Chapter 9
Researching Telecollaboration Processes in Foreign Language Education: Challenges and Achievements

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9.1 Introduction

In an increasingly globalized and digitalised society, the integration of ICT, and particularly, computer mediated communication, offer opportunities to innovate and enrich foreign language curricula, while adapting to the specific needs of the twenty-first century students who use digital social media every day to communicate and collaborate with others. Digital social applications may have enormous potential to support innovation in foreign language education, while following social constructivist pedagogies (Vygotsky 1978; Lantolf 2000; Lantolf and Thorne 2006) cooperation, communication and the learner are put in the centre of the learning process. However, research suggests that teachers and students do not use digital applications extensively for pedagogical purposes. Despite the efforts made by some scholars to give a boost to pedagogical digital innovation, the reality proves how difficult it is to introduce changes in traditional educational settings (Howard 2013; Eetmer and Otterbreit-Leftwich 2010).

In this paper we explore how pedagogical innovation can contribute to reshape foreign language education by integrating computer mediated communication, and more specifically telecollaboration to support meaningful foreign language learning processes. We focus on experiences drawn from different European projects at tertiary and secondary educational contexts and discuss implications for further research.

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9.2   Background

As result of the availability of user-friendly internet applications and broadband internet connections at educational institutions, teachers are able to engage their students in interactive online activities and in so doing provide them the opportunity to use the target language in a more meaningful way than in traditional classroom settings.

9.2.1   Computer Mediated Communication

Many research studies have been conducted around computer mediated communication (CMC) in the last decades, trying to find out what the benefits are for second language acquisition (SLA). The initial studies indicated that (a)synchronous[1] written CMC contributes positively to enhance L2 learner's self-confidence in the target language, that they produce more discourse than in the traditional classroom setting (Kelm 1992; Kern 1996) and that this discourse is more coherent (Felix and Lawson 1996) and lexically and syntactically more complex (Warschauer 1996).

Within synchronous CMC, most research has been conducted on communication through text-chat, evidencing that chat sessions are beneficial for enhancing language learning at grammatical (Pellettieri 2000), syntactic (Sotillo 2000), lexical (Smith 2004) and discourse (Warschauer 1996) levels. In addition to text-chat sessions, explorative studies have been conducted in synchronous CMC using different audio(visual) applications, such us, audiographic conferencing (Ciekanski and Chanier 2008; Hampel and Hauck 2004; Hampel et al. 2005; Lamy 2004), voice chats (Develotte et al. 2010), videoconferencing (Kinginger 1998; O'Dowd 2000; Wang 2004, 2006, 2007) or video communication (Guichon 2010; Jauregi 2011). Most of these studies are exploratory and describe experiences as being motivating and contributing to communicative development. However, more substantial research results are needed.

Recently 3D virtual worlds have entered the pedagogical arena of technology enhanced language learning. Virtual worlds for language teaching have been described as a rich space where foreign language learners can engage as avatars in written and oral communication with one another experimenting with a variety of norms of social interaction (Steinkuehler 2006) while undertaking joint action (Deutschmann and Panichi 2009; Peterson 2010). The specific nature of the 3D environment with both realistic and fantasy scenarios provides rich learning conditions that are otherwise difficult to recreate in traditional classroom settings

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[1] Asynchronous CMC refers to interactions with a time lag, such as exchanges on bulletin boards, e-mail, blogs or Wikis. Synchronous CMC refers, in contrast, to interactions in which participants communicate simultaneously, including realtime chats or audio- and video-conferencing (e.g., via Skype, virtual worlds).

(Dieterle and Clarke 2008) and elicits in conjunction with adequate tasks (Jauregi et al. 2011) collaborative interaction, such as peer-scaffolding, hypothesized to be beneficial to language development (Peterson 2012). However, research on virtual worlds remains largely exploratory in nature and is subject to significant limitations (Peterson 2011).

9.2.2 Telecollaboration

Participants in early studies were mostly non-native speakers of an L2, and interacted with each other locally mostly in a computer lab. Most of these exchanges were conducted in large groups and the focus was primarily a linguistic one. With the irruption of social media, however, communication across geographical boundaries has become a reality, and consequently interactions among native and non-native speakers, or even interactions in lingua franca among non-native speakers with different cultural backgrounds, can be easily organised as online intercultural exchanges.

