

NEGOTIATING INTERACTIONS AND ADDRESSING
COMMUNICATION BREAKDOWNS IN FOREIGN
LANGUAGE TELECOLLABORATIVE PROJECTS
THROUGH VIDEOCONFERENCING

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I dedicate this dissertation to my parents, Asen and Kirilka.

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Abstract

Telecollaboration through videoconferencing is one way of responding to the present situation in education resulting from the current COVID-19 pandemic as well as from globalization and innovation in information and communication technology. The main purpose of this dissertation is to investigate the interactional strategies, patterns of negotiated interactions and communication strategies that secondary school learners of English as a foreign language use during task-based telecollaborative interactions with secondary school learners of English from a different cultural and linguistic background. The study focuses on two telecollaborative projects in which the same participants from Bulgaria and students from two different schools in Spain took part in synchronous videoconferencing sessions discussing culture related topics. Various data collection instruments were used in order to provide triangulation of the findings, namely, video recordings of the telecollaborative interactions, interviews, questionnaires and field observations. Both quantitative analysis with descriptive statistics and qualitative data analysis are provided. By presenting and analyzing three case studies the investigation provides invaluable information about learners' communicative behavior in telecollaborative educational settings. The study found that adolescent non-native participants demonstrate different behaviors and utilize resources with varying frequency depending on who their interlocutor is. We further point out potential factors for these variations and provide recommendations for setting up telecollaborative projects.

Key words: Videoconferencing, telecollaboration, intercultural communication, interaction, communication strategies, secondary education, non-native speakers, English as a foreign language.

Resum

La videoconferència és una manera de donar resposta a l'estat actual de l'educació derivada de l'actual pandèmia de COVID-19, així com a la globalització i innovació en tecnologies de la informació i la comunicació. L'objectiu principal d'aquesta tesi és investigar les estratègies d'interacció, els patrons d'interaccions negociades i les estratègies de comunicació utilitzades pels estudiants de secundària que aprenen anglès com a llengua estrangera durant les interaccions telecolaboratives amb altres estudiants de secundària en un entorn cultural i lingüístic diferent. L'estudi se centra en dos projectes telecolaboratius en els quals els mateixos participants de Bulgària i alumnes de dues escoles diferents d'Espanya van participar en sessions de videoconferència síncrona parlant de temes relacionats amb la cultura. Es van utilitzar diverses eines de recopilació de dades per proporcionar triangulació de conclusions: enregistraments de vídeo d'interaccions telecolaboratives, entrevistes, qüestionaris i observacions de camp. Es proporcionen tant anàlisis quantitatives amb estadístiques descriptives com anàlisis qualitatives de dades. Mitjançant la presentació i l'anàlisi de tres casos pràctics, la recerca proporciona valuosa informació sobre el comportament comunicatiu dels estudiants en entorns educatius telecolaboratius. L'estudi va trobar que els participants adolescents no nadius demostren diferents comportaments i utilitzen recursos amb diferents freqüències en funció de qui sigui el seu interlocutor. A més, apuntem a possibles factors per a aquestes variacions i donem recomanacions per a la creació de projectes telecolaboratius.

Paraules clau: Videoconferència, telecolaboració, comunicació intercultural, interacció, estratègies de comunicació, educació secundària, parlants no nadius, anglès com a llengua estrangera.

Resumen

La telecolaboración a través de videoconferencia es una forma de responder a la situación actual de la educación resultante de la actual pandemia COVID-19, así como de la globalización y la innovación en tecnologías de la información y la comunicación. El objetivo principal de esta tesis es investigar las estrategias de interacción, patrones de interacciones negociadas y estrategias de comunicación que utilizan los estudiantes de secundaria que aprenden inglés como lengua extranjera durante las interacciones telecolaborativas con otros estudiantes de secundaria de un entorno cultural y lingüístico diferente. El estudio se centra en dos proyectos telecolaborativos en los que los mismos participantes de Bulgaria y estudiantes de dos escuelas diferentes de España participaron en sesiones sincrónicas de videoconferencia hablando sobre temas relacionados con la cultura. Se utilizaron diversos instrumentos de recopilación de datos con el fin de proporcionar la triangulación de las conclusiones: grabaciones en vídeo de interacciones telecolaborativas, entrevistas, cuestionarios y observaciones sobre el terreno. Se proporcionan tanto análisis cuantitativos con estadísticas descriptivas como análisis cualitativos de datos. Al presentar y analizar tres estudios de caso, la investigación proporciona valiosa información sobre el comportamiento comunicativo de los estudiantes en entornos educativos telecolaborativos. El estudio encontró que los participantes adolescentes no nativos demuestran diferentes comportamientos y utilizan recursos con frecuencia variable dependiendo de quién sea su interlocutor. Además, señalamos posibles factores para estas variaciones y proporcionamos recomendaciones para la creación de proyectos telecolaborativos.

Palabras clave: Videoconferencia, telecolaboración, comunicación intercultural, interacción, estrategias de comunicación, educación secundaria, hablantes no nativos, inglés como lengua extranjera.

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List of Acronyms

CALL - Computer-Assisted Language Learning

CEFR - Common European Framework of Reference for Languages

CMC - Computer-Mediated Communication

CS - Communication Strategy

EFL - English as a Foreign Language

ESL – English as a Second Language

FL - Foreign Language

FTF - Face-to-Face

HC - Hierarchical Clustering

ICC - Intercultural Communicative Competence

ICT - Information and Communications Technologies

IELTS - International English Language Testing System

IT - Information Technology

L1 –First Language

L2 – Second Language

LA – Language Acquisition

LLSNS - Language Learning Social Network Site

LMOOCs - Language Massive Open Online Courses

NBLT - Network-Based Language Teaching

NNS - Non-Native Speaker

NS – Native Speaker

OIEs - Online Intercultural Exchanges

RFH - Relative Frequency per Hour

SCMC - Synchronous Computer-Mediated Communication

SCT - Socio-Cultural Theory

SLA - Second Language Acquisition

TBLT – Task-Based Language Learning

TILA - Telecollaboration for Intercultural Language Acquisition project

TOEFL - Test of English as a Foreign Language

ZPD - Zone of Proximal Development

CHAPTER 1: INTRODUCTION

1.1. Research Background

Teaching English as a foreign language (EFL) can take place within the context of an enclosed classroom, and/or within the context of the ‘real world’. If it only takes place within the confines of the classroom, English as a Foreign Language might become ‘English as a Forgotten Language’ (EFL, Bernard Mohan, key note speech at TBLT Conference, Lancaster University, 2009), as a result of learners’ inability to utilize and apply their language skills in real life situations (Van Der Zwaard, 2017). It has been widely recognized that the ability to speak a foreign language is acquired through interaction with other speakers. In the case of foreign or second language learning, interaction with native speakers or other language learners allows them to analyze and process linguistic forms (White, 2003), but it also permits students to participate in meaningful social activities (O’Dowd, 2011, Dooly, 2011, Helm, 2015). Within this setting, as Cabrero (2013) claims, “interaction is best conceptualized as a collaborative activity that allows for the performance of communicative practices and lays the foundation for language development (Wells, 1981). [...] As computer technology becomes an integral part in our daily lives, a change in the focus, pace, and form of interactions in language instruction can be observed”.

Over the last 30 years, language learning has become one of the most dynamic and prevalent areas of education for the application of learning technologies. This increasing availability of computer-based applications has offered new perspectives for both learners and teachers, which, on the one hand, can be challenging and stimulating but, on the other, can be confusing and intimidating. Information and Communications Technologies (ICT) is still an innovative field for research but, because of the inevitable change and the speed of innovation in technologies, it is becoming and being perceived as less so. ICT needs to adopt a more realistic and balanced approach to its use in language learning. Beatty (2010) shares the same idea, stating that “because of the changing nature of computers, ICT is an amorphous and

unstructured discipline, constantly evolving both in term of pedagogy and technological advances” (p.8).

It was the appearance of Web 2.0 that revolutionized technologies, allowing users to interact and collaborate with each other through social networks (Facebook, Tweeter, Linkedin, Instagram, etc.), blogs, wikis and video sharing, among other tools. Apart from interacting in social networks, another way to enhance learners’ language abilities is by incorporating gadgets – smart phones, ipads, tablets and their applications – into the learning environment, since these are already an essential part of our lives and children and youth are even expert users. As Prensky (2001) states, today’s students represent the first generation to grow up with technology, having spent their whole life surrounded by it and using technological tools constantly. Moreover, Prensky (2001) is the first one to distinguish between “digital natives”, that he defines as “native speakers of the digital language of computers, video games and the Internet”, and “digital immigrants”, who were not born in the digital era; they learn to adapt to the new environment but as immigrants they will “always retain, to some degree, their “accent”, that is, their foot in the past”. This ever growing availability and rapid advancement of technology is fundamentally changing the world we live in making us part of a globalized, multicultural society (Trenchs-Parera & Pastena, 2021). As Asendorpf and Conner (2013) say:

“Globalization shrinks the world, bringing a wider range of cultures into closer contact with one another more often than in previous generations. Cultural diversity and intercultural contact have become facts of modern life, so intercultural competence becomes a requisite response.”

As the world is becoming more globalized, nations are, in the meantime, becoming more diverse. This is mainly due to the constantly increasing immigration, mobility and tourism rates in the recent years (Trenchs-Parera, 2019). For this reason, in order to communicate successfully not only when we travel abroad but also within our own country or community we need to possess effective intercultural communication skills that are vital for every 21st century citizen (Schenker, 2012b).

It is exactly the dynamic and innovative aspect of second language education that made me want to investigate more into the various methods related to the use of synchronous video interaction for intercultural exchange. I strongly believe that this tool for language learning needs considerable research and attention in order to adequately prepare learners, as well as teachers, for the twenty-first century world. As a matter of fact, owing to my great interest in this field, I did my Master's Dissertation on this topic with the title *Foreign language teachers' views on intercultural communicative competence: an analysis of two Bulgarian educational institutions*.

Another reason for my interest in this subject is my long experience as a language teacher, which has proved to be a very challenging, multifaceted and rewarding practice. Throughout my 16 years as a teacher of English as a foreign language numerous questions and intriguing issues have emerged, driving me continuously to search for answers and ways of advancement and progress. During all these years I have been intrigued by the possibility of "breaking the boundary of the classroom". I have been asking myself "What can I do to broaden the horizon of my students and make them see the language as something alive, something outside the classroom and the students' books? How can I open the door for them to see the authentic experience of the language in a real situation?". Often times this has been impossible mainly due to restrictions by the curriculum, lack of time and resources, above all. Typically, English proficiency is understood as improving students' vocabulary and grammar structures where learners could improvise a conversation using correct sentences but practicing the appropriate communication skills when talking with a native speaker or a speaker of other languages is not yet included in the curriculum. Because of the growing need of our students to cope and successfully communicate with people from diverse cultural and linguistic backgrounds, I decided to look for a meaningful and authentic context in which learners would benefit from connecting and exchanging ideas with their peers from a different country, culture and linguistic background.

What is more, in the first year of my research study, I observed classes in three different schools in Catalonia and met students with diverse socio-economic status, background, culture and languages. The first school, located in the neighborhood of Esplugues de

Llobregat, a town near Barcelona (Spain), was a private school, whose students were predominantly from Catalan origin, coming from families with high socio-economic status and predominantly local background. The educational process in this school was totally digitalized, that is, every student had an ipad, they did not use paper books and the school provided students with all the necessary technological equipment and support. The second school, located in the neighborhood of Sant Antoni in the heart of Barcelona, was another private, but state-funded institution, that received students from different socio-economic levels and diverse ethno-cultural origins. Technology was a part of the educational process but rather as a supportive tool for enhancing students' learning. The third school, in the town of Rubí in Barcelona's metropolitan area, was a public high school, whose students were from very diverse socio-economic levels and ethno-cultural origins. The school predominantly used paper books and technology was occasionally used in classes, except for the three major interdisciplinary projects (i.e. Treball Transversal, literally, cross-disciplinary work) students did in groups during the school year.

Everywhere I went I felt learners' eagerness and thrill to communicate with me (I am from Bulgaria), as a representative of a different culture and a speaker of another language, and I saw their striving to participate and their genuine interest to communicate and express themselves. This is when I thought of the importance of real time, natural contact, communicative interaction and wider collaboration between learners and other speakers of the target language. So, I questioned myself: isn't a synchronous audio-video interaction a viable and effective tool for achieving these goals? It is here, in the schools of Catalonia, where my interest arose. After having met and exchanged fascinating ideas with Dr. Ricard García, teacher trainer and web editor, and Dr. Susan Dreger, both working at the Department of Education in Catalonia on cutting edge technologies and their applications in Catalan schools, I knew that I wanted to look deeper into the video conferencing technology as a tool for language learning, also known as telecollaboration, understand its efficacy and contribute to the existing research in this new field.

