# THE PRACTICES AND CHALLENGES OF TELECOLLABORATION IN HIGHER EDUCATION IN EUROPE

# Francesca Helm, University of Padova

Telecollaboration is an area of CALL research and practice which has developed considerably in the last twenty years. Many research studies have been carried out and important findings have been made, but there has not yet been a large scale survey to try and 'map' the state of the art in telecollaboration practice. Most studies focus on single telecollaboration projects and look at the project design, learning outcomes and difficulties teachers and researchers have encountered in that particular project. This paper reports on a survey which sought to explore current practices and attitudes towards telecollaboration across European universities and to identify barriers that practitioners encounter. The survey was completed in full by a total of 210 university language teachers in 23 different European countries and 131 students. The picture we found presents a broad spectrum of practices. Despite an overwhelmingly positive attitude towards telecollaboration, findings also provide large-scale confirmation of some of the problems identified in small-scale studies, such as organizational difficulties, lack of time, limited technical support and great uncertainty regarding issues students should address in their exchanges. The paper concludes with some recommendations as to how to meet these challenges and how telecollaboration practice could become mainstreamed in higher education.

# Language(s) Learned in Current Study: English

**Keywords:** Computer-mediated Communication, Computer-Assisted Language Learning, Collaborative Learning, Telecollaboration.

**APA Citation:** Helm, F. (2015). The practices and challenges of telecollaboration in higher education in Europe. *Language Learning & Technology*, *19*(2), 197–217. Retrieved from http://llt.msu.edu/issues/june2015/helm.pdf

Received: December 22, 2013; Accepted: September 19, 2014; Published: June 1, 2015

Copyright: © Francesca Helm

# INTRODUCTION

Telecollaboration is the practice of engaging classes of geographically dispersed learners in online intercultural exchange using Internet communication tools for the development of language and/or intercultural competence. It has also been called Online Intercultural Exchange (OIE) (O'Dowd, 2007) and Internet-mediated Intercultural Foreign Language Education (ICFLE). Telecollaboration offers opportunities for universities to support their internationalization strategies by 'globalizing their curriculum' and engaging learners in dialogue with peers in distant parts of the world. However this potential has yet to materialize as telecollaboration has not been mainstreamed into higher education. Student mobility, that is periods of study abroad, on the other hand, has a much stronger place in universities' internationalization policies (and budgets) despite the fact that only a small percentage of the student population actually benefit from this (currently 1% in the US, and about 5% in Europe). In primary and secondary education, on the other hand, where study abroad is not so feasible, projects such as the European Commission's eTwinning actively promote and support collaboration between schools through ICT. A portal has been developed for eTwinning to help schools find partners and to facilitate communication and collaboration between staff and pupils of partner schools as they develop and engage in joint educational projects. There are currently over 230,000 members registered and the project has the support of a network of education ministries across Europe, European Schoolnet.

Despite its short history, telecollaboration has established itself as a rich sub-field of CALL and Computer-Mediated Communication, with hundreds of journal articles on the theme, dedicated volumes (Belz & Thorne, 2006; Dooly, 2008; Guth & Helm, 2010; O'Dowd, 2007) journal special editions (Belz, 2003; Lewis, Chanier, & Youngs, 2011) and a book series, *Telecollaboration in Education*, edited by O'Dowd and Dooly. Telecollaboration research has progressed from collections of classroom practice and anecdotal research to in-depth studies of online interaction and exchange (Dooly & O'Dowd, 2012). Research studies have reported on the many outcomes of different telecollaborative projects, mainly in higher education contexts, such as increased motivation and linguistic output, gains in language development, accuracy and fluency, intercultural communicative competence, pragmatic competence, learner autonomy, online literacies, and multimodal communicative competence. The research has also documented failures and difficulties. The literature, however, largely consists of in-depth studies of individual projects and contexts, focusing on pedagogic design, the technology used, analysis of the interaction, linguistic and/or intercultural learning outcomes, difficulties, and barriers. Few studies offer a bigger picture of telecollaboration in terms of its implementation in higher education, other than a preliminary study carried out by O'Dowd (2011) which revealed that it is very much a peripheral add-on activity that is not being fully integrated into foreign language programmes.

The aim of the present survey study, which was financed by the European Commission, was to explore current practices and attitudes towards telecollaboration across European universities and to identify barriers that foreign language teachers and telecollaboration practitioners encounter. The survey was completed in full by a total of 210 university language teachers in 23 different European countries (see Appendix) and 131 students (see Guth, Helm & O'Dowd, 2012, for full report). The picture we found presents a broad spectrum of practices that have been developed in different university contexts, some of which will be outlined in this paper. The paper also reports on what are seen to be the main barriers to the mainstreaming of telecollaboration in foreign language education in higher education contexts and provides large-scale confirmation of the multiple issues reported in the many individual studies we find in the literature. The paper closes with recommendations on how practitioners could be supported in mainstreaming online intercultural exchange in foreign language education (FLE) in tertiary education and finally offers suggestions for further research to be carried out in this field.

#### LITERATURE REVIEW

The telecollaboration literature is quite vast and has focused on many different aspects. This literature review is organized around the main issues which the survey study sought to address, namely: (a) the models and language configurations adopted in telecollaboration, (b) the mediating role of technologies, (c) tasks and assessment, and finally, (d) the challenges of telecollaboration.

#### **Telecollaboration Models and Language Uses**

The most well-established models of telecollaboration are the bicultural and bilingual eTandem and Cultura, which have formed the basis of many exchanges and have been adapted to different languages and contexts. eTandem is a form of institutionalized online tandem learning (Kötter, 2003; O'Rourke, 2005) in which individual students from different classes, with different native languages, are paired and communicate together with the aim of learning one another's language. The focus tends to be on the development of linguistic competence, with learners encouraged to provide feedback on their partners' foreign language performance, correct errors, and offer new formulations (Bower & Kawaguchi, 2011; Vinagre & Munoz, 2011). Research on this type of exchange, generally grounded in Interactionist theories of SLA, has found that this approach offers opportunities for negotiation of meaning and form, which in turn, fosters language acquisition (see for example Lee, 2006).

The Cultura model, developed by Furstenberg and her colleagues at MIT (Furstenberg, Levet, English, & Maillet, 2001), is the basis of what O'Dowd has described as a "blended intercultural model" (O'Dowd,

2011). It has a strong intercultural component, with learners engaging in tasks designed by educators to elicit cultural differences and similarities. Research on projects adopting this model is generally based on sociocultural frameworks and looks at the role and development of intercultural competence as well as language development (Belz, 2003).

Much of the literature on telecollaboration regards projects involving the most commonly taught languages, with English being one of the main exchange languages followed by French, German, Spanish and Italian. In 2003 Belz lamented that there was little research on partnerships involving the so-called less commonly taught languages (LCTL). In recent years, however, there seems to have been a rise in the number of publications describing telecollaboration projects involving what have been defined as LCTLs, particularly Chinese (Wang, Zou, Wang, & Xing, 2013) and Russian (Klimanova & Dembovskaya, 2013).