In this sense we are experiencing a shift both in foreign language pedagogy as well as in CMC research, away from a focus on pure linguistic communicative competence towards embracing the intercultural stance. Thorne (2010) refers to this shift in focus as the "Intercultural turn" in language education and research. This move might well be the result of the dynamic development that is taking place at the society of the twenty-first century, which is largely characterized by globalisation driven by technology and internationalisation in all societal sectors (politics, economics, education, research and culture). Nowadays people view themselves increasingly as 'global' and 'cosmopolitan' citizens who move continuously either physical or digitally across traditional borders meeting people from other cultures (Byram 2012). These developments stress the importance of developing a specific competence to be able to successfully manage cross-cultural encounters with the *Other* (Thije and Maier 2012).

When learning a foreign language it is not sufficient to only acquire knowledge of grammar, but most importantly, attention must be paid to socially and culturally adequate use of the target language (Savignon 2004). Byram (1997) differentiates between communicative and intercultural competence in his *Intercultural Communicative Competence* approach to foreign language education; communicative competence constituting basically information exchange, while intercultural competence lays emphasis on the ability to *decentre* and take up the perspective of the other, as well as to establish and maintain relationships with speakers with a different cultural background (Byram 1997: 3). By adopting an intercultural dimension in foreign language teaching, language students will learn to raise their awareness of the role that culture (Kramsch 1991, 1993; Hinkel 2006) plays in communication, they will learn to interact with speakers of other languages on equal terms, to be aware of their own identities and those of their interlocutors and

to develop rapport with speakers of a different cultural background (Byram et al. 2002; Möllerig and Levy 2012).

The modern technologies offer an excellent opportunity to bring the intercultural component into language teaching to the foreground and to expand the teaching context over the physical borders by allowing students to carry out projects with peers abroad. Such projects are known as telecollaboration (O'Dowd 2006, 2007; Guth and Helm 2010), which have been defined as: "internet-based intercultural exchange between groups of learners of different cultural/national backgrounds set up in an institutional blended-learning context with the aim of developing both language skills and intercultural communicative competence" (Guth and Helm 2012: 42).

In these intercultural encounters students share views about their cultures with students from a different culture. They experience and reflect upon intercultural issues that emerge during the online exchanges, hence obtaining a better understanding of their own and others' cultural visions. Therefore, students become more aware of themselves, their cultural identity and their worldview (Meei Ling 2006).

Research studies on telecollaboration show that participation in task-based intercultural exchanges can foster the development of language learners' linguistic, pragmatic, and intercultural communicative competence (Basharina 2007, 2009; Belz 2001, 2002, 2003, 2005; Belz and Thorne 2006; Bueno Alustey 2011; Darhower 2002, 2007, 2008; Dooly and Sadler 2013; Guth and Maio 2010; Jauregi and Bañados 2008, 2010; Jin 2013; Kramsch and Thorne 2002; Lee 2001, 2004, 2007, 2009, 2011, 2012; Liauw 2006; Thorne 2006; Tudini 2007; Ware and Kramsch 2005). However, contact alone is not sufficient for students to develop intercultural competences (O'Dowd 2011), reflection and critical awareness have to be stimulated around rich points (Agar 1994).

Organising telecollaboration projects can be quite complex (O'Dowd and Ritter 2006). Problems and misunderstanding (Ware 2005) can arise at individual, classroom and/or socioinstitutional levels. Hindrances can emerge due to insufficient technological availability, accessibility and network robustness, differing pedagogical views and intercultural competence levels of those engaged in telecollaboration partnerships, mismatching communication styles and project expectations and uneven prestige of the target language (see Fig. 9.1).

Organisational burden increases when synchronous communication applications are been used in telecollaboration projects, as sessions have to be planned at the same time.
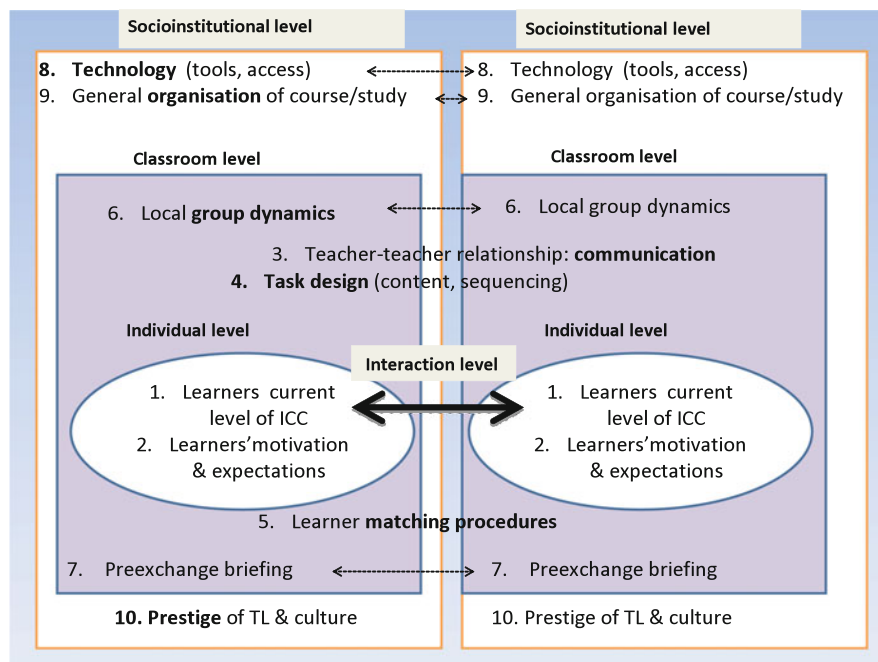
Fig. 9.1 Difficulties in the organisation of telecollaborative projects (Based on O'Dowd and Ritter 2006)