These were the motives which brought me to this very challenging research area, namely, telecollaboration. It took me and the participating teachers, from both the Spanish and

Bulgarian side, approximately three years in order to organize and implement two telecollaborative projects. The first one was conducted in 2018 and consisted of five telecollaborative meetings between students from Lluís Anton School, Spain and Mundi School, Bulgaria. The second project was conducted the following year, in 2019, when the same number of sessions were organized between participants from Anglia School, Spain and Mundi School, Bulgaria.

1.2. Purpose and Significance of the Study

In our globalized, dynamic and faster than ever developing world, the ability to communicate effectively with people from different cultures is vital, so ensuring that learners acquire the appropriate intercultural communication skills is of utmost importance (Lee & Markey, 2014). Byram (1997, 2000) stresses the importance of including Intercultural Communicative Competence (ICC) within the formal foreign language instruction, as learners need to be not only linguistically competent but also be able to successfully negotiate for meaning in different socio-cultural contexts.

As I have already mentioned I have been teaching English for more than 16 years to all age groups and levels of proficiency. Throughout my time as a teacher, I have tried to teach not only vocabulary and grammar structures to my students but also communication skills and strategies which would help them interact in the foreign language and feel more comfortable in both formal and informal interactional contexts. Learners primarily use textbooks with DVDs containing listening practice, as well as some videos which cover contemporary topics (environment, work, media, politics, technology), they practice their writing skills and understand the difference between formal and informal speech. Yet, most of my students reveal their anxiety and the fact that they feel uneasy and nervous when they have to communicate in English, and even more so if they are outside of the classroom environment.

Therefore, over the course of the years, despite time limitations, schedule restrictions and having to teach in a traditional classroom setting (very often to students with varying FL skill levels), I felt a stronger need and necessity to improve and provide innovative tools for my students. Some of them had already travelled to English-speaking countries but yet a

significant number still had not, and for this reason, they did not relate to the cultural situations and traditions of countries, such as the United Kingdom or the United States, we often discussed in class. The textbooks were not very helpful either, as they very often concentrated on grammar and vocabulary taken out of context and the reading texts were not authentic or motivating for young people. In spite of the boom in technology and the increasing number of applications and platforms where you can learn or practice foreign languages (*Hello English, Duolingo, Lingbe, Memrise, Babbel* and others), I felt that my students still needed guidance in order to become intercultural speakers.

Therefore, I tried to find ways to implement a telecollaborative project without having to make substantial changes in their curriculum. This was only possible due to the fact that at that time I was not only a teacher but also the manager and Director of Studies of the language academy, which gave me the freedom and opportunity to make the necessary changes and organize an intercultural project. Initially, my aim was to implement a class-to-class project which would provide the foreign language (FL) learners with the opportunity to actively use the target language in an authentic, meaningful way. This was a unique experience for the students; nevertheless, I realized there were some weaknesses in the project, issues that I could improve. Firstly, after discussing their opinion about the project with my students, they confirmed my intuition that a class-to-class exchange was not the best option. They confessed that the fact that they had to speak in front of so many people made them feel nervous and tense. Moreover, not everybody was given the same opportunity to communicate and participate in the group meeting. The participants clearly expressed their preference for a one-to-one project, where they would not only have the chance to implement their language skills but they would also bond with their partners, make friends and be able to participate more confidently and comfortably in the experience.

This study aims at filling some of the research gaps in the field of telecollaboration in this specific context, that is, the interaction between adolescent students, such as those former secondary school students of mine, who are non-native speakers of the target language in educational environment. I purposefully chose this age, as I find it particularly interesting and a very distinctive and particular part of our lives. *Adolescence* (from Latin *adolescere*,

meaning 'to grow up') is a period of both physical and psychological change. It is the transition from childhood to adulthood, when children form their opinions and philosophy of life and prepare to face future challenges such as education, employment, and integration in the society among others. Undoubtedly, a difficult stage for adolescents themselves, as well as for parents, siblings, friends and educators. As I previously explained, my interest in the educational context comes from my long personal experience as a teacher, which I consider to be my vocation and passion, rather than just a job. Similarly, the motivation, strong desire and inspiration of all the participating teachers were fundamental for the success of this research study.

Additionally, I believe that with the increased accessibility of computer technology and the Internet in the recent years, it is important to study the potential of telecollaboration for language learning purposes. Therefore, the significance of the study is twofold. Firstly, it lies in how teachers should make use of this new tool to improve language teaching and learning. It is also important for students who do not have opportunities to practice the target language outside the classroom (Lee, 2001, Zhao, 2010, Lewis, O'Rourke, & Dooly, 2016, O'Dowd, 2013, Ware & Kramsch, 2011). In countries like Spain and Bulgaria, where English is taught as a subject in school but not much used outside the classroom, except for areas and cities like Barcelona receiving tourists (Newman, Trenchs-Parera & Corona, 2019), learners hardly ever have the opportunity to practice the target language in real life settings. As a result, students are likely to have trouble communicating with native speakers of English after several years of learning English, even though they may have scored high in standardized Cambridge English language tests like FCE and CAE (First Certificate of English and Certificate of Advanced English). Therefore, it is essential "to create opportunities for learners to communicate with native speakers or other speakers of the language in order to acquire real life experience of using English" (Aina, the English teacher at one of the Spanish participating schools).

In this view, the purpose of this dissertation is to explore learners' interactional and communication skills and to understand how non-native speakers negotiate for meaning and use negotiation strategies in telecollaboration. Through this multiple perspective of the study

I hope to contribute to the growing interest, necessity and body of research in the field.

1.3. Organization of This Dissertation

This study contains six chapters: introduction, literature review, methodology, two results chapters, discussion and conclusions. This Chapter 1 offers a general outline of the role of technology in the present educational setting within the context of our modern globalized world. It also provides a background of the research by highlighting my interest in the field of telecollaboration for L2 learning and teaching as well as the purpose and significance of the investigation.

Chapter 2 presents a review of literature on concepts, theories, empirical research, and different approaches to second language acquisition. It provides conceptualization of telecollaboration and focuses on Intercultural Communicative Competence as a construct to study telecollaboration. Chapter 2 further presents and discusses negotiation of meaning and communication strategies in computer-mediated communication in SL learning and presents studies in similar educational contexts. At the end of the chapter, the research gaps are discussed in depth, and three research questions are proposed.

Chapter 3 describes the context and methodology of the dissertation. The chapter starts with the research approach, the implementation, procedures and design of both telecollaborative exchange projects, as well as methodological challenges. After that, the chapter introduces the participant classrooms and the process of selection of the case studies. The following section presents a detailed description of the data collection tools employed in this investigation, and finally, the chapter closes with a presentation of the data analysis procedures and the limitations of the study.

Chapters 4 and 5 present detailed analysis of the data collected and the results of the current study. Chapter 4 offers the results of the in-depth analysis of the interactional patterns in the telecollaborative exchanges. It first provides a general overview of such patterns of all participants in both projects and next focuses on three case studies. Chapter 5 analyses the patterns of negotiated interactions and communication strategies used in the telecollaborative

exchange projects. In the same way, we initially offer a general overview and then a comprehensive analysis of the three case study participants and their use of the features under investigation.

And finally the sixth chapter presents a discussion of the results in relation to existing literature, and brings out new findings that this study managed to uncover. The first section of the chapter discusses the first research question related to students' use of interactional strategies in secondary school telecollaborative projects for second language learning. The second one is devoted to discussing the findings related to the second research question as regards the patterns of negotiated interactions and the third section discusses the last research question concerning learners' use of communication strategies during telecollaboration in such educational context. The following two sections provide recommendations for setting up telecollaborative projects in secondary schools and for future research in this field in pandemic and post-pandemic era. The chapter closes with my personal remarks on the growing significance of technology integration, especially in the post COVID-19 era, and the importance of telecollaboration for enhancing FL learning and intercultural communication.

CHAPTER 2: THEORETICAL FRAMEWORK AND LITERATURE REVIEW

The goal of this chapter is to present the theoretical framework of the current thesis and the findings of the related body of empirical research. It outlines the Second Language Acquisition (SLA) models that determined the selection, description and interpretation of the data in this research project. This dissertation analyzes two synchronous internet-based intercultural exchanges between groups of learners of different cultural and linguistic backgrounds set up in a classroom context with the aim of developing both language skills and intercultural communicative competence (ICC) (Byram 1997, Guth & Helm, 2012): this kind of projects are also known as telecollaboration. Given the relevance of interaction in such educational projects, I begin this chapter with an overview of the interactionist approach to SLA and the role of input, intake, output and feedback. I also provide a revision of the socio-cultural approach to SLA, what has been called “the social turn in SLA”. In order to obtain a comprehensive understanding of the background of the current study, I discuss literacy and language learning in the era of information and communication technologies, and then I offer a detailed focus on research in telecollaboration. In the sections that follow, I provide a conceptual framework for this study that aims to investigate the skills of information discovery and interaction in telecollaborative settings, as well as negotiation of meaning and communication strategy use. And, finally, I identify gaps in telecollaborative research and present the research questions of this dissertation.

2.1. The Interactionist Approach to Second Language Acquisition

This section presents an overview of the available literature on theories, concepts and approaches to Second Language Acquisition that are most relevant to the present study, that is, relevant for the study of interaction. More specifically, in Section 2.1.1., we focus on the role of input and intake for second language learning and in Section 2.1.2., we offer an outline

of the importance of output and feedback, all four elements considered to be the backbone of successful foreign language learning.

2.1.1. Input and Intake

In her studies into SLA, Hatch (1978) recommends an approach to language acquisition that takes learner interaction and communication as a starting point rather than as a final goal. That is, instead of focusing on how language acquisition can lead to communication, she suggests analyzing how communication can lead to language acquisition: “language evolves out of learning how to carry on conversations, out of learning how to communicate” (p.63).

A few years later, in 1981, Long made a major contribution to the interactionist approach by introducing the Interaction Hypothesis, which argues that learners acquire language by interacting with others and by engaging in conversational modifications during breakdowns in the communication and subsequent repairing or solving intents. The latter process has been labelled “negotiation of meaning” (Long 1980, 1982), or “repair construction” (Hatch 1978) and is nowadays considered an essential part of the L2-learning process as it “forces learners to check, clarify and adjust their utterances and often leads to modified input (usually from the speaker of the trigger) when participants attempt to solve the misunderstanding or non-understanding” (Van Der Zwaard, 2017). Long (1981) defines this modified input or “foreigner talk” as “a register of simplified speech...used by speakers of a language to outsiders who are felt to have very limited command of the language or no knowledge of it at all”.

Another major influence on the development of the interactionist approach has been Krashen’s Input Hypothesis (1985). He suggested that “humans acquire language in only one way – by understanding messages, or by receiving “comprehensible input” (p.2), which should be on a language level that is slightly higher than the level of competence of the learner, or $i + 1$. As such, Krashen was one of the first researchers to investigate and demonstrate the relationship between input and language acquisition. Despite the fact that Krashen’s theory was met with numerous critiques, his work has made a major contribution to SLA research and set the directions for future scholars in the field.

Long (1981, 1983, 1996) has also argued that it is the input through interaction and modification that makes language acquisition more powerful and meaningful. Long (1996) claims that learners need access to input that provides positive evidence on L2 as it contains message meaning. Sources of positive evidence could be authentic spoken or written texts, or those that could be modified in order to be more comprehensible. Long, however, argued that positive evidence (input) was insufficient for the mastery of certain L2 forms and constructions. As Swain (1985) has further claimed, the positive and negative evidence that comes from input and feedback can be enhanced during learners' interaction when they are required to modify or improve their message, either for better comprehensibility or for accuracy (Pica, 2014). Plenty of studies have been conducted so as to test the relationship between simplified and modified input and L2 acquisition and comprehension (e.g. Ellis and He, 1999; Ellis, Tanaka, and Yamazaki, 1994; Gass and Varonis, 1994; Loschky, 1994; Mackey, 1999; Pica, 1992; Pica, Young, and Doughty, 1987). For example, Mackey (1999) investigated whether interactionally modified input facilitated the development of question forms in English. Based on an investigation of thirty-four adult ESL learners, Mackey found that most of the learners who actively participated in conversational interaction demonstrated improvement, while none of the others indicated development.