The bilingual models mentioned above are based on the assumption that the "native speaker" is the ideal interlocutor and can act as a cultural informant and/or language expert, providing error correction, feedback, and cultural information. One of the questions Train (2006) asks is the extent to which telecollaborative pedagogies participate in or work against powerful ideology. He argues that from this standpoint, telecollaboration can be seen as a risk in reproducing what he calls Native Standard Language (NSL):

a complex constellation of hegemonic ideologies of language, (non)standardness, and (non)nativeness that have come to define the socio-historically and discursively constructed "realities" of language, culture, community, language use, and speaker identity inside and outside the classroom (p. 249).

Recently, there has been some research on telecollaboration exchanges whereby participants use a foreign language common to all of them, a "lingua franca", rather than communicating with native speakers, most commonly this language is English. It has been suggested that this move may be partly due to the increase in telecollaboration projects involving multiple partners (Lewis et al., 2011), though it may also reflect an acknowledgement, by English language teachers in particular, that their students are more likely to communicate with non-native than with native speakers. Research in this area of telecollaboration is just beginning, but an interesting finding is that learners report being less anxious when interacting with non-native speakers, and that the use of a contact language can cement participants' feelings of proximity and mutual support (Guarda, 2013).

#### **Teacher Education and Telecollaboration**

One of the implications of the growth in the practice of telecollaboration is its inclusion in teacher education programmes, particularly CMC teacher education approaches based on social constructivist views of teacher education (Dooly, 2010). Engaging teacher trainees in telecollaboration projects offers the opportunity for 'exploratory' teaching practice (Guichon & Hauck, 2011) and 'experiential modelling' (Guichon, 2009; Hampel, 2009). This kind of experience has been found to foster the development of multimodal communicative competence, multiliteracy, autonomy, and the teacher competences required for teaching with multimodal technologies (Fuchs, Hauck, & Müller-Hartmann, 2012).

#### **Mediation of Technology**

All telecollaborative interaction is mediated by technology: this has the potential to offer considerable benefits but also possible pitfalls. However, it is clearly not the only factor that influences language and intercultural learning (Kern, 2014). Different tools and modes of communication have been found to offer particular affordances and constraints in diverse contexts. Synchronous communication has generally been found to be motivating by participants, to promote increased participation and interaction amongst students, and to offer opportunities for negotiation of meaning, thus fostering language acquisition

(Blake, 2000; Lee, 2006; Tudini, 2003). The value of asynchronous communication for language learning, on the other hand, is that it gives learners time to reflect on their communication and to plan their interventions whether they are using email, discussion forums or more recent tools such as blogs and wikis (Guth & Thomas, 2010). The written form is more permanent than the spoken word and the study of transcripts of both synchronous and asynchronous communication has been found to support focus on form and the noticing of language features, which fosters language development (Dussias, 2006; Ware and O'Dowd, 2008). What has been considered a disadvantage of the written form is that it can lead to misunderstandings as the speakers are invisible, their interlocutors see only their words which, as Ware and Kramsch (2005) write bear "the full weight of their historical, ideological, social, and cultural density" (p. 201).

Audio-video-conferencing has rapidly evolved from expensive group-to-group equipment to desktop and, more recently, mobile applications. Researchers have found that whilst video-conferencing can be highly motivating for students participating in telecollaboration, it also places demands on them as they need to be able to become competent in both switching linguistic and semiotic codes, as well as "become fluent in new codes such as online speech and writing *and* image" (Hampel & Hauck, 2006, p. 12).

The mediational role of technology is important and has an impact on interaction as participants orient to and engage with the technical as well as the social layer of interaction (Liddicoat 2011 in Kern 2014). Social networking tools such as Twitter (Lomicka & Lord, 2012), Facebook (Chen, 2013) and others popular in different languages such as *Vkontakte* for Russian, and *Mixi* for Japanese (Pasfield-Neofitou, 2011) have begun to be explored in telecollaboration studies. Several researchers have looked at the opportunities they offer for what has been described as 'intercultural communication in the wild' (Thorne, 2010: 144), that is, not with language learners in partner classes but rather with members of online environments such as news discussion forums, or online gaming communities. Research reports on the motivational aspects of this form of telecollaboration and the extended periods of language use it can entail as learners negotiate new roles and identities, shifting from second language (L2) learners to L2 users. Learners can overcome what may be seen as limitations of low proficiency by using the multiple affordances for meaning making in order to create and maintain genuine communication with distant peers (Thorne, Black & Sykes, 2009; Thorne, Cornillie & Piet, 2012).

#### **Tasks and Assessment**

Telecollaboration projects generally adopt a task-based approach and research has looked into types of tasks which foster negotiation of meaning and form (Blake, 2000), and also how tasks can and should integrate the development of language, intercultural competence, and online literacies (Helm & Guth, 2010). O'Dowd and Ware (2009) identified three main categories of tasks that blended intercultural telecollaboration projects have used. First of all Information Exchange, whereby students provide information for one another. Comparison and Analysis tasks go a step further and require participants to make comparisons or critical analyses of cultural products (such as books, films, newspaper articles) from both cultures. Finally, Collaboration and Product Creation tasks, which are deemed the most demanding but the least often used tasks (Harris, 2002; Helm & Guth, 2010). Examples of these tasks are joint production of an essay, a presentation, a webpage, a translation or a cultural adaptation of a text. In O'Dowd and Ware's (2009) study, the teachers who were new to telecollaboration selected the first two types of tasks which required lesser degrees of collaboration and organization.

Assessment of learners' telecollaborative activity and development is a complex, yet fundamental issue that has not been addressed much in the literature (Lamy & Hampel, 2007). O'Dowd (2010) identified some of the challenges educators face in assessing the multiple aims of telecollaboration. These include ethical issues of assessing the attitudinal component of intercultural competence, the calibration of intercultural skills and literacies into levels and the need to find testing procedures which take into account the new skills and the new contexts in which students are learning (Levy & Stockwell, 2006).

### **Challenges of Telecollaboration**

As Lamy and Goodfellow (2010) point out, telecollaboration researchers have been ready to identify difficulties, tension and failure in telecollaboration projects, which have been attributed to a wide range of factors. From a review of the telecollaboration literature, O'Dowd and Ritter (2006) identified four levels at which factors can contribute to 'failed communication': the individual, classroom, socio-institutional and interaction. They do argue, however, that it is usually a combination of interconnected factors that lead to failure. In their inventory, the individual level regards learners' level of intercultural communicative competence, their knowledge, their motivations, and their expectations. Also included on this level are the stereotypes that participants may bring with them to an exchange. On a class level, there are other factors involved, such as the teacher-to-teacher relationship, the task design, the matching of learners, and the local group dynamics. According to O'Dowd and Ritter, the level that has received the most attention in the research is the socio-institutional level. This includes the mediating technologies and their design, the general organization of the students' courses of study including differences in timetables, contact hours, workload and assessment, or recognition of student participation in telecollaboration activity. However, it is not simply a question of whether students are assessed or not, but also as Belz (2001) reports, differences in the value placed on the languages studied by participants, as well as "culturally determined classroom scripts" (p. 213) such as working and interacting in order to be awarded grades.