9.3 Networked Interaction in Foreign Language Acquisition and Research

The European project NIFLAR (Networked Interaction Foreign Language Acquisition and Research) originated from the need to innovate foreign language education and make foreign language learning processes more meaningful, motivating and effective using two innovative digital environments that enable oral synchronous interaction: *Second Life*, a well-known 3D virtual world, and a video communication platform, Adobe-Connect.

Research studies have been carried out in order to find out whether integrating telecollaboration exchanges with a native speaker in the curriculum of foreign languages through a blended pedagogical approach, have a positive effect upon students' oral communicative skills, motivation and their intercultural competence (see also Canto et al. 2013, 2014; Jauregi et al. 2011, 2012).

The main research questions we addressed are:

1. Do learners who have the opportunity to engage in task-driven telecollaboration exchanges with native speakers improve their oral skills more than learners who have not this opportunity?
2. How do telecollaboration exchanges affect students' motivation?

3. How do foreign language learners experience telecollaboration?
4. Which learning sequences do emerge in telecollaboration sessions?

9.4   Method

9.4.1   Subjects

Thirty-six students of Spanish from Utrecht University (the Netherlands) and 14 - pre-service teachers from the University of Valencia (Spain) participated in the study. Language students were randomly assigned to one of three research conditions:

1. Task-based telecollaboration exchanges carried out with a native speaker through *video communication*,
2. Task-based telecollaboration exchanges carried out with a native speakers through *Second Life*,
3. Control group, who carried out the same tasks as the previous groups with peers in the classroom setting.

Pre-service teachers were assigned to one of the conditions according to their personal preferences.

9.4.2   Tasks

Five tasks were created (see Table 9.1) following criteria built on *Task Based Language Teaching* for effective tasks (Jauregi et al. 2011) and aligned with the course content and objectives. Tasks were the same for all three groups; they were only adapted in order to take advantage of the specific affordances of the environments being used. All task sessions were part of the course syllabus.

9.4.3   Procedure

Language participants at Utrecht University followed a Spanish language course at B1 proficiency level (CEFR). The course for both experimental groups was a blend of face- to- face-lessons with the teacher, who met twice a week, and telecollaboration sessions with the student native teacher, scheduled once a week. Participants in the experimental groups communicated in triads during the telecollaboration exchanges: two language students with one native speaker. As for the control group, they performed the same tasks as the experimental groups in the habitual classroom setting.

Table 9.1 Description of tasks developed

Tasks	Description
Session 1: *Cool people*	Students:
	(1) Visit an apartment they are meant to share
	(2) Talk about themselves and exchange cultural information triggered by pictures, and
	(3) Choose an outing option (go to the cinema, to a museum or to walk in the city)
Session 2: *People & adventure*	Participants plan a holiday and reflect on past holiday experiences
Session 3: *Movie celebrity people*	Participants have to play different roles given the indications of a brief script
Session 4: *People with heart*	Participants impersonate different characters and experience the reactions caused on others
Session 5: *People & cultures*	Students participate in a cultural television-game style contest between a Dutch and a Spanish team

Previous to the task-driven online sessions, language learners and pre-service teachers participated in tutorials to become familiarized with the tools they would be using during the telecollaboration exchanges.

9.4.4   Data Gathering Instruments

A mixed method research design (Creswell 2009; Creswell and Plano Clark 2011) was used to investigate telecollaboration processes. Four sources of data were gathered using different instruments:

1. Pre- and post-oral tests, which assessed learners on measures of range of language, grammatical accuracy, fluency, thematic development and coherence in order to measure oral communicative growth.
2. Weekly surveys were used to measure motivation.
3. A final questionnaire was designed to evaluate participants' telecollaboration experiences.
4. All task-driven interactions were recorded for further analysis.

