes that language learners make when they are in a hurry. Often, the learners know the rules they are breaking but they are so focused on writing or speaking fluently, that they overlook them.Sometimes they are easy to identify: misspelled words, missing articles, missing accent marks, or the occasional wrong verb tense. In contrast, *global errors* are identified as sentences or phrases that sound awkward to your native-speaking ear.

2) Use specific strategies for providing feedback: It is often helpful to use these strategies:

* **Provide feedback**: Look for patterns in the errors and provide feedback. Instead of simply writing in the correct answer for your partner, go back through their text and highlight with a different font all of the errors of a particular type.

* Selective correction: It is important to focus on just one or two *types of errors* per message (for example, focus on verb tenses or on comma usage but not on both at once)

* **Reformulation**: You can rewrite one or two sentences for your partners so they can compare the "native-sounding" version to their own. This is a useful technique!

* **Give examples**: When you explain a grammar rule or a vocabulary word, give multiple examples so your partner has a context for using the new expression.

* Ask clarification questions: If you do not understand a particular sentence or think there might be multiple meanings, ask your partner directly what they mean by such-and-such.

* **Provide "mini-grammar lessons":** If you feel comfortable explaining your native language, try giving your partner short lessons. Think of these mini-lessons as teaching patterns and reasons, not necessarily rules.

3) Ask your partners what they would like help with (and specify this for yourself, too): It is often easier to provide feedback when your partner tells you specifically what they would like help with. Here are some sample requests when asking for focused feedback:

* Could you please read this and comment on how I'm using the subjunctive?
* As you read this, will you write down any more sophisticated vocabulary words that come to mind? I think mine are still very simple. Please ignore accent marks this time!
* I'd like to learn more idioms -- as you read this, do any come to mind that I might use?

4) Keep the tone positive: Upbeat comments certainly help encourage your partner to take risks in trying out more complicated and sophisticated target language writing.

* Praise specific points; don't just make general comments: Good: "I really like how descriptive you are -- you have such a wide range of vocabulary!" Not-so-good: "Good work!"

5) Don't worry if you don't know how to explain something in your native language: Even language teachers have to look up language explanations some of the time. You can always help out by looking up resources online or by asking your own teacher to explain something to you.

* **Remember** that there are regional and national differences in language. Look at these layers of language as potential areas to explore, not to "correct."

* **Realize** that context often influences grammar or vocabulary choice. Help your partners to obtain a more complex view of how English or Spanish is used by pointing out differences between "registers" of language.

ACKNOWLEDGMENTS

We are grateful for the funding support of The International Research Foundation for English Language Education (TIRF) and for the invaluable suggestions made by the LLT reviewers.

ABOUT THE AUTHORS

Paige Ware is an assistant professor at Southern Methodist University. She has a Ph.D. in Language, Literacy, and Culture from the University of California at Berkeley. Her publications include research on the use of new technologies to support adolescent language learners and the integration of telecollaboration into ESL and EFL courses. She currently directs and teaches in Project CONNECT, a program for secondary teachers to work with English language learners.

Email: pware@smu.edu

Robert O'Dowd teaches EFL and Foreign Language Methodology at the University of León in Spain and has a Ph.D. on the development of intercultural competence through the use of networked technologies. He is currently on the executive committees of both Eurocall and IALIC and has published widely on the themes of on-line foreign language education and on the role of culture in foreign language learning.

Email: robert.odowd@unileon.es

REFERENCES

Appel, C., & Mullen, T. (2000). Pedagogical considerations for a web-based tandem language learning environment. *Computers and Education*, *34*, 291-308.

Bauer, B., deBenedette, L., Furstenberg, G., Levet, S., & Waryn, S. (2006). The Cultura project. In J. Belz & S. Thorne (Eds.), *Internet-mediated intercultural foreign language education* (pp. 31-62). Boston: Heinle & Heinle.

Belz, J. (2002). Social dimensions of telecollaborative language study. *Language Learning & Technology*, *6*(1), 60-81. Retrieved January 8, 2008, from http://llt.msu.edu/vol6num1/belz/default.html.

Belz, J. (2003). Linguistic perspectives on the development of intercultural competence in telecollaboration. *Language Learning & Technology*, 7(2), 68-117. Retrieved January 8, 2008, from http://llt.msu.edu/vol7num2/belz/default.html.

Belz, J. (2006). At the intersection of telecollaboration, learner corpus analysis, and L2 pragmatics: Considerations for language program direction. In J. Belz & S. Thorne (Eds.), *Internet-mediated intercultural foreign language education* (pp. 207-246). Boston: Heinle & Heinle.

Belz, J., & Kinginger, C. (2003). Discourse options and the development of pragmatic competence by classroom learners of German: The case of address forms. *Language Learning*, *53*(4), 591-647.