On an interactional level O'Dowd and Ritter identify cultural differences in communication styles and behaviours, such as different attitudes to directness, non-verbal communication, use of humour, and irony. Also on the interactional level is the cultures-of-use of particular tools which can lead to divergent communicative expectations and cause a breakdown in communication (Thorne, 2003). Perhaps the greatest challenge on an interactional level though is getting students to engage in deeper levels of interaction (Belz 2001, 2003; Kramsch & Thorne, 2002; O'Dowd, 2003; Ware & Kramsch, 2005; Helm, 2013) where they move beyond the 'assumption of similarity' and manage to take an intercultural stance (Ware 2005; Ware & Kramsch, 2005). As Ware (2005) reports in her study, to avert miscommunication, students can often avoid deep engagement which, as she reports "while potentially helpful for saving face, can lead to "missed" communication, or missed opportunities for approximating the kind of rich, meaningful intercultural learning that instructors often intend with telecollaborative projects" (p. 66).

# **RESEARCH QUESTIONS**

The aim of this study was to provide a picture of the current "state of the art" in telecollaboration at European universities and to explore teacher and student attitudes towards the practice. The research questions we seek to answer in this paper are:

- 1. What kind of educators engage in telecollaboration?
- 2. What types of telecollaborative practices are European university educators undertaking?
- 3. What are the views of educators and students regarding the value and learning outcomes of telecollaboration?
- 4. What barriers do practitioners encounter or envisage in setting up online intercultural exchanges?

# METHODOLOGY

Three different questionnaires were developed. The first was aimed at university educators in European institutions who had carried out telecollaboration projects in order to find out about their experience and opinions regarding online exchange. As we were interested in exploring what these European educators *perceived* to be the barriers to their undertaking of a telecollaboration project the second survey addressed those who had not yet carried out telecollaboration though were aware of and interested in the activity. The third was designed mainly to identify student attitudes toward telecollaboration. All three surveys,

which were translated from English into three languages—French, German, and Italian—were developed through a process of pre-piloting and piloting. Initial drafts of the different surveys were drawn up by three project members: the author of this paper, Sarah Guth from the University of Padova, and Robert O'Dowd, from the University of León in Spain and co-ordinator of the INTENT project (Integrating Telecollaborative NeTworks in University Foreign Language Education). These survey drafts were reviewed by the rest of the INTENT team, online versions were created, piloted, and then further reviewed.

This paper is based mainly on the quantitative data using descriptive statistics, in addition to a small amount of qualitative data. The answers to the open-ended questions regarding the barriers to telecollaboration were imported into NVivo (QSRInternational, 2013) and coded for recurring themes and patterns. The researchers carefully read each response and assigned it to one or more codes (see Table 8). In the few instances where answers were not clear, interpretation was resolved through discussion with the project team.

### Respondents

A total of 286 university educators from 142 institutions responded to the survey but only 210 respondents were taken into consideration for this report, since 60 questionnaires were incomplete and 16 came from outside the European Union (EU). Of these, 102 were teachers with experience of online intercultural exchange (OIE) and 108 were teachers with no direct experience of OIE. 131 students responded to the survey in full.

Responses were received from educators in 23 different European countries, which indicates a broad geographic distribution of respondents. The most represented countries were France, Germany, Italy, Spain, Poland, the UK, and Cyprus. One quarter of these educators were male, and three quarters were female. Most respondents were foreign language educators, and the majority taught English, followed by French, German, Spanish, Italian, and Chinese. Many respondents taught students from more than one domain of study. Over half taught students majoring in foreign languages, however many respondents taught students in Social Sciences, Humanities, and to a lesser extent, students majoring in Science & Technology or clinical and para-clinical subjects. About a quarter of respondents taught students who were training to become foreign language teachers.

# FINDINGS AND DISCUSSION

#### A Profile of the Telecollaborative Teacher

Most of the survey respondents with experience of telecollaboration were teachers of the most commonly taught languages in Europe (see Table 1) (European Commission, 2012) and/or trainers of future foreign language teachers. They generally attend conferences, read academic publications, and have a strong network of international contacts through which they find partners and support for their activity.

	Experienced telecollaborators	Not experienced
English	42%	54%
French	18%	17%
German	11%	8%
Spanish	7%	6%
Italian	4%	5%
Other (please specify)	Catalan, Chinese (5), Dutch, Hungarian, Polish, Portuguese	Catalan (2), Chinese, Czech, Dutch, Polish (3), Portuguese (3)

Note: Numbers indicated under 'other' are number of respondents.

Telecollaboration was not generally a unique experience, but rather an activity they have engaged in repeatedly, possibly also during their education and/or training (see Table 2). It would thus appear that once educators have carried out a telecollaboration exchange they are likely to continue, since most of the survey respondents (72%) had carried out more than one telecollaboration exchange in the last five years.

Table 2. Survey Question: "How many exchanges have you set up in the past 5 years?"

1	28%
2	21%
3	15%
4	8%
5 or more	28%

Having experienced telecollaboration themselves, was the most widely reported stimulus for them to engage students in this activity (cited by 30% of respondents), as can be seen in Table 3. This reflects the importance of including telecollaboration in teacher training programmes and also of supporting teachers in embarking on their first exchange. Other stimuli for embarking on telecollaboration were through colleagues' recommending telecollaboration (27%), attending presentations/workshops (25%), or reading about it in academic publications (23%). Additional responses included involvement for research purposes, through involvement in an EU or other kind of project, through invitation to be an exchange partner, to meet a teaching need and, as one respondent remarked, "just because it made sense".

Table 3. Survey Question: "Please explain where you got the idea to do an online exchange"

I read about it in academic publication.	23%
I read about it in a website.	14%
A colleague recommended it to me.	27%
I attended a presentation or workshop about it.	25%
I had done language exchange activities myself.	30%
Other (please specify) research, part of EU project, invitation, meet teaching sense	ng need, made

# **Established and Emerging Practices**

The pedagogic aim of telecollaboration projects (see Table 4) indicated by most respondents was the development of students' intercultural awareness and communication skills (83%), followed by development of students' foreign language competence (73%), and then by students' ability to communicate and collaborate with others online (70%). This may, in part, be due the opportunity it offers for intercultural contact and authentic communication that educators see as distinguishing Online Intercultural Exchange from "traditional" foreign language classroom practice.

 Table 4. Survey Question: "Please describe briefly what pedagogical aims you usually have when doing exchanges"

Development of students' foreign language competence	73%
Development of students' intercultural awareness and communication skills	83%

Development of students' ability to communicate and collaborate with others online	70%
Learn more about their subject area in other countries	
Other (please specify) <i>Teaching competence, autonomy, work experience, multiple academic competences, diversity</i>	

The most common type of exchange would seem to be a bilateral, bilingual, bicultural exchange lasting more or less one semester, thus corresponding to the more established models described in the literature review (see Figure 1). The most common exchange languages were English (63%), followed by French (35%), German (24%), Spanish (19%), Italian (13%), and Chinese (5%). Exchange partners were usually classes of students who were studying a foreign language, though not necessarily as a major, and both classes thus interacted mainly with native speakers of their target language.