9.4.4.1   Oral Tests

The oral test consisted of a video recorded message from a native student teacher informing that she would be coming to the Netherlands as exchange student and requesting information to prepare for the exchange. The oral test had 11 open questions that ranged from personal information and studies, previous experiences in Spanish-speaking countries, student life, weather and gastronomy, economy (one

item) and general recommendations for foreigners visiting their country. The pre- and post-test were the same for the three research conditions.

The oral tests were administered by means of a computer in a language lab. Every student sat in front of a computer, activated the video and answered orally the 11 questions. The recording was done automatically. Individual recordings were anonymous and received a code so that the researchers would not know beforehand if it was a pre- or a post-test they were assessing.

9.4.4.2 Surveys for Motivation

Students' motivation was measured weekly by means of a short questionnaire. Thirteen I-statement items were used that covered different motivational dimensions (Jauregi et al. 2012): (1) attitudes towards interacting with native speakers (Willingness to communicate: MacIntyre et al. 2001; MacIntyre 2007) which included categories as learning goals, linguistic self-confidence and language anxiety; (2) attitudes towards the course and (3) attitudes to the L2 culture (see Table 9.2).

All language students across research conditions filled in this weekly questionnaire starting 2 weeks prior to the actual telecollaboration exchanges. All questions were answered on a five point scale, ranging from (1) *does not apply to me at all* to (5) *does apply to me completely*.

9.4.4.3 Final Questionnaire

After the conclusion of the telecollaboration project a final questionnaire was digitally distributed to the three groups of language learners and native student teachers in order to evaluate participants' experiences.

The questionnaire for the experimental groups had 29 open and closed items addressing different categories: virtual environment (10 items), tasks (2 items), speech partner (4 items), learning potential of the project (4 items), organization (1 item) and global project evaluation (5 items). The control group questionnaire consisted of eight items referring to demographic data (2 items), native speaker interactions (2 items), the language course (1 item), learning outcomes from interactions with native speakers (1 item) and preference of interaction styles (2 items). In all three surveys a five point Likert scale was used for the closed items.

9.4.4.4 Recordings

All telecollaboration sessions and the interactions of the control group were recorded. For the present paper a selection of the recordings was made for in-depth qualitative discourse analysis. One task-driven interaction for each research condition: telecollaboration through video communication,

Table 9.2 Items used for measuring motivation in telecollaboration exchanges

Category	Items
Attitudes towards interacting with native speakers	Learning goals:
	I really get to learn the language well by speaking with native speakers
	By learning this language I get new ideas and I am broadening my horizon
	I like speaking to native speakers in the target language
	Linguistic self-confidence:
	My competence in the target language is sufficient to communicate with native speech partner(s)
	Because of my positive attitude I can communicate well with native speech partners
	I can easily adapt to native speech partner(s) while speaking in the target language
	I can explain myself well in the target language
	I understand (almost) everything that is being said to me by native speech partner(s) in the target language
	Language anxiety:
	I feel nervous when speaking in the target language
	I get very worried if I make mistakes when interacting in the target language
Attitudes towards the course	*I enjoy the language course this semester*
	I feel I am making progress in the target language this semester
Attitudes to the L2 culture	*I feel that there are hardly any cultural differences between the native speakers' country and my country*

telecollaboration through virtual worlds and the small group class interaction of the control group, were selected for analysis.

9.4.5 Data analysis

A mixed method approach to data analysis was used by resorting to quantitative measures and qualitative data analysis to address the specific research questions.

9.4.5.1 Oral Tests

Language learners were assessed on measures of communicative language competence based on descriptors from the Common European Framework of Reference for languages. A 10-point scale was used to assess five communication categories: (1) range of language, (2) grammatical accuracy, (3) fluency, (4) thematic development and (5) coherence (see Appendix). Since a high correlation was found

between all five indicators ($0.89 \leq r \leq 0.98$), they were reduced to one measure of oral skill. Two native speakers of Spanish rated the tests separately. An estimate of inter-rater agreement was calculated ($\alpha = 0.91$) (Canto et al. 2013).

The effect of the task-driven interactions on oral skills was analysed by comparing the mean differences between pre- and post-test scores and conditions by means of analysis of variance for repeated measurements.

9.4.5.2 Motivation

The effect of telecollaboration exchanges was assessed by means of (multi-level) regression analysis of the survey item scores. If a clear break in the regression lines can be shown when the telecollaboration sessions are introduced this can be attributed as a (causal) effect of the session (Shadish et al. 2001).

9.4.5.3 Final Questionnaire

Mean values and standard deviations were calculated for the close items and the open questions were analysed following a set of categories that emerged from the data.