Most theories and approaches to SLA consider input as a critical variable as it is the main data source for the learner. As VanPatten and Benati (2010) claim, the learner constructs some kind of grammar based on the exemplars provided by the input he/she has received. However, theorists differ regarding what they believe the learner's grammar to be and the "internal mechanisms" that interact with the input to generate a grammar (VanPatten & Benati, 2010). For instance, the Universal Grammar theory does not deny the central role of input but considers that the learners bear some innate principles regarding language that are not necessarily present in the input. That is, acquisition is the result of the interaction between input and the innate principles that every learner possesses. In its view, the learner processes, matches and connects information that has been available in the input. Overall, major theories and research paradigms in the field of SLA recognize the fundamental role of input as it is the basics on which the learners construct their linguistic knowledge.

All researchers agree that input is essential for acquisition although input in itself is not helpful until it enters learners' cognitive system, that is, it becomes intake. Intake is defined by Loewen (2014) as "that part of the input that is noticed, comprehended and taken into the cognitive system" (p.41). Thus, it is only after the comprehensible input has become intake that it can be beneficial for L2 acquisition. According to the Interaction Approach learners develop implicit knowledge which would allow them to participate in meaningful communication. So as to achieve this aim, Gass and Mackey (2007) suggest that all three constructs of acquisition should be considered: the input learners receive, the interactions they engage in, and the output they produce (Loewen, 2014) (See Figure 2.1 below).

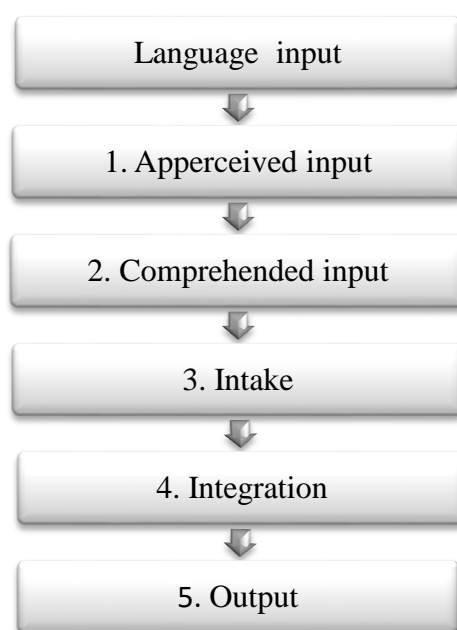


Figure 2. 1: Gass and Selinker's model (1994) for second language acquisition.

Gass's model of SLA originated in 1988 and was slightly updated several years later (Gass 1997; Gass and Selinker 1994). As figure 2.1 represents, at the top of the figure is the *Input Stage*, which is considered the first and utmost necessary condition for any language learning to occur. However, Gass herself admitted her doubts regarding the exact nature of the input – whether it should be elaborated or simplified – and what the source of this input should be. Nevertheless, the fact is that it is essential. The first stage in the model is the *Apperception Stage* during which the learner notices the incoming information, relates it to past experiences

and then deconstructs it into meaningful units. In the following stage the learner moves from simply noticing the input into actually analyzing and comprehending the information that he or she was exposed to. The third stage, namely the *Intake Stage*, is defined by Gass as “the process of assimilating the linguistic material” (1997). This is the crucial stage between input and grammar, when internal structures to the learner begin to change in some ways. However, this process is not automatic and certain mediation throughout this stage is fundamental. This will lead to the fourth stage of this model, which is the *Integration Stage*. It is when the learner develops and stores the changes that have occurred in the previous phases and are a result of modification or restructuring. And, finally, in the last *Output Stage* the learner tests hypothesis by producing spoken language. This, however, should not be considered an endpoint in this model but rather “a potential catalyst for starting up the entire process again” (Block, 2003).

The original version of Long’s Interactional Hypothesis provoked numerous controlled and semi-controlled studies which explored whether engagement in meaning negotiation makes input more comprehensible to the learners. For instance, Pica et al. (1987) conducted a study including two groups of L2 learners. In the first group, learners had to listen to instructions and perform a task without any additional help and in the second group learners were encouraged to ask for assistance. They found that learners who were allowed to take part in meaning negotiation were more successful than the other group in completing the task correctly. From these results, Pica could conclude that, indeed, interactional modifications were beneficial for enhancing L2 comprehension.

In his reformulation of the Interactional Hypothesis Long (1996) emphasized on how these interactional processes might work, suggesting a connection between features of the input and cognitive factors (Rosamond, 2019).

It is proposed that environmental contributions to acquisition are mediated by selective attention and the learner’s developing L2 processing capacity, and that these resources are brought together most usefully, although not exclusively, during *negotiation of meaning*. Negative feedback obtained during negotiation work or

elsewhere may be facilitative of L2 development, at least for vocabulary, morphology, and language-specific syntax, and essential for learning certain specifiable L1-L2 contrasts.

(Long, 1996, p.414)

This reformulated version demonstrates the importance of input for L2 learning and reveals the need to define better the process by which input becomes intake. Slabakova (2016), for instance, argues that it is not age that is an absolutely critical factor in language acquisition but it is actually input. She elaborates that the amount of input is crucial but so is the kind of input that the learner receives. Slabakova states that in order to maintain an acquired language the input has to be “copious, sustained, and continuous. Communication (give and take) in that language is essential”.

In 1967 Pit Corder had already intended to distinguish between what the learners were exposed to and what they actually “take in” and, thus, was the first one to introduce the term Intake. This term, however, has been used differently by scholars. Corder understood the term as what the learner actually processes and acquires; what becomes his/her competence. In other models intake is seen as only the data that is processed from the input, held in “working memory” but not yet acquired (VanPatten, 2002). In yet another models, intake is considered as a process not a product, that is, it refers to the data or the mental activity that mediates between the input and the linguistic competence (VanPatten & Benati, 2010).

2.1.2. Output and Feedback

Output refers to “the language that learners produce during communicative interactions or for the purpose of expressing a message” (VanPatten & Benati, 2010). In line with Gass and Mackey (2007) and in contrast to the Input Hypothesis, Swain (1985) also supported the insufficiency of the input theory and claimed that learners’ comprehensible output is critical for effective and successful language production. As Swain argues (1985), learners may fake comprehension, but they cannot fake production, which is why it is important that they are

pushed to produce correct output. In her initial Comprehensible Output Hypothesis Swain claimed that:

Comprehensible output.... is a necessary mechanism of acquisition independent of the role of comprehensible input. Its role is, at minimum, to provide opportunities for contextualized, meaningful use, to test out hypotheses about the target language, and to move the learner from purely semantic analysis of the language to a syntactic analysis of it (1985, p.252).

Swain's claim caused a debate among scholars which still exists today. The opinions are that output is necessary (Swain's original claim), output is not necessary (Krashen, 1985), or output may be beneficial (VanPatten & Benati, 2010). Actually, there is no research that demonstrates that output is necessary for language acquisition and even Swain herself has softened her claim since 1985. It was Krashen (1985) that claimed that output plays little to no role in LA, arguing that if the Output Hypotheses were correct, then the learner would have to test every single feature during acquisition, which is impossible. Additionally, if those supporting the Universal Grammar Hypothesis were right in that language acquisition comes from the interaction between input and innate principles, then linguistic competence could not come from production. Another position is not that output is necessary but that interaction (thus implying output) is beneficial for learning. Initiated by Long in 1981, the idea of modified interactions and their importance for acquisition was later supported by numerous researchers (Long, 1983; Krashen, 1985; Swain, 1985, 1995). Long claimed that native speakers modified their own speech in accordance to the non-native speaker's production. That is, the learner's output triggered modifications in native speakers' production, thus making it useful and beneficial for the learner. This is known as the Interaction Hypothesis which claims that learner output causes changes in the input the learners receive. This may lead to feedback to learners that they are doing something wrong.

However, no matter the different views and positions, Swain's work has been without any doubt influential and researchers are now convinced that learner's output entails various benefits, including (Mackey & Abbuhl, 2005) (a) promoting fluency (by means of

automatization), (b) drawing students' attention to their linguistic problems, (c) encouraging the processing of the L2 syntactically, not simply for meaning, and (d) testing hypothesis about the structure of the target language.

Since her initial claims of the necessity of output, Swain (2000) has adjusted her hypotheses by considering that "output may stimulate learners to move from the semantic, open-ended, strategic processing prevalent in comprehension to the complete grammatical processing needed for accurate production" (p.99). In a small-scale study Nobuyoshi and Ellis (1993) found that "pushing learners to improve the accuracy of their production results not only in immediate improved performance but also in gains in accuracy over time" (p.208). Van den Branden (1997), similarly, proved that children who engaged in the interaction produced a significantly greater quantity of output and larger range of vocabulary.

In the same way, McDonough (2005) conducted a study with sixty-two learners of English in Thailand about the importance of modified output to learning. Results demonstrated that both the quantity and quality of such output influence the linguistic development. Similarly, according to Swain (1985), when producing comprehensible output learners use linguistic forms in meaningful situations and in cases of breakdown in communication they would engage in negotiation of meaning or interactional modification so as to guarantee mutual understanding. (See description of the process of negotiation of meaning below, in Section 2.6). According to Pica (2014), when learners take part in goal-oriented interaction they not merely exchange messages but also indicate and react to each other's difficulties. In this way they provide each other with modified, comprehensible input and feedback and can modify their own output. The author argues that such linguistic modifications provide information on cognitive processes such as attention, noticing, and awareness.

Additionally, Pica claims that output modified during interaction can serve not only as an evidence resource but also as a mechanism for important learning processes. Some of the most reliable evidence about the role of output has come from Swain (1985, 1998) in research that she conducted among long-term French immersion learners. She discovered that, despite the fact that learners had access to meaningful and comprehensible input, scores were much

lower in production accuracy than in reading or listening skills. Swain suggested that if learners were given the opportunity to modify their message production they might be able to “to move from an interlanguage characterized by semantic processing and juxtapositioning of constituent features, to one distinguished by syntactic processing and message organization” (Pica, 2014). Apart from the importance of comprehensible output, Swain acknowledged that learners’ modified production during negotiation and collaboration could be a source of positive and negative evidence and a starting point for their hypothesis testing.

Feedback, or also called negative evidence, refers to “the response that learners receive regarding the language they produce” (VanPatten & Benati, 2010) and can be explicit or implicit. Explicit feedback is when there is an overt correction or comment about what the learner did wrong, implicit feedback, on the other hand, is when the interlocutor directly provides the correct form without explicitly pointing to the wrong utterance. Some of the research has shown that feedback provided by the interlocutors can affect the learner’s ability to produce complex and accurate structures. It has also been revealed that the impact of output in the learning process is stronger when it is in response to feedback. In spite of the fact that feedback has been viewed as negative evidence, it appears to be an important incentive for learners to modify their output and therefore increase their interlanguage development (Ellis, 1994). What is more, some researchers consider negative feedback to be even more important and beneficial as it motivates the learners to focus on form and produce more comprehensible output (Long, 1996; Schachter, 1991).

In their recent book on *Second Language Learning theories*, Rosamond, Myles and Marsden (2019) pay special attention to the role of feedback during oral interaction. The authors argue the interactionist approach has been interested in feedback and, thus, has been the focus of many observational and experimental interactionist studies. Plonsky and Brown (2015), for instance, identified 18 meta-analyses of feedback research, which demonstrated the overall positive effect it has on L2 grammar, vocabulary, pronunciation and pragmatics. From the interactionist perspective, Long (1996) claimed that interlocutor feedback involving modification of learner’s own utterance can assist with “noticing of gaps between the learner’s own L2 productions and L2 target forms, and may even be essential in overcoming

aspects of L1 influence” (Rosamond et al., 2019). Most research on corrective oral feedback has been conducted in controlled classroom settings, which demonstrated high rates of corrective feedback and identified six main categories, namely: 1) Explicit correction; 2) Recast; 3) Clarification request; 4) Metalinguistic feedback; 5) Elicitation; and 6) Repetition. Reviews of studies show that the proportions of corrective feedback in this settings is relatively stable with recasts being the most common type (57% overall), followed by eliciting modified output (30%) and explicit corrections (10%).

According to Ellis (2016) prompts provide negative evidence and are purer forms of feedback than recast because they draw the attention of the learner to the inaccuracy of his/her utterance without providing the correct form. As a result, the learner is expected to intend a self-repair. This approach originates its theoretical foundations from the Output Hypothesis, which we discussed previously. This hypothesis suggests that learner’s output has several functions:

1. A “noticing/triggering” function, or what might be referred to as consciousness-raising role;
2. A hypothesis testing function;
3. A metalinguistic function, or what might be referred to as its “reflective” role.