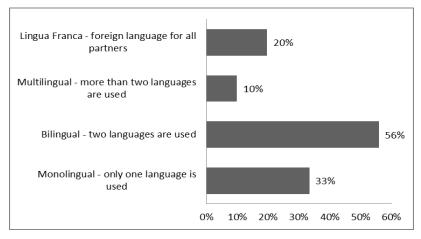


Figure 1. Type of exchange(s) in terms of language configuration

Partners were not necessarily in European countries; indeed often they were outside Europe. The US, proved to be the most common exchange partner country (indicated by one third of respondents, whilst the UK was indicated by about one fifth), but respondents also indicated many other countries outside Europe (see Figure 2). There are certain geographic regions, however, where no respondents had partners, for example most African countries and also a lot of Asian countries. This is probably due to both issues of language and accessibility in these areas.



Figure 2. Map of OIE partner countries based on respondents' answers.

The survey also provided widespread evidence of the emerging models that were reported in the literature review. Twenty-five per cent of experienced educators reported that their students were training to become foreign language teachers, thus exchanges are increasingly part of teacher training programmes. Many of these were monolingual exchanges, and partly account for the considerable number of monolingual exchanges reported in the survey (33%). It would appear that a need has been recognized to help teacher trainees "connect-the-dots' between theory and practice by gradually immersing them in more and more complex online learning interactions by promoting both 'doing' and 'reflecting on doing'" (Dooly & Sadler, 2013, p. 7).

Findings also confirm the emergence of lingua franca exchanges (20%), and to a lesser extent multilingual exchanges (10%). There is some overlap in the answers as respondents could indicate more than one option, and they could also provide additional information. Two respondents indicated that their English as a lingua franca (ELF) exchanges also included other languages on an ad hoc basis. Nearly one third of the lingua franca exchanges reported involved more than 2 partners, confirming a connection between the use of a lingua franca and multilateral projects, as suggested by Lewis et al. (2011) and also perhaps a response to the growing interest in ELF—a rejection of the native speaker of English as the unattainable, ideal standard (Jenkins, 2007)—and/or a recognition of the "privilege of the nonnative speaker" (Kramsch, 1997, p. 359).

A number of exchanges reported involved less commonly taught languages (LCTLs) such as Chinese, Polish, Hungarian, Portuguese, Greek, Turkish, and Dutch. Apart from the opportunities offered by telecollaboration for authentic communication and development of intercultural knowledge and understanding, telecollaboration can be particularly useful for LCTLs for which there are much fewer teaching materials and resources than for English or the more commonly taught languages (Godwin-Jones, 2013).

A further interesting result was the considerable number of multilateral projects (see Table 5). Whilst bilateral exchanges were the majority, the number of respondents who reported having more than one partner is perhaps surprising, particularly if we consider the complex organization that a multilateral exchange requires. Fifteen per cent of respondents reported having two university partners and 14% had three. Six per cent reported usually having four partners while 5% indicated five or more. Responses to open-ended questions and the follow up case studies carried out indicate emerging models and broader networks, such as the Transatlantic translation project and the Soliya Connect Programme (Helm, Guth, & Farrah, 2012).

1	58%	
2	15%	
3	14%	
4	6%	
5 or more	5%	

Table 5. Survey Question: "Apart from your own university, how many other universities or other groups	
are usually involved in your exchanges?"	

#### Technologies

Respondents had the possibility of indicating more than one option in response to the question regarding tools, and Figure 3 clearly reflects the fact that most respondents reported using more than one tool. Asynchronous communication tools such as email, discussion forums, and virtual learning environments, which were among the first tools to be used in telecollaboration, are still the most commonly used tools despite the fact that many other means of online communication have appeared on the horizon since the

emergence of telecollaboration (see Figure 3). Asynchronous Web 2.0 tools such as wikis and blogs have also been adopted quite widely. The student responses were very similar to those of the educators.

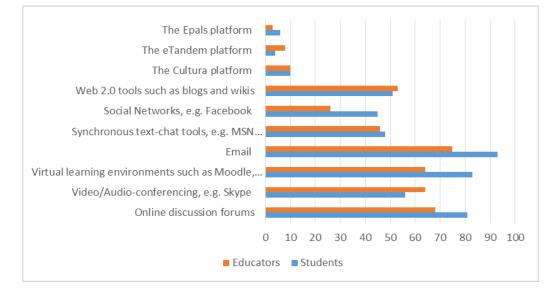


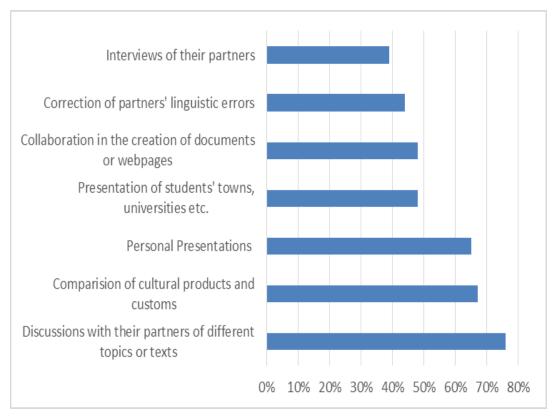
Figure 3. Tools that educators and students reported using in their exchanges 'several times'.

Audio/video conferencing was the most popular synchronous tool reported and seems to have been embraced in telecollaboration. This may be surprising if we consider the challenges and cognitive demands that meaning making in multimodal environments has been found to place on learners (Hampel & Hauck, 2006). Certainly these tools offer opportunities for developing oral skills, which, until such technological developments, could only be addressed through group-to-group video conferencing.

Social networks, on the other hand, were indicated by only one quarter of experienced telecollaborators. This is the one tool in which students reported considerably higher use than educators. It was not clear from the survey, however, whether they had used social networks for telecollaboration "in the wild" or for communication between closed groups of learners. The slower uptake of social networks by teachers may indicate some reticence amongst educators for adopting social networks in their exchanges. For both learners and educators the relationship between formal and informal learning is complex: factors at individual, socio-institutional, as well as on an ideological level are at play (Lamy & Goodfellow, 2010). The use of social networks for telecollaboration is no doubt an important direction for future research.

# **Tasks and Assessment**

As displayed in Figure 4, the tasks most educators reported they have their learners engage in were: discussion of topics or texts (76%), comparison of cultural products and customs (67%), and personal presentations (65%). Collaboration in the creation of products, such as web pages or documents, is a slightly less common activity (48%), reflecting, to some extent, what was found in the literature review, that tasks which require collaboration in product creation are less commonly used than those requiring only information exchange and/or cultural comparison. This is likely because of the greater time required for the coordination of collaborative activities, though these are the ones which Harris (2002) argues, facilitate higher-level thinking and interaction, and which offer participants the many benefits from having to understand and incorporate procedures and perspectives which are different from their own. There is thus a need to support educators in establishing the conditions which facilitate them in integrating collaboration in their online tasks. Correction of partners' errors was an activity that 44%—less than half of respondents—engaged in, perhaps reflecting the predominantly intercultural rather than linguistic focus in their exchanges.