9.4.5.4 Discourse Analysis

The task-driven interactions across research conditions were analysed focusing on the negotiation sequences during which (cultural) meaning related episodes were overtly discussed, as these have been reported on SLA research to be conducive to acquisition (Swain and Lapkin 1995). The in-depth discourse analysis was carried out particularly in two tasks: people and adventures, where participants had to plan a holiday and reflect on past holiday experiences, and people and culture, where students participated in a cultural television-game style contest between a Dutch and a Spanish team.

9.5 Results

In the present section the main results related to the individual research question will be described.

9.5.1   Do learners Who Have the Opportunity to Engage in Task-Driven Telecollaboration Exchanges with Native Speakers Improve Their Oral Skills More Than Learners Who Have Not This Opportunity?

The difference in pre- and post-oral tests taken by students in the three research conditions (control group, experimental group video communication and experimental group Second Life) show a significant interaction effect between research condition and difference between pre- and post-oral tests, experimental groups outperforming significantly the control group (F (1, 34) = 147.7; p < 0.001). As can be seen in Fig. 9.2 the averages on oral language proficiency increased from pre- to post-test for the three conditions. On average students' scores on the post-test are higher than the scores on the pre-test. However, the interaction between condition and moment of measurement proved to be significant. This means that the increase in oral skills differs between the three conditions. In the control condition the increase in students' oral skills is significantly less than in either the video communication, or the Second Life telecollaboration conditions. Therefore, on average both video communication and Second Life telecollaboration sessions with native speakers are more effective than traditional education systems as measured in the control condition.

9.5.2   How Do Telecollaboration Exchanges Affect Students' Motivation?

The telecollaboration exchanges have been found to have a positive impact on motivation, particularly on foreign language learners' willingness to communicate. Comparisons between experimental (Second Life and video communication) and control groups reached significant values for perceived competence in the target

Fig. 9.2 Mean scores for oral pre- and post-tests of experimental and control groups (*VC* video communication, *SL* virtual worlds – *Second Life*, *C* control)
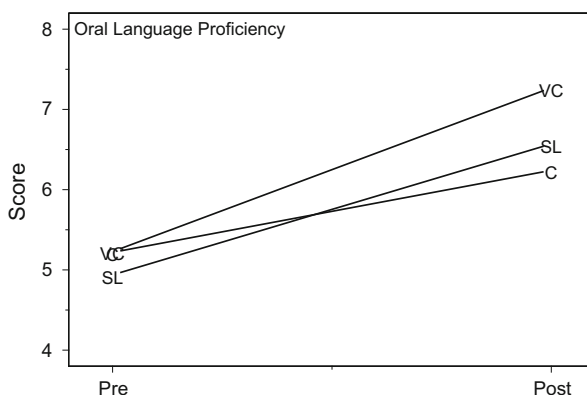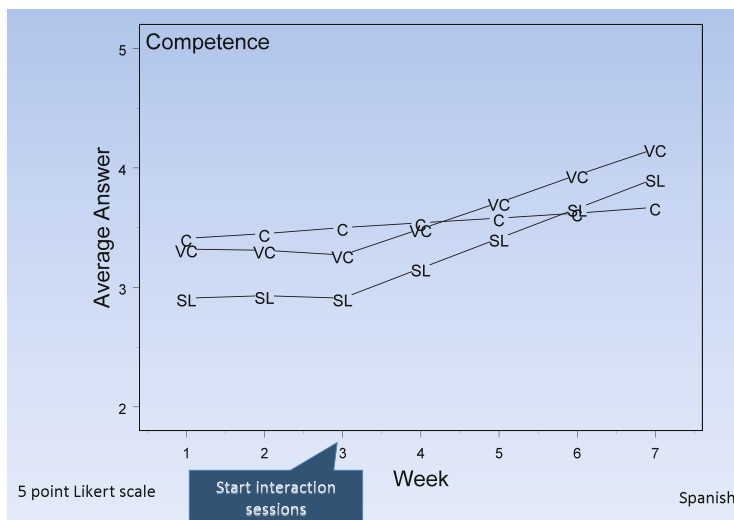
Fig. 9.3 Values for perceived competence according to three research condition groups (*VC* video communication group, *SL* Second Life group, *C* Control group

language (Fig. 9.3), positive attitudes towards talking to native speakers, and decrease of speaking anxiety.

9.5.3 How Do Foreign Language Learners Experience Telecollaboration?

The telecollaboration experiences have been very positively evaluated by all participants. Tasks were felt to be motivating and useful for language acquisition purposes. But it was particularly the interaction constellation with speakers of different cultural and linguistic backgrounds communicating with each other that was felt to highly contribute to enhance intercultural language learning processes. Language learners who had had the opportunity to collaborate with native speakers (VC and SL groups) reported that the telecollaboration sessions had made them more aware of cultural contrasts and similarities, that they had become more confident, were able to talk more fluently, and took more initiative (Table 9.3).