(Swain, 1995, p.128)

Feedback studies within the interactionist approach have provided valuable evidence for the Output Hypothesis, however not always demonstrating straightforward evidence of learning (Rosamond et al., 2019). In sum, research shows the general usefulness of corrective feedback during interaction but its exact place in actual language learning is still hard to pinpoint.

2.2. The Socio-Cultural Approach to Second Language Acquisition

All the above-mentioned studies and the research done so far provide evidence that oral interaction works by “connecting input, internal learner capacities, and output via selective attention” (Ellis, 2008, p. 257) and identifies the “conditions under which ideal input and interactions take place” (Chapelle, 1999, p.5). Given that this study will investigate interactions between speakers coming from different cultural and linguistic backgrounds, it becomes necessary to address the social-cultural aspect of SLA in a synchronous virtual learning environment

During the last decades, researchers have been examining SLA from different perspectives and those who position themselves from a socio-cultural perspective question or go beyond previous approaches, such as, behaviorism and cognitivism. Behaviorism suggests that “learning occurs through a series of stimuli and responses and that all learning is the establishment of habits as a result of reinforcement. [...] Thus, language learners can be made to automatically produce and comprehend language” (Aimin, 2013). They simply ignore the mental processes that happen during acquisition and only examine the behavior that can be observed. Later, “cognitivism” perspective appeared, which stemmed from Chomsky’s views. Supporters of this theory argue that “human beings are born with a genetic capability that predisposes them to the systematic perception of language around them, resulting in the construction of an internalized system of language” (Aimin, 2013). Therefore, according to cognitivists, SLA is an entirely mental process, yet it ignores the social processes it entails. Another view, which aims to describe both the cognitive and social components in SLA, is the socio-cultural perspective. The socio-cultural theory (SCT), initiated by Vygotsky, is a theory about the development of human cognitive and mental function, which comes from social interactions and through participation in social activities. Vygotsky (1978) argues that “from a social-cultural perspective, children’s early language learning arises from processes of meaning-making in collaborative activity with other members of a given culture”.

The socio-cultural theory focuses on cognitive development and the incorporation of social, cultural and biological factors and argues that socio-cultural circumstances play an essential role in human's cognitive development. Therefore, the principal paradigms of the theory are Mediation, Regulation, Internalization, The Zone of Proximal Development, Verbal Thought and Activity Theory. As Aimin (2013) explains, mediation is based on the claim that humans "do not act directly on the world - rather their cognitive and material activities are mediated by symbolic tools as well as by physical tools". Regulation, according to the same author, is the controlling of an activity or process, normally through rules and Internalization refers to "the process of making what was once external assistance a resource that is internally available to the individual". The Zone of Proximal Development (ZPD) originated from Vygotsky who suggests child's two development levels. The first is the real developmental level, which refers to the skills acquired by the child working independently. The second is the future development level, which is the level of potential skills that the child could obtain with the assistance of an instructor. Vygotsky's other significant contribution involves the interrelationship of language development and thought. He claimed that language is a symbol system used to convey one's thoughts and ideas and that speech is the spoken production of language. Language, therefore, belongs to society while speech belongs to individuals. And, finally, Activity Theory deals with the nature of human behavior, which is the result of the combination of social and cultural mediations (Aimin, 2013).

Second language acquisition has undergone major changes during recent decades leading to new theoretical perspectives which have influenced our views on second language learning and teaching. The theorists of SCT believe that learning occurs as a result of shared experiences in social settings and that it is only effective when students interact with one another in foreign language classrooms. Apart from bringing more knowledge about how learning occurs the socio-cultural approach can also be useful for teachers to discover and create ways to facilitate the language learning process and, by mediating, make it more effective, thus bringing learners to their Zone of Proximal Development.

In the past 30 years there has been a general division of opinion between scholars who saw SLA mainly in psycholinguistic terms and those who saw it as both psycholinguistic and

social in nature. Initially, most researchers appeared critical or dismissive to the social component of SLA until the publication of the special issue of *Modern Language Journal* in 1997. In their article published in this journal, Firth and Wagner claim the need for a “reconceptualization” of conventional research in SLA as they consider it to be “imbalanced”. Firth and Wagner claimed that the prevailing conception within SLA did not take into consideration the interactional and sociolinguistic aspects and because the non-native speaker was mainly stigmatized as a “defective communicator, limited by an underdeveloped communicative competence” (1997: 285). The authors also propose that instead of using “blanket terms, implying homogeneity throughout each group” (291), learners should be viewed as “individuals who all possess separate social identities” (Van der Zwaard, 2017).

Firth and Wagner’s call for a more holistic approach to SLA research that focuses on the “dynamics” and uniqueness of the language learner; this proposal culminated in a heated debate among researchers. For instance, Gass, Lee and Roots (2007), in an overview of research projects in the field between 1997 and 2007, claimed that Firth and Wagner had not given rise to a new direction, but rather had only widened the gap between cognitive and social SLA frameworks. On the contrary, in his book *The Social Turn in Second Language Acquisition*, Block (2003) advocated for a social turn in the field, expanding on some of the ideas originating from this debate and campaigning for a broader and sociolinguistically oriented SLA which “takes on board the complexity of context, the multi-layered nature of language and an expanded view of what acquisition entails”. In his recent book, Ellis (2015) also emphasizes that researchers have challenged their view that acquisition is just a cognitive phenomenon and now believe that it is “taking place not in the learner’s mind but within the social interactions in which they participate”. To conclude, there was a clear call for a dialectical approach to SLA that should combine insights from both cognitive and social SLA research paradigms (Block, 2003; Reinhardt, 2008).

2.3. Literacy and Language Learning in the Era of Computer-Mediated Communication

Over the past 20 years, information and communication technology has rapidly transformed our perception of literacy and of how information is created and exchanged, offering unprecedented opportunities for language learners, instructors and researchers (Chun, 2008). While the term Computer-Assisted Language Learning (CALL) is used to describe applications, such as educational games, drills, tutorials, and others, Network-Based Language Teaching (NBLT) refers to the use of computers for pedagogical purposes and focuses on the interaction between learners in computer-mediated environments. The appearance of NBLT is a result of both technological and educational change and advancement. In the 1980s and 1990s, networking technologies and infrastructure developed with remarkable speed in many industrialized countries, making low-cost connections accessible for a larger number of people. Warschauer (2005) claims that the multi-dimensional expansion of communication technologies, such as hypertexts, blogging, wikis, instant messaging, video calls and others, have changed literacy practices around the world, and therefore, the way humans interact. Shaffer, Squire, Halverson, and Gee's (2004) also argue that "how we learn and how we process knowledge, online discourse influences societal development" (Magnan, 2008).

In 2001 Prensky used the term "digital natives" to refer to the new generation that will not know life without computers and technology, therefore, they will perceive much less difference between learning in the formal institution, at school, and learning online, at home (Levin & Arafeh 2002). The focus of the current investigation, therefore, is specifically on this group since in line with many other authors, such as Tapscott (1999, 2009), Prensky (2001a, 2001b, 2010), Howe and Strauss (2000), Oblinger and Oblinger (2005), Hall and Keynes (2011) and others, we consider that, due to the fact that today's generation has grown up in a world of digital technologies, they perform and act differently to previous generations. What is more, Hall and Keynes (2011) claim that "they think differently, they learn differently, they exhibit different social characteristics and have different expectations about life and learning". Prensky (2001b) has even claimed that their brains are "physically

different” from previous generations because of the students’ early contact and engagement with technology. Due to all these changes the new generation of learners prefer to receive information fast, rely on communication technologies, and favour active rather than passive learning (Tapscott 1999; Oblinger, 2003; Oblinger and Oblinger, 2005).

According to Thomas and Reinders (2010) the effects of these “out-of-class electronic literacies” also impact greatly on learners’ in-class skills and expectations. Tapscott’s (1998) argued that the traditional model of pedagogy is to be transformed into a more interactive and collaborative one. Tapscott (1998, 2009) outlined the similarity between the digital natives and the principles of an interactionist pedagogy, which he identified with a movement:

1. from linear to hypermedia learning
2. from instruction to construction and discovery
3. from teacher-centered to learner-centered education
4. from absorbing material to learning how to navigate and how to learn
5. from school to lifelong learning
6. from one-size fits all to customized or personalized learning
7. from learning as torture to learning as fun
8. from the teacher as transmitter to the teacher as facilitator.

These multimodal environments require flexibility, responsiveness and, surely, IC competence from the instructor. As Martin (2013b) claims, they are demanding teaching environments to work with, but “carry tremendous learning potential especially now that manipulating multilayered technology no longer poses a challenge for today’s digital natives”. In line, Dooly (2011) states, that future learners will be “digital natives”, therefore, most of these students and teachers “will be expected to integrate some sort of pedagogical use of Web 2.0 into their language classrooms in the future”. For this reason, learners should be encouraged to develop communication skills in order to ensure dialogue, exchange of ideas and growing mutual confidence which would meet digital natives expectations and needs (Montes et al., 2011). In the recent years, however, researchers investigating online

interaction are struggling to keep pace with the constantly growing availability of communication technologies and applications.

The current research on NBLT generally focuses on either the SLA theory and interactionist approach to learning, offering quantitative interpretation, or on sociocultural and sociocognitive theories, providing both quantitative and qualitative methods. Apart from measuring the linguistic development, the latter is also concerned with “understanding how learners interpret and construct meaning online across culturally situated contexts”. In the past 30 years research has shifted its focus from the use of asynchronous, usually written, communication, to synchronous computer-mediated interactions aiming at “understanding how these can foster the development of intercultural competence in FL learners” (Martin, 2013a).

In 1999, for instance, Appel conducted a study investigating the effectiveness of tandem second language learning using electronic mail (e-mail). In this case study, seven different tandem pairs were asked to write e-mail in English and Spanish for a period of at least one month. From the resultant data, two elements clearly emerged as central to the process of language learning through this type of activity: language awareness and learning awareness. The results of the study strongly indicated that e-mail tandem writing developed and sharpened these two forms of awareness, and that they in turn fostered language acquisition and the development of learner autonomy. Similarly, Trenchs (1996, 1997, 1998) described how beginning language learners generated electronic mail in a foreign language and what the resulting texts looked like. The study uncovered different, contrastive writing behaviors and a diversity of texts and suggested that communicative activities in the language classroom pose dilemmas for students. Trenchs recommended that language educators should provide guidance and support the students regarding the use other sources of information (such as bilingual dictionaries, their notes and collaboration between classmates) as well as assist the learners in how to properly use these sources and raise their consciousness of the purpose of its use. Besides, teachers should structure the production of their e-mails in accordance with the school’s environment. On the whole, the balance between providing the

initial guidance and allowing for learners' autonomy at the subsequent stages seemed to be crucial for the successful outcome of the technology-assisted learning process.

González-Bueno (1998) detected some of the features that distinguish the foreign language produced in e-mails from that in traditional in-class activities. These were: (a) a greater amount of language; (b) wider variety of topics and language functions; such as, use of more questions and discourse management markers; (c) a higher level of language accuracy; (d) more similarity with spoken language; (e) more student-initiated interactions; and (f) more personal and expressive language use. In addition, it was found that some of these characteristics, especially the fact that some participants wrote longer messages and about more personal topics, might be related to the availability of at-home terminals.

In his study Chen (2006) added to previous research in providing a deeper understanding of how a foreign language learner develops e-mail literacy in the target language environment, by presenting a longitudinal case study of a Taiwanese student's e-mail practice in English during her studies at a U.S. university for two and a half years. The study showed the complexity of the language learner's e-mail practice and struggle for appropriateness. Her development of e-mail literacy was discussed in relation to her understanding of the e-mail medium, changing performance of student identity, growing knowledge of student-professor communication and culture-specific politeness. In 2014 Wu researched the effects on student motivation of using computers for writing and communication in the language classroom, demonstrating that self-reported knowledge of computers and amount of experience using electronic mail, were associated with students' positive attitude.

Written chat, either synchronous or asynchronous, is another technology driven mode of communication that has also been widely investigated in the recent years. As Van der Zwaard (2017) affirms, different claims have been made in studies comparing real-time chat communication with face-to-face communication in L2- learning environments. Kelm (1992), for instance, claimed that communicating through chat is a "great equalizer" because students do not feel the pressure of keeping up with the pace of oral comments. Likewise, Beauvois (1992) argues that real-time chat eliminates issues such as accent, gender or skin

colour. Higher participation level and more equal positioning, most likely due to the non-threatening environment of the real-time chat, were also demonstrated by other researchers (Abrams 2003; Beauvois 1992; Chun 1994; Kern et al. 2008; Warschauer 1997). Similarly, it was revealed that participants communicating through chat were generally more motivated (Meunier 1998, Freiermuth 1998, 2001; Freiermuth & Huang 2012; Freiermuth & Jarrell 2006; Kern 1995).