*Figure 4.* What types of tasks or activities do your students usually carry out during their online exchanges?

As regards evaluation of student learning, 64% of respondents indicated that they assessed their students' activities in online exchange in some way. Of those who did, more respondents said they assessed their students' intercultural communicative competence and ability to communicate online than their foreign language fluency or linguistic correctness, reflecting the multiple objectives these same educators reported for their exchanges (see Table 6).

 Table 6: Survey Question: "Please indicate what aspects of student learning you usually assess in your exchanges"

Linguistic correctness (grammar, vocabulary etc.)	25%
Foreign language fluency	29%
Aspects of Intercultural communicative competence	40%
Ability to communicate online	33%
Other (please specify)	

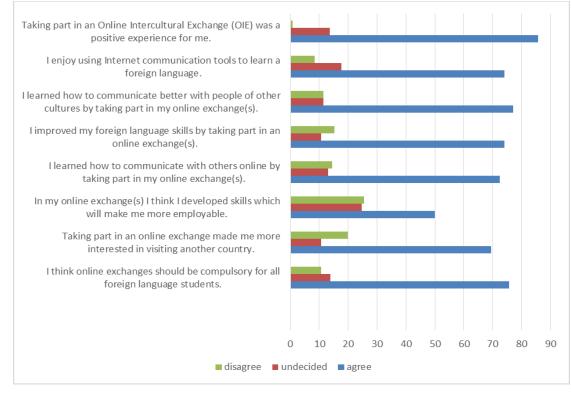
The main methods used for assessment (see Table 7) were essays or reflections on exchanges and the content of students' interactions (44% and 43% respectively). Only 22% reported using student portfolios. Several respondents reported assessing products developed through the exchange, such as translations, webpages, learning journals, self-assessments, and structured reports, but this is a minority and corroborates the finding that fewer educators engage students in tasks involving collaboration in product creation. Overall, it appears that progress is gradually being made towards assessment, recognition, and integration of telecollaboration in university foreign language courses.

Evaluating students' portfolios	22%
Evaluating the content of students' online interaction	43%
Evaluating students' essays or presentations reflecting on their exchanges	44%

Table 7: Survey Question: "Please indicate how you usually assess student learning in your exchanges."

#### Student and Educator Beliefs about Value and Outcomes of Telecollaboration

Ninety-three per cent of educators surveyed, both with and without telecollaboration experience expressed overwhelmingly positive attitudes towards telecollaboration. Many educators with experience (72%) indicated that they believe their students find it relevant and important for their learning, they believe students develop their foreign language skills (54%), their ability to communicate effectively online (63%) and above all their intercultural awareness (75%). It is interesting to compare these beliefs with what students reported. They too find it a generally positive experience (86%) and enjoy using ICT to learn a foreign language (see Figure 5). More students had positive beliefs about improving their intercultural communication skills, foreign language and online communication skills than educators with experience of telecollaboration. Only 50% of students, however, reported they had developed skills which would make them employable. This is surprising if we consider that the oft-cited 21<sup>st</sup> century skills are seen to include communication, collaboration, and information literacy (see for instance Zhao, 2009).



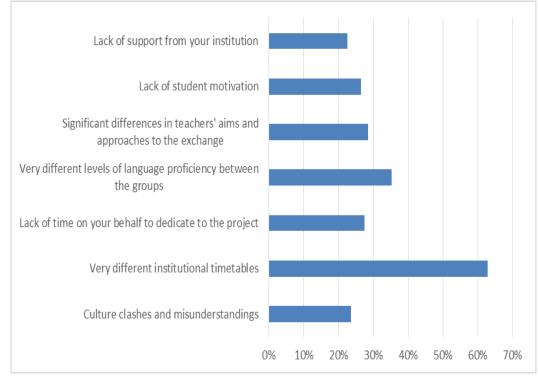
*Figure 5*. Student beliefs about value and outcomes of telecollaboration.

Though no survey respondents reported actually carrying out pre-mobility exchanges, ninety-one per cent of experienced educators believe that online exchanges can support physical mobility while the number of inexperienced educators reporting the same was 2% greater: 93%,. As to whether telecollaboration was considered a valid alternative to physical mobility, there was less agreement. Clearly, a virtual exchange is quite different from a study period abroad, yet many proponents would argue that it has the potential of

offering students a powerful intercultural experience with students in different parts of the world (Exchange 2.0). Educators with experience (63%) were more inclined to see virtual exchange as a valid alternative to physical mobility than those without experience (46%), and also to more likely to believe that a true intercultural experience does not necessarily require face-to-face contact (48% versus 36%), though there is less certainty about this. Students were not asked the same questions about physical mobility, but one important finding is that students believed that their experiences with telecollaboration made them more interested in visiting another country. Over 70% of students thought online exchanges should be compulsory for all foreign language students. This figure is much higher than for teachers, with only 57% of experienced telecollaborators agreeing that it should be compulsory and 54% of those without experience.

# **Challenges and Issues**

The survey results also revealed several challenges and issues in the practice of telecollaboration. The main challenges educators could choose from had been identified in the literature and covered issues at all 4 levels identified by O'Dowd and Ritter (2006): individual, class, socio-institutional, and interactional.



*Figure 6.* Survey Question: "What types of problems (if any) have you had when organizing or running your online exchanges?"

Organizational issues on the class and socio-institutional levels were the most common options (see Figure 6), with "very different institutional timetables" being the most commonly indicated problem (63%), and to a lesser extent "very different levels of language proficiency between the groups" (35%) and also differences in teachers' aims and approaches to the exchange (28%). These responses are corroborated by the levels of agreement given to statements regarding their experience of OIE on some of these same issues (see Table 8) where over half of respondents agreed with the statements that "OIEs have been difficult to organize" (56%) and that "collaborating with partner-teachers is challenging". Lack of support from their institution was a problem reported by 23% of respondents. These results provide large-scale confirmation of what the many single studies in the literature have found.

On the individual teacher level, 84% of respondents agreed with the statement that "OIEs have been time consuming", but *lack* of time to dedicate to the project was only reported to be a problem by 27% of respondents. This perhaps reflects that though time is a major issue, most respondents managed to find time to dedicate to this activity. Sixty-nine per cent of students also reported that the online exchange took a lot of time, though it was overall a positive experience. Twenty-six per cent of educators perceived that lack of student motivation presented a problem in running their exchange, and in the open responses, some also indicated that they believed students had different expectations. Technical support was seen as an issue, particularly for educators who did not have experience of telecollaboration.

Table 8. Survey Question: "The following are statements about your experience of Online Intercultural Exchange. Choose from 1 (fully agree) to 5 (fully disagree) to indicate your level of agreement with them In my experience..."