Students' communicative improvements in the telecollaboration groups were also noticed by student teachers who were asked in the questionnaire to compare the first and last telecollaboration sessions in terms of their communicative abilities (Table 9.4).

When participants in the control group were asked if they thought that, given the opportunity to interact with a native speaker they would improve their confidence,

Table 9.3 VC and SL language learners' evaluation responses about learning experiences on a 5-point Likert scale (1: disagree; 5: agree)

What have you learned during the sessions?	Mean	Sd
To be aware of cultural contrasts and similarities	3.85	0.82
To talk more fluently	3.89	0.70
To become confident talking in the target language	3.85	0.72
To talk more	3.48	0.85
To take more initiative in the conversation	3.33	1.00
To be more motivated to talk	3.26	0.98
To use new words	4.26	0.71
To use idioms/expressions	3.93	0.68
To use grammar more accurately/correctly	3.96	0.65

Table 9.4 Pre-service teachers' evaluation responses about language learners' improvement on a 5-point Likert scale

Comparing the first and the last session:	Mean	Sd
I noticed an overall improvement in the communicative competence of my foreign language learner comparing session 1 to the last session	4.57	0.65
They talked more in the last session	4.14	0.95
They were able to talk more fluently in the last session	4.36	0.84
They took more initiative during the last session	4.07	1.07
They asked more questions during the last session	3.64	1.01
They became more confident talking in the target language	4.50	0.94
They became more aware of cultural contrasts and similarities	4.64	0.50
They enlarged their lexicon and used more adequate words	4.43	0.65
They have learned to talk more accurately in terms of grammatical constructions.	4.00	0.55
They were more motivated to talk in the last session	4.21	1.19

fluency and knowledge about the target culture, would learn to speak better and understand more, answers were positive (see Table 9.5).

Finally, the environments were described as effective in enabling distant native non-native speaker interaction, although participants did experience technical problems particularly related to sound.

9.5.4 Which Learning Sequences Do Emerge in Telecollaboration Sessions?

In the recordings analysed we found instances of negotiation of meaning across research conditions and in both tasks. Interestingly, each task seemed to prompt a different focus on negotiation. In the task where participants had to plan a joint holiday most negotiations were lexical, while in the cultural game contest these negotiations were essentially intercultural.

Table 9.5 Control group language learners' evaluation responses on a 5-point Likert scale about possible learning experiences when interacting with a native speaker

Do you think that having the opportunity to conduct interaction tasks with native speakers:	Mean	Sd
You learn to understand better the target language	4.14	0.770
You learn to speak better	3.93	0.730
You learn to speak more fluently	3.93	0.917
You learn more vocabulary	3.86	0.663
You learn to become more confident talking to native speakers	4.21	0.802

Table 9.6 Task duration and number of negotiations per group – people and adventure task

Group	Task duration	Negotiations
Second life (SL)	01:15:01	27
Video communication (VC)	01:20:04	23
Control (C)	00:41:00	2

Table 9.7 Number of negotiations per group – people and culture task

Group	Task duration	Negotiations
Second life (SL)	01:46:08	26
Video communication (VC)	01:05:33	24
Control (C)	00:41:00	12

If we look at Table 9.6 we observe that in the holiday planning task all groups engaged in negotiating meaning, although there was a substantial difference between the number of negotiations encountered when the task was performed by the experimental groups (VC: 23; SL: 27) as compared to the control group (C: 2). This would imply that telecollaboration encounters with native speakers are richer in promoting SLA processes as more instances of negotiation of meaning take place in such exchanges compared to the traditional language classroom setting.

Analysis of all negotiation sequences showed that those were mostly triggered by lexical difficulties, either due to problems recognizing words, misusing or pronouncing them.

The analysis of the recordings of the cultural contest task (*People and Cultures*) revealed that negotiations took place across research conditions (Table 9.7); yet, differences between experimental groups (SL: 26; VC: 24) and the control group (C: 12) were considerable. In addition, negotiations were not always triggered at a word level. People and culture task was seeded with overt triggers of cultural nature.

During the *People* and *culture* telecollaboration sessions participants engaged in rich exchanges as can be observed in Example 9.1. This example had as trigger a photograph of a rucksack hanging from a flag, a well-known custom in The Netherlands meaning that the child living at that house has passed the state exams at secondary educational level. The Spanish team had to guess its meaning during the quiz. In the negotiation sequence the Dutch team succeeds in clarifying this cultural ritual.