Freiermuth (2006), for instance, demonstrated that online chatting provided a “more comfortable environment” compared to traditional face-to-face settings, making it “a fruitful tool” for communication in a foreign language as it “reduced social constraints”. In her study, investigating meaning negotiation and communication strategy use among non-native speakers of English, Zhao (2010) revealed that text chat has more potential of promoting lexical acquisition than videoconferencing.

On the other hand, more recent studies comparing digital and non-digital synchronous communication affirm that the availability of the speaker’s image during interaction increases the dynamics of the communication and creates an awareness of social presence in second language learning environment (Yamada 2009; Yamada and Akahori 2007). Yamada’s study (2009), for instance, investigated potential designs in the use of synchronous computer-mediated communication in learner-centered interaction. In his study, Yamada compared four types of SCMC, namely, text-based chat with and without participants’ image, video conferencing, and audio conferencing. He investigated the effect of each type of communication on four components of language learning. The findings demonstrated that the image enhances the social presence and productive performance, and the use of voice influences the perceived consciousness of language learning, productive performance and consciousness of learning objectives.

In a new study conducted in 2020 Birello and Pujolá looked into the way preservice teachers use images to stimulate reflective processes through writing in a digital setting. The findings demonstrated that those blog posts in which the teachers use images related to personal experiences, the relation between image and text prompts their contemplations;

while the neutral images did not add value. The study intends to aid teachers to use images in digital writing in a way that is meaningful and beneficial for their reflective processes.

In spite of the belief that social presence may support second language interaction in learner-centered communication, it can also hinder consciousness of learning context and learning objectives. In a study conducted in 2012, Ko demonstrated that the differences in the SCMC (video/audio, audio and face-to-face) environments are reflected in the learners' perception of social presence.

The communication mode, therefore, may affect the way learners interact (Lowenthal 2010). According to Hampel (2006) for instance, users of SCMC "suffer from techno-stress" as a result of the pressure to respond quickly and adequately to their partners. On the other hand, Reeder, Macfadyen, Roche and Chase (2004) argue that chat fits "poorly into traditional parameters of communication" because it "lacks important features of orality" and is "largely founded in literacy".

In her article on computer-mediated discourse Chun (2008) provides a review of studies on the use of computer-mediated communication (CMC from now on) for SLA and proposes five purposes of using CMC (synchronous and asynchronous) to achieve different language/culture learning goals:

- (1) Linguistic, grammatical development
- (2) Improvement of communicative competence, oral and written proficiency
- (3) Negotiation for meaning
- (4) Co-construction of knowledge/meaning, development of pragmatic competence
- (5) Intercultural exchange/communication

Magnan (2008) clarifies that the first two categories are a representation of the cognitive approach to SLA, while the other three embody the socio-cultural approaches, that is, language development is understood as a social process and is "a property of social settings and the interface between person and social context" (Foster & Ohta 2005: 403). In other

words, CMC is thought to create “the opportunity for a group to construct knowledge together, thus linking reflection and interaction” (Warschauer 1997: 473).

In 2015 Appel and Pujolà examined Language Massive Open Online Courses (LMOOCs) by looking into the challenges regarding the methodological approach to foster meaningful language learning tasks and the tools required to enhance meaningful interaction. The authors described a new type of LMOOC, the tandem MOOC, which provides language learners with opportunities to communicate online with native speakers of their target language and demonstrated that CMC can enhance the development of some L2 competences. Additionally, the current research aims to investigate the intercultural aspects and benefits that such computer-mediated environment has to offer.

2.4. Telecollaboration and Intercultural Exchanges in Second Language Learning

The focus of the current study is on the use of synchronous online interactions and the possibilities of the videoconferencing technology to enhance cross-cultural communication in foreign language education. According to O’Dowd (2007), online intercultural exchange, also known as telecollaboration, is “the activity of engaging language learners in interaction and collaborative project work with partners from other cultures through the use of online communication tools such as e-mail, videoconferencing, and discussion forums”. Research on telecollaboration has flourished in the past 20 years, demonstrated by a large number of studies and journal articles dedicated to this topic (Belz, 2003; Lewis, Chanier, & Youngs, 2011; Belz & Throne, 2006; Dooly, 2008; Dooly & O’Dowd, 2012; Guth & Helm, 2010; O’Dowd, 2007; Warschauer, 1995, 1996; Warschauer & Kern, 2000). In this section we provide a state-of-the-art overview of telecollaborative research in educational environment.

Recently, researchers have been calling for a reorientation of teaching practices “toward intercultural objectives that are in line with language needs in the face of an increasingly globalized world and with practices favored by the digital natives that will inhabit it” (Martin, 2013a). This model is based on the notion of a learner as an intercultural speaker. Intercultural Communicative Competence (ICC) as Byram (1997) defines it is the “knowledge of others;

knowledge of self; skills to interpret and relate; skills to discover and/or to interact; valuing others' values, beliefs, and behaviors; and relativizing one's self' (further explanation of Byram's model of ICC is provided in Section 2.5).

As Martin (2013) claims, "in the absence of full cultural immersion, telecollaboration, a form of networked-based language teaching (NBLT), is particularly well suited for this purpose". Guth and Helm (2010) define telecollaboration as an "Internet-based intercultural exchange between people of different cultural/national backgrounds, set up in an institutional context with the aim of developing both language skills and intercultural communicative competence (as defined by Byram 1997) through structured tasks".

In his recent review of the literature O'Dowd (2019) states that the main models of virtual exchanges used in foreign language education are the e-tandems and intercultural telecollaboration approaches (O'Dowd 2016). In the e-tandem model (O'Rourke 2007), two native speakers of different languages communicate together in order to practice the other's language, and messages are typically half in the target and half in the first language, in that way providing each partner with an opportunity to use their target language and, at the same time, offering authentic input to their partner. These exchanges, though, are primarily based on the principles of autonomy and reciprocity.

Telecollaboration, as O'Dowd (2019) affirms, "differs considerably to e-tandem due to the greater importance it attributes to classroom integration of the online interaction and also because of the shift of focus in learning outcomes from developing communicative competence to intercultural communicative competence (Byram 1997)". Telecollaborative approaches focus largely on the development of cultural awareness and intercultural communicative competence and aim to integrate students' online activities more comprehensively into the students' classwork. Next, O'Dowd suggests an alternative approach to virtual exchanges which is similar to the previous ones but includes the principles of global citizenship education and is not limited to bilingual/bicultural interaction mode. As O'Dowd (2019) claims, he recognises the valuable results of such bilingual/bicultural exchanges, but he aims to "suggest alternative models which avoid students positioning their

virtual partners as oversimplified representatives of monolithic cultures”. Additionally, he argues that we should aim to develop students’ critical thinking of the world they live in so that they see problems and issues from different perspectives and be able to deal with them. And, finally, O’Dowd stresses on the important role that language educators play in order to explore the possibilities that second language learning offer to enhance such initiatives.

Another scholar who has contributed to the field of telecollaboration is Dooly. In 2011, she published an article in which she examined participants’ modes of language use beginning with the task-as-workplan and then examining episodes and outcomes of the task-in-process. By identifying specific moments of emerging language knowledge in the telecollaborative process, the article aimed to delineate salient factors involved in this type of language learning context. In another article Dooly and Davitova (2018) examined the complexity of the multiple resources used by participants during Skype interactions. More specifically, they investigated how the learners used such resources to creatively negotiate and resolve communication problems. In their most recent work Vallejo and Dooly (2020) include texts by some of the leading scholars in the fields of plurilingualism and translanguaging. As both authors come from different geographical and cultural contexts, they were invited to share their standpoints on the evolution of plurilingualism, translanguaging and their relation to language teaching and learning. The articles showed the different possibilities of these approaches that mean to put speakers’ fluent, hybrid, multimodal and creative communicative practices at the core of research and practice. Additionally, the articles demonstrated that, whilst socioeducational inequalities exist, more reflection, expansion and actions are needed.

In his article Godwin-Jones (2019) states that telecollaboration is “such a powerful and effective tool for both second language acquisition (SLA) and fostering intercultural communication competence (ICC) that it should be regularly included in foreign language instruction” and that its use should be “normalized” into the language classroom (Bax, 2003). At the same time the author claims that there has been some skepticism concerning the usefulness of telecollaboration, as normally implemented in class-based exchanges. As some of the concerns Godwin-Jones (2019) mentions ineffective, peer-based error-correction

(Ware & O’Dowd, 2008; Lin, Warschauer, & Blake, 2016; Tai, Lin, & Yang, 2015) and the reinforcement of cultural stereotypes (Flowers, Kelsen, & Cvitkovic, 2019; Guth, Helm, & O’Dowd, 2012; Kirschner, 2015). In their study Lin, Warschauer and Blake (2016), for instance, investigated learners’ attitudes, usage, and progress in a major Language Learning Social Network Site (LLSNS) through a survey of 4,174 as well as 20 individual case studies. The study demonstrated that apart from the overall positive perceptions of participants there were also limitations, as most learners dropped out or displayed limited improvement. The study, thus, made evident that, if online education is to positively contribute to FL learning and teaching, students will need guidance and well-structured activities. In 2015, Kirschner investigated whether combining Skype, blogging and class discussions reinforces or reduces stereotypes. By writing a blog, taking surveys, and requiring students to occasionally reflect on their thoughts throughout the semester Kirschner revealed progress in reducing but not eliminating stereotypical reinforcements.

One apparent lesson from the 20-year history of telecollaboration is that “linguistic and intercultural gains are by no means automatic and that exchanges need to be set up with care as well as with an awareness of best practices” (Godwin-Jones, 2019). Moreover, he argues that context and goals will shape the design, tools and services used in telecollaboration. He also points out to studies that have demonstrated the importance of “guided reflection” in collaboration for developing Intercultural Communicative Competence, other studies, however, have suggested that the access to informal resources today in online interest groups, social media, and digital entertainment create opportunities for “intercultural communication in the wild”. According to this author, it has been claimed that independent engagement in online L2 exchanges and activities may lead to more L2 exposure, greater motivation to use the language, and deeper cultural insights, in contrast to the monitored class-based exchanges. Godwin-Jones refers to a recent study conducted by Flowers, Kelsen and Cvitkovic (2019) who compared experiences of students engaged in monitored telecollaboration to autonomous learners with interesting results. It was demonstrated that there were more gains in respect for cultural differences for the classroom-based group, but the autonomous group showed gains in confidence and in learning efficiency.

Liaw and Johnson (2001), for instance, investigated the cultural dimension involved in the e-mail correspondence between university EFL students in Taiwan and pre-service ESL teachers in the USA. The findings revealed that curiosity toward the other culture influenced the continuity of the correspondence, but cultural beliefs were sometimes an obstacle for communication; positive interpretations of cultural differences and empathy were major factors for ensuring meaningful and enjoyable interaction. The authors claim that, although there is no replacement of a real immersion into the target culture, cross-cultural e-mail correspondence helped the participants become conscious about the cultural differences and improved learners' cross-cultural understanding.

In her study Schenker (2012b) refers to many other studies that have discussed the factors concerning the successful outcome of the telecollaborative projects. Hauck (2007), for instance, suggests that linguistic competence, affective variables (different levels of motivation on both sides of the exchange), the learning context, and cultural learning are the key factors. Belz (2001) also claims that differences in language proficiency may lead to misunderstandings and tensions. These types of differences and their effect on the telecollaboration have been recognized as essential factors leading to a successful telecollaborative experience by many researchers (Belz, 2001; O'Dowd & Ritter, 2006; Ware, 2005). In her study Belz (2001) found some sociocultural factors that had an influence on cross-cultural German-American telecollaboration. She discovered that certain social and institutional aspects may affect the use of language in telecollaborative projects. One reason is the difference in value of German (as a foreign language) in the US and English (as a foreign language) in Germany. This led to different language proficiency and resulted in shorter e-mails which some learners interpreted unfavourably. In this case, the misinterpretation can have a negative impact on the exchange as a whole.

Ten factors or potential areas for tensions or problems in telecollaboration are explained by O'Dowd and Ritter (2006):

- (1) learners' levels of intercultural competence,
- (2) learners' motivation and expectations (as mentioned by Belz (2001)),
- (3) the relationship between the two teachers of the exchange classes,

- (4) the task design,
- (5) the way learners are matched with each other,
- (6) the dynamics of each group or pair of learners,
- (7) students' preparation for the exchange (what has been called "pre-exchange briefing"),
- (8) technology itself,
- (9) the organization of the project, and (10) the prestige of the target language and culture, or lack thereof.