	Agree	Neither agree nor disagree	Disagree
OIEs have been difficult to organise.	56%	26%	18%
OIEs have been time-consuming.	84%	9%	7%
collaborating with partner-teachers is challenging.	56%	26%	18%
my OIE projects have been superficial and have not led to significant learning outcomes.	6%	21%	73%
my OIEs have led to the reinforcement of stereotypes.	5%	26%	69%
I have encouraged students to discuss 'sensitive' topics (eg. religion, racism, terrorism).	47%	25%	28%
I have chosen topics for discussion that help to avoid any sort of disagreement or conflict of opinion.		15%	61%

On an interactional level, we found that 'culture clashes and misunderstandings' were indicated as a problem only by 24% of respondents. Most educators disagreed with the statement that their exchanges had led to the reinforcement of stereotypes (69%), though a quarter were undecided, and they also disagreed with the statement that their projects had been superficial and had not led to significant learning outcomes (73%). The survey did not specifically ask what kind of topics were discussed, but it did explore whether teachers chose topics which would avoid disagreement or conflict of opinion and also whether they encouraged students to discuss 'sensitive' topics, such as racism, religion, and terrorism. These survey items were written in an attempt to explore whether educators sought to avoid the risk of their students' entering in conflicts and thus kept them on 'safe' topics. The responses to these items were more varied than for most other items in the survey. Almost a quarter of educators chose topics that would help to avoid disagreement, and 15% were undecided on this issue. As for encouraging students to discuss sensitive topics, only 47% of educators agreed with this and 25% neither agreed nor disagreed.

Scholars (Kramsch & Ware, 2005; Phipps & Levine, 2010; Schneider & von der Emde, 2006) have recently recognized that if more in-depth intercultural understanding is to be achieved in educational contexts, then a more dialogic approach needs to be adopted. This would allow potentially sensitive issues to be addressed and tensions to be recognized as an inevitable part of intercultural dialogue. In their views, tensions can be seen as transformative agents, rather than as something to be avoided but this cannot be done by avoiding uncomfortable issues nor by ignoring power inequalities. This recalls Train's question regarding the extent to which telecollaborative pedagogies participate in or work against powerful ideology (2006).

# **Open-ended Questions**

Responses to the open question regarding perceived barriers to the integration of telecollaboration in European universities confirmed the responses to some of the closed questions on similar issues both for those with experience of telecollaboration and those without (see Table 9). The greatest barrier perceived by experienced telecollaborators was time, whereas for those without experience, technology issues appeared to be the greatest concern. The other principle barriers considered by those with experience were a lack of recognition, technical as well as organizational issues.

Е	NE	Codes for Barriers	Example responses
39	20	Time issues	Finding the appropriate amount of time to dedicate to an exchange
21	17	Lack of institutional interest, recognition and/or funding	Funding and support from my management. No one sees the value
24	44	Tech issues including access, teacher eliteracies	l'acces à l'internet serait plus lent et difficile Because of lack of computer expertise
16	10	Organization, size of student groups	Can be difficult to set up and maintain. size of student groups can be challenging to manage and connect with relevant partners
16	5	Too much of a novelty and/or need for pedagogic training	Because it is new, scary. Besoin de formation des enseignants dans la télécollaboration
12	4	Requires dedicated staff	Second, the idea sounds interesting, but the teachers involved need to dedicate much time and energy to the exchange, so finally they won't do it.
6	0	Assessment and awarding of credits difficult	Do not lead to the kind of conventional learning that is easily measurable at university level.
5	13	Difficult to find partners	Obtaining a partner group for the exchange
4	4	Relationship with partner	It can be really time consuming and sometimes maintaining relationships can be difficult.
3	22	Lack of student time, motivation and/or language competence	The main problem would be the initial motivation to get learners involved, particularly as classroom time is tight and much of what they might do would be done out of hours.
0	10	Institutional constraints	Fitting into the content module specifications

Table 9. Categories of Responses to Open Questions Regarding Perceived Barriers to Telecollaboration

Note: Responses from experienced telecollaboration practitioners (E) and from teachers without experience of telecollaboration (NE)

It is interesting that several respondents reported that telecollaboration is something new and unknown, and that it requires dedicated staff keen to promote this activity. These were not such a concern for those without experience. Assessment and the awarding of credits are issues mentioned only by experienced telecollaborators, whilst lack of student motivation, institutional constraints, and students' language level are issues mentioned only by teachers with no experience. There are, thus, some divergences in the perceptions of these two groups, yet all need to be addressed if telecollaboration is to become mainstreamed.

# LIMITATIONS

The study presents several limitations. First of all, there were issues in terms of representativeness, as it was not possible to address every foreign language educator in the European higher education area. The geographic scope of respondents was beyond our expectations, but though, we had respondents from most European countries, these were not balanced. Clearly, the project members' geographic locations and their networks led to greater responses from some countries in particular. In regards to the survey tools themselves, though they were piloted and reviewed, the wording of some of the survey questions left them open for interpretation and may have revealed the assumptions of the authors, as some of the responses indicated. Also, the different wording of questions and statements in the different versions, though necessary, may also have contributed to differing interpretations of the issues. The translation of the questionnaires may also have led to slight differences between the versions. Finally, this is a survey study; hence it does not address any of the issues in depth. The aim was rather to provide a broad overview, which we felt was missing from the field of telecollaboration.

# CONCLUSIONS

This survey study has attempted to contribute to a broader understanding of telecollaboration practices in higher education in Europe in terms of the types of activities engaged in, the emergence of new models and practices, the perceived value and learning outcomes as well as shared challenges. This kind of understanding is important in allowing us to define common strategies to support educators in the practice of telecollaboration and to achieve greater integration within university curricula. It also allows us to suggest avenues for future research.

We need further work to be carried out that measures the impact of telecollaboration beyond individual, in-depth studies and outside of educator and student beliefs, yet the field of virtual exchange needs tools to measure impact to evaluate the effectiveness of projects. This need has been recognized in the eTwinning impact study (Education for change, 2013) and also in the US with the work of the Exchange 2.0 coalition, who are collaborating with the Saxelab at MIT to develop tools which will seek to do this. Being able to measure the impact of online intercultural exchange will no doubt contribute to improving the quality of exchanges, and to making it easier to harness political and financial support for the field.

The increase in 'lingua franca' exchanges marks an interesting move away from the native speaker ideology, which has been criticized by many researchers in the fields of language learning, English as a Lingua Franca (ELF) and sociolinguistics (i.e. Canagarajah, 2007; Jenkins, 2006, 2007; Kramsch, 1997; Pennycook, 2007; Rampton, 1990; Widdowson 1994). However, given that most of the lingua franca exchanges reported involved the English language, does this represent a challenge to Train's NSL or does this move represent a move away from the promotion of plurilingualism and diversity towards even greater hegemony of English? This is an important avenue for future research. Other rich areas for future research are tensions in telecollaboration interaction, how they are or could be addressed to transform learning and take it to deeper levels. Another important issue is the way participants interact both with and through the mediating technologies (Kern, 2014) and how technology mediates language use, communication, cultural expression, and social meanings on a variety of levels.