Example 9.1: Fragment Taken from People and Culture Task (NS: Native Speaker; NNS: Non-Native Speaker)

NNS1: cuando has terminado el instituto/¿sí? hay una fiesta y ponemos nuestras mochilas fuera/con la bandera de Holanda y/y es como una fiesta que todo el mundo sabe que has hmm terminado el instituto bien	*NNS1: when you have finished your secondary education/yes? there is a party and we put our rucksacks outside/with the Dutch flag and/and it is like a party that everybody knows that you have hmm finished your secondary education well*
NS: ¡Ah! ¿y entonces se quedan ahí las mochilas?	*NS: Ah! and then the rucksacks stay there?*
NNS1 : sí/ fuera/ por dos semanas o así (risas	*NNS1: yes/outside/for 2 weeks or so (laughter)*
NS: ¡Ah!	*NS: Ah!*
NNS1: porque es la idea que nunca tenemos que usar la mochila (risas)	*NNS1: because the idea is that we don't have to use the rucksack anymore (laughter)*
NS: ¡Ah! ¡qué originales!	*NS: Ah! how original!*

This rich intercultural negotiation was stimulated on the one hand through the specific task characteristics, but particularly through the presence of a speech partner who has a different cultural background and who does not know this Dutch ritual. Speech partners engage in negotiation, reflect on habits, clarify their meanings and share empathy in the process of co-constructing discourse.

In the control group negotiation sequences were quite different: there was no contrasting of opinions between the members of the team to reach an agreement over the correct answer and even when their answers were wrong not much curiosity was detected to find out more about the topic (Canto et al. 2014).

As to the possible differences according to the specific environment being used, *Second Life*, seemed to elicit a high degree of engagement triggered by elements of the virtual world (Jauregi et al. 2011), when for example the avatars discussed the holiday options in a pizzeria and talked about the movie posters hanging on the walls or when they attempted to pay for the pizzas they had eaten virtually. The interactions from the video communication group and control group were characterized by a more descriptive language guided by the photographs being used. In *Second Life* actions triggered conversations and there was more topic switching enabled by in world elements.

9.6   Discussion and Conclusions

The research results hint at the added value of implementing task-driven oral telecollaboration exchanges with native speakers in language teaching as:

1. language learners' oral communicative skills appear to grow more rapidly when they have the opportunity to engage in telecollaboration sessions compared to students following traditional language education systems;

2. language learners become more self-confident and less anxious when communicating in the target language with native speakers,
3. they like the experience and think that it is useful for their learning process, which boosts their motivation, and hence contributes to create a beneficial setting for optimizing language learning processes, and
4. rich meaningful sequences arise during the telecollaboration sessions where participants exchange social and cultural information and engage in frequent negotiation of meaning, both linguistic and cultural, as participants reflect upon, clarify and compare concepts, customs, styles or behaviors with each other. Those negotiations are more frequent and richer in telecollaboration exchanges than in the traditional education group settings. The environments with their specific affordances elicit different interaction patterns. Sequences in video communication are more static; visual-cues (facial expressions, body language, laughter) play a crucial role either intensifying or clarifying meaning and contribute to enhance interpersonal relationships. Sequences in virtual worlds, on the other hand, are dynamic and action related. Unpredicted world specific sequences emerge, as unexpected things happen when avatars are engaged in interaction which elicit hilarious communication exchanges (Jauregi et al. 2011). The analysed telecollaboration recordings revealed that learners succeeded in building rapport: there were many instances of laughter, where they shared empathy and worked towards creating symmetrical relations during the interaction exchanges trying to strengthening interpersonal relationships.

These are very favorable results. However, all telecollaboration studies that have been reported on in this paper and our research results refer to adult students mostly learning the foreign language at universities. In fact to date, all research studies on telecollaboration published in key refereed journals[2] refer to tertiary education (Pol 2013). The lack of knowledge about the effect that telecollaboration exchanges may have on the foreign language learning process of youngsters, who have to learn languages in quite different educational circumstances than university students, constitutes a serious limitation in the research field of telecollaboration practices. Have telecollaboration exchanges the same beneficial effects on language learning processes of youngsters and their motivation as those reported for university students? Can telecollaboration projects be integrated in a sustainable way in foreign language curricula at secondary educational systems? Do teachers possess the necessary pedagogical and intercultural competences to integrate successfully telecollaboration practices? What does constitute a good telecollaboration task? Which applications are more suitable for which telecollaboration exchanges?