Belz, J. A., & Müller-Hartmann, A. (2003). Teachers as intercultural learners: Negotiating German-American telecollaboration along the institutional fault line. *The Modern Language Journal*, 87(1), 71-89.

Belz, J., & Vyatkina, N. (2005). Learner corpus analysis and the development of L2 pragmatic competence in networked intercultural language study: The case of German modal particles. *Canadian Modern Language Review/Revue canadienne des langues vivantes, 62*(1), 17-48.

Blake, R. (2000). Computer mediated communication: A window on Spanish L2 interlanguage. *Language Learning & Technology*, 4(1), 120-136. Retrieved January 8, 2008, from http://llt.msu.edu/vol4num1/default.html.

Bogdan, R. C., & Biklen, S. K. (1998). *Qualitative research for education: An introduction to theory and methods* (3rd ed.). Boston: Allyn & Bacon.

Brammerts, H. (1996). Language learning in tandem using the Internet. In M. Warschauer (Ed.), *Telecollaboration in foreign language learning* (pp. 121-130). Honolulu, HI: University of Hawaii Press.

Chavez, M. (2002). We say "culture" and students ask "What?": University students' definitions of foreign language culture. *Die Unterrichtspraxis*, *35*(2), 129-140.

Dussias, P. E. (2006). Morphological development in Spanish-American telecollaboration. In J. Belz & S. Thorne (Eds.), *Internet-mediated intercultural foreign language education* (pp. 121-146). Boston: Heinle & Heinle.

Erikson, F. (1986). Qualitative methods in research on teaching. In M. Wittrock (Ed.), *Handbook of research on teaching*. New York: Macmillan.

Foster, P., & Ohta, A. (2005). Negotiation for meaning and peer assistance in second language classrooms. *Applied Linguistics*, *26*(3), 402-430.

Furstenberg, G., Levet, S., English, K., & Maillet, K. (2001). Giving a virtual voice to the silent language of culture: The CULTURA project. *Language Learning & Technology*, *5*(1), 55-102. Retrieved January 8, 2008, from http://llt.msu.edu/vol5num1/furstenberg/default.html.

Kern, R. (1995). Restructuring classroom interaction with networked computers: Effects on quality and quantity of language production. *Modern Language Journal*, *79*(4), 457-476.

Kern, R. (1996). Computer-mediated communication: Using e-mail exchanges to explore personal histories in two cultures. In M. Warschauer (Ed.), *Telecollaboration in foreign language learning* (pp. 105-120). Honolulu, HI: University of Hawaii Press.

Kern, R., Ware, P., & Warschauer, M. (2004). Crossing frontiers: New directions in online pedagogy and research. *Annual Review of Applied Linguistics*, 24(1), 243-260.

Kinginger, C. (1998). Videoconferencing as access to spoken French. *Modern Language Journal, 82*(4), 502-513.

Kinginger, C., & Belz, J. (2005). Socio-cultural perspectives on pragmatic development in foreign language learning: Microgenetic and ontogenetic case studies from telecollaboration and study abroad. *Intercultural Pragmatics*, *2*(4), 369-422.

Kötter, M. (2003). Negotiation of meaning and codeswitching in online tandems. *Language Learning & Technology*, 7(2), 145-172. Retrieved January 8, 2008, from http://llt.msu.edu/vol7num2/kotter/default.html.

Kramsch, C., & Thorne, S. (2002). Foreign language learning as global communicative practice. In D. Block & D. Cameron (Eds.), *Globalization and language teaching* (pp. 83-100). London: Routledge.

Kubota, R., Austin, T., & Saito-Abbott, Y. (2003). Diversity and inclusion of sociopolitical issues in foreign language classrooms: An exploratory survey. *Foreign Language Annals, 36*, 12-24.

Lantolf, J. P. (2000). "Introducing sociocultural theory." In *Sociocultural theory and second language learning* (pp. 1-26). Oxford, UK: Oxford University Press.

Lee, L. (2004). Learners' perspectives on networked collaborative interaction with native speakers of Spanish in the U.S. *Language Learning & Technology*, 8(1), 83-100. Retrieved January 8, 2008, from http://llt.msu.edu/vol8num1/lee/default.html.

Lee, L. (2006). A study of native and nonnative speakers' feedback and responses in Spanish-American networked collaborative interaction. In J. Belz & S. Thorne (Eds.), *Internet-mediated intercultural foreign language education* (pp. 147-176). Boston: Heinle & Heinle.

Levy, M., & Kennedy, C. (2004). A task-cycling pedagogy using stimulated reflection and audioconferencing in foreign language learning. *Language Learning & Technology*, 8(2), 50-69. Retrieved January 8, 2008, from http://llt.msu.edu/vol8num2/default.html.

Liaw, M-L. (2006). E-learning and the development of intercultural competence. *Language Learning & Technology*, *10*(3), 49-64. Retrieved January 8, 2008, from http://llt.msu.edu/vol10num3/liaw/default.html.