At an individual teacher level, the greatest barriers appear to be time, institutional constraints (which can mean different timetables), assessment requirements as well as a need for training and support. The emergence of telecollaboration within teacher training programmes is beginning to address the latter, which will likely contribute significantly to greater adoption of OIE. It is also hoped that the UNICollaboration platform and the tools it offers will provide support for educators both in the setting up of exchanges (as well as through its database of tasks) and task sequences for exchange projects in different languages, assessment tools, and training activities.

Finally, it appears that we are spending a lot of time 'reinventing the wheel' as it were, designing

exchange projects for specific classes, and negotiating objectives, tasks, and processes for each new project. Whilst there will always be educators who need and want to build exchanges according to specific needs and interests, participants and contexts, there is also scope for more 'pre-packaged' telecollaboration projects with a more or less fixed curriculum, duration, assessment tools, and even facilitators for specific target groups and contexts. These projects could be designed and implemented by consortia of educational institutions across geographic borders, as in the Trans-Atlantic & Pacific Translations project or could be designed and run by external virtual exchange providers, who would collaborate with universities in designing and running a virtual exchange model at tertiary level, as does, for instance, Soliya or the Sharing Perspectives Foundation. Having a well-established syllabus and project is one way of relieving educators of some of the time burden that the organization of telecollaboration projects imposes, and would also facilitate integration into curricula and recognition with credits. Research needs to be carried out on the development, piloting, and evaluation of sustainable models of telecollaboration which will allow more students and educators to engage in this practice.

Country	Number of respondents	
Austria	2	
Belgium	2	
Switzerland	3	
Cyprus	16	
Czech Republic	1	
Germany	32	
Spain	20	
Finland	2	
France	43	
Greece	2	
Hungary	3	
Ireland	5	
Italy	24	
Lithuania	8	
Latvia	1	
Netherlands	3	
Norway	1	
Poland	17	
Portugal	6	
Romania	1	
Sweden	2	
Slovenia	1	
United Kingdom	15	

#### **APPENDIX.** Countries where survey respondents reported they were working

### ACKNOWLEDGEMENTS

The survey study was part of the INTENT (Integrating Telecollaborative Networks into Foreign Language Higher Education) project. The INTENT project and the UNICollaboration platform were co-funded by the European Commission's Lifelong Learning Programme. However, the views reflected in this article are the author's alone and the Commission cannot be held responsible for any use which may be made of the information contained therein.

The survey was developed and analyzed together with Sarah Guth and Robert O'Dowd. The whole project team was involved in piloting and dissemination. A full report of the survey study is available here (http://intent-project.eu/sites/default/files/Telecollaboration\_report\_Final\_Oct2012.pdf). Along with the project team, the author would like to thank the LLT reviewers for their insightful comments on previous versions of this paper.

# **ABOUT THE AUTHOR**

Francesca Helm is an English language teacher and researcher at the University of Padova in Italy. Her research interests lie in computer-mediated collaboration, telecollaboration, intercultural dialogue, critical approaches to technology and learning, as well as 'internationalization' in higher education.

E-mail: francesca.helm@unipd.it

# REFERENCES

Belz, J. A. (2001). Institutional and individual dimensions of transatlantic group work in network-based language teaching. *ReCALL*, *13*(2), 213–231.

Belz, J. A. (2003). From the special editor. *Language Learning & Technology*, 7(2), 2–5. Retrieved from http://llt.msu.edu/vol7num2/pdf/speced.pdf

Belz, J. A., & Thorne, S. L. (2006). *Internet-mediated intercultural foreign language education*. Boston MA: Thomson Heinle.

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

Bower, J., & Kawaguchi, S. (2011). Negotiation of meaning and corrective feedback in Japanese/English eTandem. *Language Learning & Technology*, *15*(1), 41–71. Retrieved from http://llt.msu.edu/issues/february2011/bowerkawaguchi.pdf

Canagarajah, A. S. (2007). Lingua Franca English, multilingual communities and language acquisition. *The Modern Language Journal 91*(S1), 923–939.

Chen, H. I. (2013). Identity practices of multilingual writers in social networking spaces. *Language Learning & Technology*, *17*(2), 143–170. Retrieved from http://llt.msu.edu/issues/june2013/chen.pdf

Council of Europe (2008). *White paper on intercultural dialogue*. Retrieved from http://www.coe.int/t/dg4/intercultural/source/white%20paper\_final\_revised\_en.pdf

Dooly, M. (2008). Telecollaborative language learning. Bern, Switzerland: Peter Lang.

Dooly, M. (2010). Teacher 2.0. In F. Helm, & S. Guth (Eds.), *Telecollaboration 2.0: Language, literacies and intercultural learning in the 21st century* (pp. 277–304). Bern, Switzerland: Peter Lang.

Dooly, M., & O'Dowd, R. (Eds.). (2012). Researching online foreign language interaction and exchange:

Theories, methods and challenges. Bern, Switzerland: Peter Lang.

Dooly, M., & Sadler, R. (2013). Filling in the gaps: Linking theory and practice through telecollaboration in teacher education. *ReCALL*, 25(1), 4–29.

Education for Change (2013). *Study of the impact of eTwinning on participating pupils, teachers and schools*. Luxembourg, Luxembourg: Publications Office of the European Union.

European Commission (2012). *Key data on teaching languages at school in Europe – 2012*. Brussels: Eurydice. Retrieved from http://ec.europa.eu/eurostat/documents/3217494/5775673/EC-XA-12-001-EN.PDF/917d3746-886e-456a-8b01-1971013d1cef?version=1.0

Fuchs, C., Hauck, M., & Müller-Hartmann, A. (2012). Promoting learner autonomy through multiliteracy skills development in cross-institutional exchanges. *Language Learning & Technology*, *16*(3), 82–102. Retrieved from http://llt.msu.edu/issues/october2012/fuchsetal.pdf

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

Godwin-Jones, R. (2013). The technological imperative in teaching and learning less commonly taught Languages. *Language Learning & Technology*, *17*(1), 7–19. Retrieved from http://llt.msu.edu/issues/february2013/emerging.pdf

Guarda, M. (2013). *Negotiating a transcultural place in an English as a lingua franca telecollaboration exchange*. Unpublished PhD thesis. Retrieved from http://paduaresearch.cab.unipd.it/5337/1/guarda\_marta\_tesi.pdf

Guichon, N. (2009). Training future language teachers to develop online tutors' competence through reflective analysis. *ReCALL*, 21(2), 166–185.

Guichon, N., & Hauck, M. (2011). Editorial: Teacher education research in CALL and CMC: More in demand than ever. *ReCALL*, 23(Special Issue 3), 187–199.

Guth, S., & Helm, F. (Eds.). (2010). *Telecollaboration 2.0. Language, literacies and intercultural learning in the 21st century*. Bern, Switzerland: Peter Lang.

Guth, S., & Thomas, M. (2010). Telecollaboration with web 2.0 tools. In S. Guth, & F. Helm (Eds.), *Telecollaboration* 2.0 (pp. 39–68). Bern, Switzerland: Peter Lang.

Hampel, R. (2009). Training teachers for the multimedia age: Developing teacher expertise to enhance online learner interaction and collaboration. *Innovation in Language Learning and Teaching*, *3*(1), 35–50.