As regards task design, based on findings from three different telecollaborative projects O'Dowd (2007a) found that in order to promote cultural awareness such projects should aim at directly comparing cultural topics and provide the opportunity to reflect on the exchange of opinions. While O'Dowd (2006) admits that "the contribution of visual images to online communication and the immediacy of "live" face-to-face interaction seem to offer a much more authentic and personal side to long-distance telecollaboration", he is also doubtful as "it remains unclear, however, if videoconferencing can make a particular contribution to intercultural telecollaboration that other communication tools such as e-mail or chat cannot". Moreover, he considers that the immediacy of the videoconferencing mode can lead to some awkward situations and this, to misunderstandings and tension between the participants. However, based on our personal experience and in line with Martin (2013), we do not agree with O'Dowd's negative understanding of tension in telecollaborative projects. Rather, it is our belief and starting standpoint in this dissertation, that misunderstandings, pressure and anxiety "are part of natural conversation between speakers of the same language and that in [...] real time interactions, these are normal, if more common occurrences, and should be perceived as valuable learning moments for FL learners" (Martin, 2013).

In her study on the effects of a virtual exchange on language skills and intercultural competence Schenker (2012a) points out that many researchers support the use of telecollaboration for foreign language and culture learning and identify a variety of benefits, such as:

- the development of intercultural competence and the process in which students become intercultural speakers (Müller-Hartmann, 2006; O'Dowd, 2003; O'Dowd, 2007),
- the pleasure students derive from this cultural learning opportunity (Liaw, 1998),
- the expansion of topics,
- promotion of student-centered learning,
- connection of different speakers and opportunity for all speakers to participate equally (Gonglewski et. al, 2001),
- the cross-cultural growth through critical incidents (Ware & Kramersch, 2005),
- the improvement of written communication skills and increased learner motivation (Spodark, 2001; Ware, 2005),
- a discovery of and reflection on cultural behaviors, beliefs and concepts that enriches the learners' understanding and interaction in their own and with other cultures (Liaw, 2006),
- the opportunity for self-empowered learning (Von der Emde, Schneider, & Kötter, 2001),
- the opportunity for receiving feedback from more than one professor (Lord & Lomicka, 2004),
- the chance to use new ways to link learners and the high educational value of such cross-cultural exchange (Warschauer, 1997),
- the maximizing of intercultural learning, social interaction, and language learning (Belz & Müller-Hartmann, 2002; Kern 2006),
- the encouragement and high motivation of students (Godwin-Jones, 2003),
- the higher willingness to participate which leads to better attitudes and, in turn, fosters intercultural competence (Schuetze, 2008),
- and the dynamic of the learning experience whereby students learn to understand each other, interacting with speakers other than the lecturer (Kinging, Gourvès-Hayward, & Simpson, 1999).

The results of several studies point at exceptionally positive responses of participants - both students and educators - in telecollaborative activities. Caluianu (2018), for instance, reports that over 80% of the students and more than 70% of the educators surveyed in Helm (2015) agreed that taking part in a telecollaborative exchange was a positive experience. Among the benefits listed by student participants were: learning to communicate with people from other cultures, improving language skills and becoming more proficient in the use of online tools to communicate. Despite the support from European organizations, such as the European Commission and the Council of Europe, and in spite of the high satisfaction levels of participants in these exchanges, telecollaboration has yet to bring to light its potential “as telecollaboration has not been mainstreamed into higher education” (Helm, 2015). The cause for this delay, as Caluianu claims, might be due to the difficulties faced by practitioners of the method, some of which are difficulties in coordinating timetables, levels of proficiency and educational goals, lack of institutional support, cultural clashes, and lack of time. Most of the educators surveyed in Helm (2015) stated that telecollaboration was time-consuming (84%) and many referred to technical issues.

In a very recent study Taskiran (2020) looked into the learners’ experience after a five-week telecollaborative project between one hundred English as a foreign language (EFL) students from China and Turkey. According to the learners the activity motivated them to put in practice what they learn in class in their daily lives in real conversations. Thus, the learners became more aware of their language competence and more motivated to engage in language exchanges, which helped them boost their confidence in their foreign language skills. As the participants mentioned in their comments, they enjoyed discovering similarities between Chinese and Turkish university students’ daily lives. They initially found it difficult to interact with someone from another culture in English but later on became more self-confident and more interested in each other’s culture.

Likewise, Kohn and Hoffstaedter (2017) conducted a study on telecollaboration for intercultural communication in foreign language school settings. The focus was on non-native English and German lingua franca conversations between pairs of students (aged 14–16, B1 level) from France, Germany, the Netherlands and Spain. The telecollaborative

exchange was conducted through the BigBlueButton video communication platform and Moodle chat. The main goal was to look into the pedagogical potential of telecollaboration for meaningful intercultural communication and foreign language competence development beyond the traditional classroom. Qualitative and quantitative analyses of the data demonstrated (a) increased learner agency, topic development, communicative success and rapport building, and (b) emerging emancipatory qualities of non-native speaker identity such as increased speaker satisfaction and strategic resourcefulness. There was a noteworthy increase in ICC development, and both students and teachers stated that going beyond the constraints of the foreign language classroom became an invaluable and useful experience.

As we have mentioned in this section, telecollaborative approaches focus on the development of cultural awareness and intercultural communication. In the following section we provide contextualization of the terms within Byram's (2008a) framework of Intercultural Communicative Competence.

2.5. Intercultural Communicative Competence as a Construct to Study Telecollaboration: A Focus on the Skills of Information Discovery and Interaction

In previous sections we have provided a framework for the current research which focuses on the interactional and communication strategies as well as negotiation practices of FL learners in the context of videoconferencing intercultural exchanges. The interactional features fall within the skills of information discovery and interaction, a component of the larger construct of intercultural communicative competence (ICC from now on). Therefore, given the multifactorial aspect of ICC, I selected Byram's (2008a) model as a framework and a method of analysis that allowed for the investigation of students' interactional features while telecollaborating. As Martin (2013) affirms, Byram's model seems well suited for telecollaboration because "it does not seek to quantify ICC development and concentrates on objectives and observable actions as evidence of development instead of on statements of learner self-evaluation to demonstrate learning".

In fact, Byram's model of intercultural competence was selected to serve as the theoretical framework for this study for two main reasons: (1) it addresses intercultural communication in the domain of foreign language learning and (2) it has already been applied in previous research into telecollaboration (Schenker, 2012; Ware, 2013; Belz, 2003; and O'Dowd, 2003 among others). Byram's initial model (1997) evolved from his previous work on cultural studies in foreign language education, in which he suggested that language and culture should be taught in an integrated fashion (Byram, 1988). Actually, Byram's work developed through the years and moved "towards intercultural citizenship education putting his notion of how language teaching could leading to political action into practice through a new model for intercultural citizenship education" (Awad, 2019). The current section presents a detailed description of Byram's model and its three general domains - knowledge, attitudes, and skills, focusing in particular on the skills of information discovery and interaction since they are particularly relevant in the present study.

Byram's model of intercultural communicative competence, explained in his book *Teaching and Assessing Intercultural Communicative Competence* (1997), suggests five factors in intercultural communications: (1) attitudes of openness and curiosity (*savoir être*), (2) knowledge of self and other (*savoir*), (3) skills of interpreting and relating (*savoir comprendre*), (4) skills of discovery and interaction (*savoir apprendre/faire*), and (5) critical cultural awareness / political education (*savoir s'engager*) (See Table 2.1). Byram (1997) also provides specific educational objectives based on this model which are designed for language and culture learning. His model is multidimensional as it incorporates different components of intercultural competence, namely knowledge, skills of discovery and interaction, attitudes, and skills of interpreting and relating. These four components together aim at supporting the student to achieve a fifth objective of intercultural competence, which Byram (1997) calls critical cultural awareness. The model assumes a threshold level for intercultural competence, which is the minimum level that is necessary in order for the learner to be able to function as an intercultural speaker. However, he further claims that an intercultural competence threshold is not fixed, since it might differ according to context depending on which components and objectives are emphasized. The model, as explained in Table 2.1, has been widely used in foreign language classrooms, and has been referenced in many occasions in the literature on intercultural learning and in publications issued by the Council of Europe. (e.g. Byram, Bribkova, & Starkey 2002; Barrett; Byram, Neuner, Parmenter, Starkey, & Zarate, 2003; North, Goodier, & Piccardo, 2018).

Table 2.1: Byram's (1997) Model of Intercultural Communicative Competence.

Attitudes (savoir être):	Attitudes of curiosity and openness, readiness to suspend disbelief about other cultures and belief about one's own.
Knowledge (savoirs):	Knowledge of social groups and their products and practices in one's own and in one's interlocutor's country.
Skills of interpreting and relating (savoir comprendre):	The ability to interpret a document or event from another culture, to explain it and relate it to documents from one's own.
Skills of discovery and interaction (savoir apprendre /faire):	The ability to acquire new knowledge of a culture and cultural practices and the ability to operate knowledge, attitudes and skills under the constraints of real time communication and interaction.
Critical cultural awareness (savoir s'engager):	The ability to evaluate critically and on the basis of explicit criteria perspectives, practices and products in one's own and other cultures and countries.

As we mentioned, Byram's (1997) model focuses on learners reaching a certain threshold rather than acquiring complete and perfect competence. Byram et al. (2002) argue that it is not possible to acquire all types of knowledge that might be necessary to interact with people from different cultures, since these cultures are constantly changing, and countries consist of many cultures. Apart from the fact that any language could be used as a lingua franca, they also claim that everyone's own social identities and values develop and change throughout their lives with each new experience they live and each time they become a member of new social groups. In general, intercultural competence is never a completed process and learners need to be aware of the need to adjust their attitude and behavior, as well as to learn to accept and understand people who are different from them (Awad, 2019; Pogorelova & Trenchs-Parera, 2018).

Additionally, in order to meet all of the objectives Byram's recommends a stay in the target country, which certainly causes ambiguity as to how students can attain them without studying, travelling or living abroad. As Byram (1997) claims, his model consists of three essential features: "the ideal of the intercultural speaker (as opposed to the native speaker ideal which is predominant in some other models), educational objectives for acquiring

intercultural competence in an education setting, and specific places of learning and roles of instructors and students” (Schenker, 2012b).

Although many studies make use of Byram’s (1997) model, it has also been met with criticism by some scholars. As Schenker (2012b) mentions in her study, some of the criticism refers to the specificity of the model, the assumption that all learners are or will be visiting the target country (Belz, 2007a; Guth & Helm, 2010), and the notion of culture which overlooks subcultures and diversity. According to Risager (2007), Byram offered an intercultural communicative model without presenting explicit discussion on the relationship between language and culture. Others like Houghton (2010) criticized it for the lack of enough emphasis on transformation and identity development. In her recent study Awad (2019) points out on the recent criticism of the existing models of interculturality. She mentions problematic areas, such as assessment, the relationship between intercultural competence and interculturally competent performance, the context-based and relational nature of intercultural competence, and the affective dimension of intercultural competence. Another concern about Byram’s model involves the lack of consideration of online contexts and their impact on intercultural learning (Guth & Helm, 2010) which, however, is perfectly understandable given the fact that the original publication of Byram’s (1997) book came way before the rise of Web 2.0 tools.

Nonetheless, by reviewing the research studies of telecollaboration published in the past 15 years we can clearly observe that it is Byram's model that has been mostly used in classroom-based research studies and educational practices (Belz, 2003; Dooly, 2008b; Hu, 2008; Kramer, 2008; 2007; Sercu, 2004; Wagner, 2008). O’Dowd (2006a) also bases many of his studies on this model because he finds it practical and relevant, especially for educational contexts and he believes that the elaboration of the model makes it well suited for the classroom context.