All relevant question that require informed answers. The European TILA project (Telecollaboration for Intercultural Language Acquisition tilaproject.eu),

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[2] Key journals within technology enhanced language learning: Language Learning and Technology, ReCALL, CALL, CALICO, System.

originated from this very specific need (Jauregi et al. 2013). The project aims to promote intercultural awareness and communicative competence in foreign languages of younger learners by integrating telecollaboration projects in foreign language courses at secondary schools. Learners are brought into contact with other young learners from different European countries to cooperate by carrying out specific interaction tasks in the target language. Different internet applications are used for this: synchronous communication tools (virtual worlds, video communication or chat) and/or asynchronous communication applications (blogs, wikis, discussion forum). With the integration of telecollaboration exchanges in foreign language teaching curricula at secondary schools, TILA seeks to make foreign language learning more effective, meaningful and motivating whilst enhancing younger learners' intercultural awareness. The project bears a strong research focus, the main aim being to study the potential added value that telecollaboration practices may have in language learning processes of youngsters from secondary educational systems. The initial pilot experiences carried out in 2014, where eight secondary schools from five countries with approximately 200 pupils participated in telecollaboration exchanges using video communication and/or virtual worlds, showed satisfactory results. Seventy-seven students completed a user experience questionnaire at the end of their telecollaboration exchanges revealing that the experience has been very positive for the majority of the participants (Jauregi and Melchor-Couto 2014). Pupils find it useful for language acquisition purposes, motivating and fun to communicate in the foreign language with peers from other countries. They like this way of learning a foreign language by using innovative web applications to communicate in the target language, meet peers from other countries and reflect upon and learn about their customs. Further research studies are needed to validate the results obtained so far on telecollaboration exchanges at secondary educational level.

Appendix: Assessment Grid for Pre- and Post-tests

	Range	Accuracy	Fluency	Thematic development	Coherence
1	Has a very basic repertoire of words and simple phrases related to personal details and particular concrete situations	Shows only limited control of a few simple grammatical structures and sentence patterns in a memorised repertoire	Can manage very short, isolated, mainly pre-packaged utterances, with much pausing to search for expressions, to articulate less familiar words, and to repair communication		Can link words or groups of words with very basic linear connectors like "and" or "then"

	Range	Accuracy	Fluency	Thematic development	Coherence
3	Uses basic sentence patterns with memorised phrases, groups of a few words and formulae in order to communicate limited information in simple everyday situations	Uses some simple structures correctly, but still systematically makes basic mistakes	Can make him/herself understood in very short utterances, even though pauses, false starts and reformulation are very evident	Can tell a story or describe something in a simple list of points	Can link groups of words with simple connectors like "and", "but" and "because".
					Can use the most frequently occurring connectors to link simple sentences in order to tell a story or describe something as a simple list of points
5	Has enough language to get by, with sufficient vocabulary to express him / herself with some hesitation and circum locutions on topics such as family, hobbies and interests, work, travel, and current events	Uses reasonably accurately a repertoire of frequently used "routines" and patterns associated with more predictable situations	Can keep going comprehensibly, even though pausing for grammatical and lexical planning and repair is very evident, especially in longer stretches of free production	Can reasonably fluently relate a straightforward narrative or description as a linear sequence of points	Can link a series of shorter, discrete simple elements into a connected, linear sequence of points

	Range	Accuracy	Fluency	Thematic development	Coherence
7	Has a sufficient range of language to be able to give clear descriptions, express viewpoints on most general topics, without much conspicuous searching for words, using some complex sentence forms to do so	Shows a relatively high degree of grammatical control. Does not make errors which cause misunderstanding, and can correct most of his/her mistakes	Can produce stretches of language with a fairly even tempo; although he/she can be hesitant as he or she searches for patterns and expressions, there are few noticeably long pauses	Can develop a clear description or narrative, expanding and supporting his/her main points with relevant supporting detail and examples	Can use a limited number of cohesive devices to link his/her utterances into clear, coherent discourse, though there may be some "jumpiness" in a long contribution Can use a variety of linking words efficiently to mark clearly the relationships between ideas
10	Has a good command of a broad range of language allowing him/her to select a formulation to express him/herself clearly in an appropriate style on a wide range of general, academic, professional or leisure topics without having to restrict what he/she wants to say	Consistently maintains a high degree of grammatical accuracy; errors are rare, difficult to spot and generally corrected when they do occur	Can express him/herself fluently and spontaneously, almost effortlessly. Only a conceptually difficult subject can hinder a natural, smooth flow of language	Can give elaborate descriptions and narratives, integrating sub-themes, developing particular points and rounding off with an appropriate conclusion	Can produce clear, smoothly-flowing, well-structured speech, showing controlled use of organisational patterns, connectors and cohesive devices

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