Hampel, R., & Hauck, M. (2006). Computer-mediated language learning: Making meaning in multimodal virtual learning spaces. *The JALT CALL Journal*, *2*, 3–18.

Harris, J. (2002). Wherefore art thou, telecollaboration? *Learning and Leading with Technology*, 29(6), 55–59.

Helm, F. (2013). A dialogic model for telecollaboration. *Bellaterra Journal of Teaching & Learning Language & Literature*, 6(2), 28–48. Retrieved from http://revistes.uab.cat/jtl3/article/view/522/571

Helm, F., & Guth, S. (2010). The multifarious goals of telecollaboration 2.0: Theoretical and practical implications. In S. Guth & F. Helm (Eds.), *Telecollaboration 2.0: Languages, literacies and intercultural learning in the 21st century* (pp. 69–106). Bern, Switzerland: Peter Lang.

Helm, F., Guth, S., & Farrah, M. (2012). Promoting dialogue or hegemonic practice? Power issues in telecollaboration. *Language Learning & Technology*, *16*(2), 103–127. Retrieved from http://llt.msu.edu/issues/june2012/helmguthfarrah.pdf

Jenkins, J. (2006). Points of view and blind spots: ELF and SLA. *International Journal of Applied Linguistics 16*(2), 137–162.

Jenkins, J. (2007). *English as a Lingua Franca: Attitude and identity*. Oxford, UK: Oxford University Press.

Kern, R. (2014). Technology as pharmakon: The promise and perils of the internet for foreign language education. *The Modern Language Journal*, 98(1), 340–357.

Klimanova, L., & Dembovskaya, S. (2013). L2 identity, discourse and social networking in Russian. *Language Learning & Technology*, *17*(1), 69–88. Retrieved from http://llt.msu.edu/issues/february2013/klimanovadembovskaya.pdf

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

Kramsch, C. (1997). Guest column: The privilege of the nonnative speaker. *Publications of the Modern Language Association of America*, 112(3), 359–369.

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, UK: Routledge.

Lamy, M., & Goodfellow, R. (2010). Telecollaboration and learning 2.0. In S. Guth, & F. Helm (Eds.), *Telecollaboration 2.0: Languages, literacies and intercultural learning in the 21st century* (pp. 107–138). Bern, Switzerland: Peter Lang.

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

Levy, M., & Stockwell, G. (2006). *CALL Dimensions: Options and issues in computer-assisted language learning*. Mahwah, NJ: Lawrence Erlbaum.

Lewis, T., Chanier, T., & Youngs, B. (2011). Special issue commentary: Multilateral online exchanges for language and culture learning. *Language Learning & Technology*, *15*(1), 3–9. Retrieved from http://llt.msu.edu/issues/february2011/commentary.pdf

Lomicka, L. & Lord, G. (2012). A tale of tweets: Analyzing microblogging among language learners. *System 40*(1), 48–63.

O'Dowd, R. (2007). Online intercultural exchange. Clevedon, UK: Multilingual Matters.

O'Dowd, R. (2010). Issues in the assessment of online interaction and exchange. In S. Guth, & F. Helm (Eds.), *Telecollaboration 2.0* (pp. 337–360). Bern, Switzerland: Peter Lang.

O'Dowd, R. (2011). Online foreign language interaction: Moving from the periphery to the core of foreign language education? *Language Teaching*, 44(3), 368–380.

O'Dowd, R. & Ritter, M. (2006) Understanding and working with 'failed communication' in telecollaborative exchanges. *CALICO Journal*, *61*(2) 623–642.

O'Dowd, R., & Ware, P. (2009). Critical issues in telecollaborative task design. *Computer Assisted Language Learning*, 22(2), 173–188.

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

Pasfield-Neofitou, S. (2011). Online domains of language use: Second language learners' experience of virtual experiences of virtual community and foreignness. *Language Learning & Technology*, 15(2), 92–

108. Retrieved from http://llt.msu.edu/issues/june2011/pasfieldneofitou.pdf

Pennycook, A. (2007). Global Englishes and transcultural flows. London, UK: Routledge.

Phipps, A., & Levine, G.S. (2010). What is language pedagogy for? In G. Levine & A. Phipps (Eds.), *Critical and intercultural theory and language pedagogy* (pp.1-14). Boston, MA: Cengage Learning.

Rampton, M. B. H (1990). Displacing the 'native speaker': Expertise, affiliation and inheritance. *ELT Journal* 44(2), 97–101.

Schneider, J., & von der Emde, S. (2006). Conflicts in cyberspace: From communication breakdown to intercultural dialogue in online collaborations. In J. A. Belz & S. L. Thorne (Eds.), *Internet-mediated intercultural foreign language education* (pp. 178–206). Boston, MA: Thomson Heinle.

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

Thorne, S., L. (2010). The 'intercultural turn' and language leaning in the crucible of new media. In S. Guth, & F. Helm (Eds.), *Telecollaboration 2.0: Languages, literacies and intercultural learning in the 21st century* (pp. 139–164). Bern, Switzerland: Peter Lang.

Thorne, S. L., Black, R. W., & Sykes, J. M. (2009). Second language use, socialization, and learning in internet interest communities and online gaming. *The Modern Language Journal*, *93*, 802–821.

Thorne, S. L., Cornillie, F., & Piet, D. (2012). ReCALL special issue: Digital games for language learning: Challenges and opportunities. *ReCALL Journal*, 24(3), 243–256.

Train, R. (2006). A critical look at technologies and ideologies in internet-mediated intercultural foreign language education. In J. A. Belz, & S. L. Thorne (Eds.), *Internet-mediated intercultural foreign language education* (pp. 247–284). Boston, MA: Thomson Heinle.

Tudini, E. (2003). Using native speakers in chat. *Language Learning & Technology*, 7(3), 141–159. Retrieved from http://llt.msu.edu/vol7num3/pdf/tudini.pdf

Vinagre, M., & Munoz, B. (2011). Computer-mediated corrective feedback and language accuracy in telecollaborative exchanges. *Language Learning & Technology*, *15*(1), 72–103. Retrieved from http://llt.msu.edu/issues/february2011/vinagremunoz.pdf

Wang, J., Zou, B., Wang, D., & Xing, M. (2013). Students' perception of a wiki platform and the impact of wiki engagement on intercultural communication. *System*, *41*(2), 245–256.

Ware, P. D. (2005). "Missed" communication in online communication: Tensions in a German-American telecollaboration. *Language Learning & Technology*, 9(2), 64–89. Retrieved from http://llt.msu.edu/vol9num2/pdf/ware.pdf

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

Ware, P., & O'Dowd, R. (2008). Peer feedback on language form in telecollaboration. *Language Learning & Technology*, *12*(1), 43–63. Retrieved from http://llt.msu.edu/vol12num1/pdf/wareodowd.pdf

Widdowson, H. G. (1994). The ownership of English. TESOL Quarterly 28(2), 377-389.

Zhao, Y. (2009). Catching up or leading the way. Alexandria, VA: ASCD.