In his model of intercultural competence, Byram proposes two sets of skills - the skills of interpreting and relating and the skills of discovery and interaction. The first set of skills refer to the ability to identify the fundamental values and viewpoints in a document or event, while

the second set concerns the learners' ability to obtain new information about the target culture, as well as the ability to communicate successfully with members of that culture under the constraints of real-time interaction. The objectives which Byram (1997a: 52/53) sets for each of these set of skills are the following:

Table 2. 2: The objectives of the skills domain within Byram's (1997) Model of Intercultural Communicative Competence

<p>Skills of interpreting and relating Objectives (ability to):</p>
<ul style="list-style-type: none"> • <i>Identify ethnocentric perspectives in a document of event and explain their origins;</i> • <i>Identify areas of misunderstanding and dysfunction in an interaction and explain them in terms of each of the cultural systems present;</i> • <i>Mediate between conflicting interpretations of phenomena.</i>
<p>Skills of discovery and interaction Objectives (ability to):</p>
<ul style="list-style-type: none"> • <i>Elicit from an interlocutor the concepts and values of a document or events and to develop an explanatory system susceptible of application to other phenomena;</i> • <i>Identify significant reference within and across cultures and elicit their significance and connotations;</i> • <i>Identify similar and dissimilar processes of interaction, verbal and non-verbal, and negotiate an appropriate use of them in specific circumstances;</i> • <i>Use in real-time an appropriate combination of knowledge, skills and attitudes to interact with interlocutors from a different country and culture, taking into consideration the degree of one's existing familiarity with the country and culture and the extent of difference between one's own and the other;</i> • <i>Identify contemporary and past relationships between one's own and the other culture and country;</i> • <i>Identify and make use of public and private institutions which facilitate contact with other countries and cultures;</i> • <i>Use in real-time knowledge, skills and attitudes for mediation between interlocutors of one's own and a foreign culture.</i>

These descriptions of the intercultural skills reveal that they are the active application of intercultural understanding (Bredella, 2002) when there is contact with the target culture. Intercultural understanding, according to Schenker (2012b), is the ability to see other cultural perspectives and to adjust one's own perspective due to exposure to this contact. By using the skills of interpreting and relating, learners have to use the understanding which they have gained of the foreign perspective to explain misunderstandings "in terms of each of the

cultural systems present" and to manage to deal with "conflicting interpretations of phenomena" (Byram 1997a: 52). Likewise, the skills of discovery and interaction involve discovering the other cultural perspective and then negotiating meaning between any potential differences in viewpoints based on cultural understanding or knowledge. It is precisely these skills, the skills of information discovery and interaction, which represent one of the main focuses of the current study.

According to Byram (2014), in the recent years the definition of intercultural education has shifted from teaching about target culture to teaching intercultural competence, which now includes teaching for intercultural citizenship. In his book Byram (2008a) presented a new approach to intercultural education that involves citizenship education, taking into account recent criticism on intercultural competence approaches. Byram's approach still focuses on intercultural communicative competences, and it is still limited to foreign language classrooms, but by including citizenship education, he further highlights civic action in the community. Awad (2019) describes the characteristics of this model as follows (p. 43):

- 1) It focuses on acquiring knowledge and understanding, not only information, about other people who are not necessarily native speakers, as well as acquiring knowledge about oneself.*
- 2) It focuses on developing attitudes of curiosity and critical questioning and introduces concepts of critical cultural awareness and social justice instead of a focus on tolerance.*
- 3) It focuses on teaching-and-learning of skills of inquiry, from which learning about oneself and others evolve, and the skill of comparison which helps create a mutual gaze that enables learners to see themselves as others see them and not only learners gaze at others.*
- 4) It focuses on out-of-classroom engagement by taking some type of action in the real world outside.*
- 5) It considers self and other as individuals in their sociocultural groups, which includes age, gender, ethnicity, etc. and not only national and linguistic aspects of these cultural groups.*

In 2021 Byram published a revisited version of his most influential work on Intercultural Communicative Competence (1997). The basic model has not changed in its structure; it still contains the five well-known components of intercultural competence. What is new is the

definition of some of these components in accordance with the complexities of the world today and the advances in the field of language and intercultural education. For instance, the central component of his 1997's model of ICC was "critical cultural awareness", which has been much more developed in his recent book. Byram now defines it as "education", with the objective of developing critical cultural awareness as well as political education. That is, Byram (2021) "takes intercultural competence in a more politically-oriented direction and with an emphasis on criticality" (p.13).

Although Guth and Helm (2010) indicate some limitations of Byram's model, they also stress that "the completeness of Byram's model and its use as a reference point for ICC in language learning and telecollaboration contexts ... make it, in [our] view, the most suitable starting point for developing a framework for the multifarious goals of Telecollaboration 2.0" (p. 70). Accordingly, because they believe that the model is in itself the most comprehensive example of a model of intercultural competence, Guth and Helm (2010) attempt to expand Byram's (1997) model to incorporate new online contexts. They call these contexts "Telecollaboration 2.0", and clarify that they don't necessarily prepare students for study or visits abroad, but aid them "to learn to operate [...] effectively in multilingual, multicultural global networks using any number of languages" (Guth & Helm, 2010, p. 72). Guth and Helm (2010) aim to integrate the concept of new online literacies in the domain of telecollaboration 2.0 within a framework of three dimensions, which they call the operational, the cultural, and the critical (See Table 2.3). In their framework, they intend to relate new online literacies and the development of ICC and foreign language learning.

This extension of Byram's (1997) model to include the new online learning contexts appears to be a good way to update this model, which was developed before the appearance of the online learning tools. We believe that this is a necessary step if the model is to be used in research and educational practices in the future. Additionally, in this way it can compensate for one of its major drawbacks, specifically the assumption of learners going abroad or visiting the target country. This objective may need to be reconsidered and replaced with the increasing contact with native speakers which can easily be facilitated through online tools today.

Table 2. 3: Framework of Telecollaboration 2.0. aimed at enhancing new online literacies, ICC and foreign language learning (Guth & Helm, 2010)

New Online Literacies	ICC	Foreign Language Learning
Operational: The ‘technical stuff’		
Computer literacy Information literacy New media literacies	<i>Savoir apprendre/faire:</i> skills of discovery and interaction <i>Savoir comprendre:</i> ability to interpret a document or event from another culture, to explain it and relate it to one’s own	Spoken production Spoken interaction Written production Reading Listening Codeswitching
Operational: Attitude: the ‘ethos stuff’		
Willingness to explore, learn from, participate in, create, and collaborate and share in online communities	<i>Savoir-etre:</i> attitude of openness and curiosity Autonomy	Autonomy Motivation Willingness to communicate
Cultural		
Knowledge of literacy practices and appropriate ways of communicating online Propositional knowledge of topic	<i>Savoirs:</i> knowledge of social groups and their products and practices in own and other cultures; knowledge of the processes of interaction	Linguistic knowledge Sociolinguistic knowledge Pragmatic knowledge
Critical		
Critical Literacy Awareness	Critical Cultural Awareness	Critical Language Awareness

Subsequently, we provide an overview of research that aims at investigating the interactional skills in computer-mediated L2 learning environment. In his study, Neuner (2000), for instance, suggests that learners need to be trained in the strategies of finding information, listening and observing as well as "[...] strategies for arriving at the meaning, for 'trading meanings', for working out the contexts, norms and values 'behind the words' ". Similarly, Ware and Kessler (2014) claim that online exchanges might offer a different kind of learning experience that provides opportunities for adolescents to engage with language in ways that do not typically happen in conventional language classrooms. Many CMC tools, such as discussion forums, chats, videoconferences and e-mails have been analyzed in their effects on intercultural competence. However, the research on the skills of information discovery

and interaction in telecollaborative setting is scarce. It is worth, therefore, mentioning some of the most relevant studies in this field.

O'Dowd (2006b) discovered that German and American students who took part in a CMC project developed intercultural competence when using ethnographic interviewing skills in videoconferences and e-mails to learn more about their partners from a different culture. The analysis based on Byram's model of intercultural competence (1997) showed that the learners improved their knowledge of the target culture especially through e-mail, while the videoconferences facilitated the development of their skills of discovery and interaction.

In their publication on the role of telecollaboration in language and intercultural learning, in which they provided a synthesis of studies published between 2010 and 2015, Yas and Sava (2018) claim that Ware's (2013) study is the only one that investigates specifically the skills of discovery and interaction in telecollaborative environment. In her study, Ware (2013) investigates the pedagogical and conceptual issues while integrating intercultural communication skills into the secondary curriculum in classroom-based, international online exchange. She investigates the skills of discovery and interaction within a model of intercultural communicative competence, and looks into the ways in which adolescent students display these skills through their online comments. The results from her study reveal that the adolescents display a variety of interactional features, which Ware claims are part of a larger construct of intercultural communicative competence that includes the types of new literacy skills needed to write, read, communicate, produce, consume, and assess in a digital age.

The focus of this project is on these skills of information discovery and interaction within Byram's (2008a) model because very few projects with adolescent learners have yet investigated thoroughly how students establish a successful relationship with their partners and acquire the necessary information to learn about the foreign culture in such online telecollaborative context. As Byram (1997a) claims, the skills of discovery and interaction aim at discovering the other cultural viewpoint ("Elicit from an interlocutor the concepts and values of a document") and then negotiating meaning. Likewise, Müller-Hartmann (2000a and

2000b) suggests that, in order for the learners to achieve a real change in perspective, they need to involve in “an intense negotiation of meaning with their partners” because simply asking each other for information is not sufficient. He recommends that the teachers’ aim should not only be to assist students' in developing their skills of analysis, but also to create activities which will “bring about the negotiation of meaning and a change in perspective and thereby set learners on the road to becoming more aware of themselves as cultural beings” (O’Dowd, 2006).

In closing, as Chun (2008) suggests, language development can be examined by looking into how learners use the L2 in interaction with other people and how they preserve the integrity of the interactions between the partners. For the reasons mentioned above, the current study is interested in investigating FL learners’ interactions and negotiation for meaning in instructed L2 environments and its contribution to facilitate intercultural knowledge.

2.6. Negotiation of Meaning in Computer-Mediated Communication in a Second Language

One of the key pedagogical implementations of the interactionist approach relates to the concept of negotiation of meaning (Ellis 2003; Gass & Mackey 2007; Long 1981; Pica 1991, 1992, 1994; Varonis & Gass 1985a, 1985b). As Van der Zwaard (2019) defines it “negotiation of meaning is defined as a series of conversational turns in which one of the participants in an interaction - usually, but not necessarily, the learner - stops the conversational flow due to difficulties in comprehension in an attempt to solve the communication breakdown”. This is considered a fundamental part of the L2 learning process and is widely asserted to promote L2 acquisition. The abundant research that has emerged since Long’s Interaction Hypothesis has revealed that negotiation of meaning in the L2 classroom plays an important role on comprehension and intake (Ellis 2003; Long 1980, 1982; Pica, Young & Doughty 1987; Pica 1991, 1992, 1994; Varonis & Gass 1985a, 1985b; Oliver 2002; Gass & Mackey 2007). Indeed, it has been demonstrated that “the interactional ‘work’ that occurs when a learner and his/her interlocutor encounter some kind of

communication breakdown ... is beneficial for L2 development” (Mackey, Abbuhl & Gass, 2012).

As Fernández-García and Martínez-Arbelaiz (2002) claim, “the type of interaction that has been identified as “negotiation of meaning” is the one that provides optimal conditions for language acquisition since it offers opportunities to generate both comprehensible input and modified output”. It is widely recognized that receiving input, including both the comprehensible and non-comprehensible, promotes comprehension and facilitates L2 learning. According to Lee (2001), “receiving input itself without negotiated interaction is not sufficient. Learners must have the opportunity to take note of particular parts of linguistic structure and make an attempt to provide input modification”. What is more, we must bear in mind the importance of modified output and recognize that pushed output, “where students are at the limit of their communicative abilities in the foreign language, can help learners to acquire the L2, particularly in the case of syntactic structures” (Clavel-Arroitia & Pennock-Speck, 2015).

We believe that synchronous online task-based activities offer chances for negotiation of meaning which the traditional classroom environment often can not provide. For the purpose of our study we consider that the most suitable and commonly used model to describe and analyze episodes of negotiation of meaning for learner interaction is the Varonis and Gass model of non-understanding (1985). Despite the fact that the model was initially based on communication between non-native speakers, it has also been applied to native speakers (NS from now on) – non-native speakers (NNS from now on) interaction (Smith, 2003; Wang, 2006; Yanguas, 2010; Van der Zwaard & Bannink, 2014, 2016). The Varonis and Gass model has also been applied in technology environments research, for example in interaction through videoconferencing (Yanguas, 2010; Wang, 2006; Lee, 2007; Monteiro, 2014) and through chat (Fernández-García & Martínez-Arbelaiz, 2002; Kost, 2008; O’Rourke, 2005; Smith, 2005; Lee, 2007). As Van der Zwaard and Bannink (2019) explain, Smith (2003a) revealed a delay between the trigger and indicator in instant chat, which led to “split negotiation routines” in a study investigating the interactions between intermediate learners (p. 48). Additionally, Smith demonstrated that the reaction-to-response stage was more

dynamic than regarded thus far and that negotiation of meaning carried on after the reaction to response. The author, therefore, adapted Varonis and Gass' model by adding three elements: (a) learner responses, such as assessing deductions to check understanding; (b) a confirmation stage, in which the NNS either confirms or negates the degree of understanding; and (c) a reconfirmation phase, unormally comprising of single-words such as *Oh* or *OK*, added after the reaction to response.