Little, D., Ushioda, E., Appel, C., Moran, J., O'Rourke, B., & Schwienhorst, K. (1999). Evaluating tandem language learning by e-mail: Report on a bilateral project. Dublin, Trinity College: CLCS Occasional Paper.

Long, M. H., & Robinson, P. (1998). Focus on form: Theory, research and practice. In C. Doughty & J. Williams (Eds.), *Focus on form in second language acquisition* (pp. 15-41). Cambridge, UK: Cambridge University Press.

Müller-Hartmann, A. (2000). The role of tasks in promoting intercultural learning in electronic learning networks. *Language Learning & Technology*, *4*(2), 129-147. Retrieved January 8, 2008, from http://llt.msu.edu/vol4num2/default.html.

Müller-Hartmann, A. (2006). Learning how to teach intercultural communicative competence via telecollaboration: A model for language teacher education. In J. Belz & S. Thorne (Eds.), *Internet-mediated intercultural foreign language education* (pp. 63-84). Boston: Heinle & Heinle.

O'Dowd, R. (2003). Understanding the "other side": Intercultural learning in a Spanish-English email exchange. *Language Learning & Technology*, 7(2), 118-144. Retrieved January 8, 2008, from http://llt.msu.edu/vol7num2/odowd/default.html.

O'Dowd, R. (2006). *Telecollaboration and the Development of Intercultural Communicative Competence*. Munich, Germany: Langenscheidt-Longman.

O'Dowd, R. and Ritter, M. (2006). Understanding and Working with "Failed Communication" in Telecollaborative Exchanges. *CALICO Journal*, *61*(2), 623-642.

O'Rourke, B. (2005). Form-focused interaction in online tandem learning. *CALICO Journal*, 22(3), 433-466.

Pellettieri, J. (2000). Negotiation in cyberspace: The role of chatting in the development of grammatical competence in the virtual foreign language classroom. In M. Warschauer & R. Kern (Eds.), *Network-based language teaching: Concepts and practice* (pp. 59-86). Cambridge: Cambridge University Press.

Robb, T. (2004). Moodle: A virtual learning environment for the rest of us. TESL-EJ, 8(2), 1-8.

Ros i Solé, C. & Truman, M. (2005). Feedback in distance language learning: Current practices and new directions. In B. Holmberg, M. Shelley, & C. White (Eds.). *Distance education and languages: evolution and change* (pp. 72-91). Clevedon, UK: Multilingual Matters.

Schmidt, R. (1993). Consciousness, learning, and interlanguage pragmatics. In F. Kasper and S. Blum-Kulka (Eds.), *Interlanguage Pragmatics* (pp. 21-42). Oxford, UK: Oxford University Press.

Schwienhorst, K. (2000). *Virtual reality and learner autonomy in second language acquisition*. Unpublished manuscript, Trinity College, Dublin, Ireland.

Smith, B. (2005). The relationship between negotiated interaction, learner uptake, and lexical acquisition in task-based computer-mediated communication. *TESOL Quarterly*, *39*(1), 33-58.

Sotillo, S. M. (2005). Corrective feedback via Instant Messenger learning activities in NS-NNS and NNS-NNS dyads. *CALICO Journal*, 22(3), 467-496.

Swain, M., & Lapkin, S. (1998). Interaction and second language learning: Two adolescent French immersion students working together. *Modern Language Journal*, 82(3), 320-337.

Tella, S. (1991). Introducing international communications networks and electronic mail into foreign language classrooms: A case study in Finnish senior secondary schools. Helsinki, Finland: Yliopistopaino.

Thorne, S. (2003). Artifacts and cultures-of-use in intercultural communication. *Language Learning & Technology*, 7(2), 38-67. Retrieved January 8, 2008, from http://llt.msu.edu/vol7num2/thorne/default.html.

Thorne, S. (2006). Pedagogical and praxiological lessons from Internet-mediated intercultural foreign language education research. In J. Belz & S. Thorne (Eds.), *Internet-mediated intercultural foreign language education* (pp. 2-30). Boston: Heinle & Heinle.

Tudini, V. (2003). Using native speakers in chat. *Language Learning & Technology*, 7(3), 141-159. Retrieved January 8, 2008, from http://llt.msu.edu/vol7num3/default.html.

Ware, P. (2005). "Missed communication" in online communication: Tensions in fostering successful online interactions. *Language Learning & Technology*, *9*(2), 64-89. Retrieved January 8, 2008, from http://llt.msu.edu/vol9num2/default.html

Ware, P., & Kramsch, C. (2005). Toward an intercultural stance: Teaching German and English through telecollaboration. *Modern Language Journal*, *89*(2), 190-205.

Warschauer, M. (1997). Computer-mediated collaborative learning: Theory and practice. *Modern Language Journal*, *81*(4), 470-481.