According to Varonis and Gass' model the negotiation episodes are divided into two main parts:

TRIGGER RESOLUTION

T → I → R → RR

A Trigger (T) is considered to be that part of the discourse that provokes the non-understanding on the part of the listener. During the Resolution phase, the non-understanding is handled: the Indicator (I) is the episode in which the listener signals the non-understanding, interrupting the progress of the intercation. This causes the Response (R) of the speaker to the non-understanding. The last stage is the Reaction to Response (RR) articulated by the listener, which normally indicates the end of the negotiated process, i.e. the understanding has been restored and the conversation can continue (Van der Zwaard, 2017). An example of how the model works is provided in Table 2.4.

Table 2. 4: Example of Varonis and Gass model with data and coding taken from the current study

Turn	Transcript	Coding
1	<i>Manuela:</i> A typical food of Bulgaria is <i>tarator</i> .	Trigger
2	<i>Carla:</i> What is this?	Indicator
3	<i>Manuela:</i> This is like a cold soup made of yoghurt and cucumbers.	Response
4	<i>Carla:</i> Aha! Yes. (nods)	Reaction to Response
5	<i>Manuela:</i> We eat it a lot in summer, when it's hot.	Interaction pops back

In Table 2.4, the word “*tarator*” serves as the Trigger of the negotiation episode, that is, the motive for the listener’s non-understanding. In Turn 2 she explicitly signals it “*What is this*” thus indicating that the meaningful interaction has come to a standstill. The speaker, in Turn 3, responds to the indicator by providing an explanation of the Trigger in order to solve the non-understanding. With the listener’s response “*Aha! Yes*” the speaker (Turn 5) presumes that the comprehension problem has been successfully resolved and, therefore, the meaningful interaction is resumed “*We eat it a lot in summer, when it’s hot*”.

The mid-1990s were marked by the rapid development of network-based language classrooms and digital platforms and with these innovations the first studies focused on communication and negotiation in interactive digital environments started to appear (Chun 1994; Lee 2001; Smith 2003a; 2003b; 2005; Sotillo 2005; Tudini 2003, 2007; Wang 2006; Warschauer 1996; Yanguas 2010). In the recent years more studies of synchronous videoconferencing have begun to emerge.

Negotiation of meaning in task-based telecollaborative setting has been one of the main focuses of this research. In a significant shift in research design from earlier studies that relied mostly on single classroom contexts (see Kern, Ware, & Warschauer, 2004), the studies reviewed in this section bring together speakers from different geographical locations into real-time synchronous videoconferencing interactions. These studies have been some of the

most recent and relevant research that has been conducted in the field of telecollaboration and has served as a theoretical framework for the current study.

Yamada and Akahori (2007), for instance, compared four types of CMC activities: text-based chat with and without participant's image, videoconferencing, and audio conferencing. They revealed that the presence of the image facilitated the interaction. Compared to the three other types, the highest average number of turns, grammatical errors, self-corrections, use of native language, and interruptions were detected in the videoconferencing mode. These results suggested that videoconferencing enhances communicative language learning as it provides a large amount of input and opportunities for negotiation of meaning. Likewise, in her eminent work Wang (2006) investigated the dynamics of focus on form in task completion during videoconferencing using the Varonis and Gass model (1985) for negotiation of meaning. The results revealed that during videoconferencing the participants modified their interaction when there was a breakdown in task completion, in this way assisting second language acquisition.

In 2010, Yanguas conducted a study which investigated task-based, synchronous oral CMC among intermediate-level learners of Spanish. In particular, he examined how learners in video and audio CMC groups negotiate for meaning in such settings and if there were any differences between both oral CMC modes and traditional face-to-face (FTF) interaction. The findings revealed differences in the way audio and video groups negotiate for meaning, mostly due to the lack of image in the audio group. No differences were detected between video and FTF groups. Moreover, the author found that oral CMC turn-taking patterns were very similar to FTF patterns but opposite to those found in written synchronous CMC. And finally, Yanguas (2010) showed that oral CMC interaction patterns were more diverse.

The influence of the type of digital medium on language learner communication was also investigated by Van der Zwaard and Bannink (2014). In their study they examined negotiation of meaning during interaction between native speakers and non-native speakers of English in a task-based advanced second language classroom via two forms of real-time one-to-one computer-mediated communication: video calling and instant chat-messaging.

Van der Zwaard and Bannink (2014) investigated the nature, scope, and possible patterns of negotiated interaction in both types of digital communication modes. Following the Varonis and Gass model of non-understandings (1985) she analyzed the data obtained during telecollaborative sessions and found negotiation of meaning episodes in both types of real-time interaction but with different patterns. The data demonstrated that video calling triggered more loss of face issues than communication through chat, which affected the trajectory and production of language. Another study by Van der Zwaard (2017), examined the relationship between negotiation configurations, that is, whether or not L2-learners will engage in negotiated interaction in two modes of synchronous CMC - video call and chat. The findings of her study suggested that the trajectory and outcome of the interaction depend on the constraints and affordances of the specific mode of communication.

Five years later, in 2019, Van der Zwaard and Bannink again expanded on their previous research this time investigating the emerging patterns of synchronous digital discourse trajectories, focusing on (absence of) negotiated interaction. They provided a new model of L2 learning interaction which consisted of two main types of hearer response found after a trigger of non-understanding. The interactions between NS-NNS Dutch and Australian students in two telecollaboration projects provided the data for their study. While the Varonis and Gass model presumes that the listener would clearly indicate non-understanding in cases of communication breakdown, Van der Zwaard and Bannink used a different approach. They classified the responses into two types: task-appropriate (Smith, 2003a) and face-appropriate (Van der Zwaard & Bannink, 2014, 2016). If listeners initiated a negotiation of meaning sequence, intended to solve it and finally resolved the communication breakdown, their interactive behaviour was categorized as a TAR. Their data, however, showed that participants sometimes acted in the interest of face, which was indicated as FAR, that is, no negotiation of meaning was initiated. In some cases, however, the speaker requested additional information, thus changing from FAR into TAR. Apart from these categories, Van der Zwaard and Bannink revealed another interactional pattern in which speakers provided additional input before a (suspected) trigger aiming to avoid potential non-understanding. At the end, five patterns, or as the authors call them *communication trajectories*, were identified:

- Trajectory (0): The speaker supplies the hearer with task- or face-appropriate input (or both) before the trigger.
- Trajectory (i): Represents the type of response that follows the Varonis and Gass model of non- understandings: The hearer initiates negotiation of meaning after the trigger by indicating non-understanding; the speaker explains and elaborates, followed by the hearer indicating understanding.
- Trajectory (ii): Represents a face-appropriate response, for instance when the hearer does not respond, or claims understanding without having understood.
- Trajectory (iii): Illustrates a progression from FAR to TAR.
- Trajectory (iv): Marks a transition from TAR to FAR.

The discourse/communication trajectories represented in that model offered useful insights into the complexities of digital interaction in an L2-learning environment and revealed that NNS-NS communication was more complex than traditional negotiation of meaning models suggested.

Clavel-Arroitia and Pennock-Speck's (2015) study has also made a significant contribution to the research in this field. They investigated the negotiation of meaning in two interactions between the same 16-year old Spanish and German students in English as a lingua franca and a Spanish tandem. The research was part of the Telecollaboration for Intercultural Language Acquisition project (TILA) (<http://www.tilaproject.eu/>) and showed that telecollaboration provides numerous opportunities for comprehension and learning. Interestingly, they could not demonstrate that negotiation of meaning is very different in the two types of language constellation. Likewise, Wang and Tian (2013) used the Varonis and Gass model (1985) to look into the quality of the negotiation of meaning by eTandem partners during videoconferencing, and the effects of such an environment on second language acquisition. The results demonstrated the interaction patterns of the dyads and the extent to which the multimodality of the videoconferencing mode facilitates L2 learning.

One more time we will mention Van der Zwaard and Bannink's research, conducted in 2016, in which they refer to a weakness in the research of negotiation of meaning in digital environment. In their study they explored the occurrence of meaning negotiation in a

synchronous computer-mediated L2 environment, in which non-native speakers (NNSs) and native speakers (NSs) of English performed two different tasks using videoconferencing and written chat. The data was coded and analyzed not only for instances of negotiation of meaning but also for instances where it was not initiated despite non-understanding. As the authors claim, absences of negotiation of meaning are not usually included in analysis primarily because it is difficult to detect non-understanding unless the participant explicitly indicated it. With the aim of assessing the effect of the nonoccurrence of negotiation of meaning on task performance and completion, Van der Zwaard and Bannink's (2016) study used two tasks: a culturally specific task that almost certainly would cause NNS non-understanding and a collaborative decision-making task that should trigger negotiation of meaning. They demonstrated that in both tasks NNS participants often did not indicate non-understanding or initiate negotiation of meaning despite non-understanding. The researchers argue that "disregarding nonoccurrence of negotiation of meaning in (digital) task-based language teaching may lead to misrepresenting task performance, task outcome, and task evaluation, and, beyond that, to disregarding evidence that has both empirical and theoretical consequences for the Interaction Hypothesis and, by implication, for second language acquisition".

All these studies suggest that conceptualizing negotiation of meaning in CMC is complex and problematic. The medium changes communication dynamics so that online meaning negotiation does not correspond in all respects with face-to-face negotiation (Smith, 2003). In all, the growing number of online learner interactions that "cross geographical, linguistic, cultural, social, and institutional lines strongly calls for more detailed investigation" (Kern et al., 2004) into what Toyoda and Harrison (2002) characterize as the "discourse" level of negotiation of meaning. Similarly, Clavel-Arroitia and Pennock-Speck (2015) claim that not enough attention has been paid to identifying the quality of negotiation of meaning in the completion of tasks carried out in a video-conferencing environment and the relevant factors (interactional modification and modified output) that can promote focus on form that may happen in those learning environments (Wang, 2006).

The current study looks into a different perspective on meaning negotiation patterns and focuses on participants' behavior during their online communications in two telecollaborative projects and, more specifically, the patterns of negotiated interactions that learners followed when a communication breakdown occurs. In situations like these, when learners are faced with a comprehension or expression trouble, it can be initiated by the speaker or by the listener; also, it can be resolved either by the speaker or by the listener, or the negotiation episode might remain unsolved. The patterns of negotiated interactions, then, depend on by whom the communication problem was indicated and resolved.

In line with Clavel-Arroitia and Pennock-Speck (2015), we believe that negotiation of meaning “is at the heart of the process of learning a foreign language facilitating a wide variety of strategies [...] that can guarantee successful understanding and mutual comprehension”. Therefore, since negotiation of meaning is so closely related to the use of communication strategies, we investigate their use by the participants in both telecollaborative projects. The following section provides a literature review of studies investigating such strategies in synchronous task-based videoconferencing environment.

2.7. Communication Strategies in Computer-Mediated Communication in a Second Language

Over the past 40 years, despite the abundant research into communication strategies (CS), there has not been a commonly accepted definition. In general, there are two approaches: one focuses on describing communication strategies via taxonomies and freely adding categories if necessary; the other approach views communication strategies as cognitive processes.

It was Tarone, Cohen, and Dumas (1976) who first tried to conceptualize the communication strategies, defining them as “a systematic attempt by the learner to express or decode meaning in the target language, in situations where the appropriate systematic target language rules have not been formed” (p. 77). Tarone's (1977) taxonomy that comprises of five categories (avoidance, paraphrase, conscious transfer, appeal for assistance, and mime) was the first one and is still regarded as one of the most significant. In 1981 Tarone updated her definition expanding it and changing the focus from the speaker to a more interactional aspect, now

defining the CS as “a mutual attempt of two interlocutors to agree on a meaning in situations where the requisite meaning structures do not seem to be shared”.

Long (1983) defined communication strategies as discourse management tools used by the participants to maintain interaction and to avoid breakdown in communication (Smith, 2003b). Another taxonomy was offered by Faerch and Kasper (1983) who viewed communication strategies from a psycholinguistic perspective. Faerch and Kasper defined them as follows: “Communication strategies are potentially conscious plans for solving what to an individual presents itself as a problem in reaching a particular communicative goal” (p. 36). With this definition, they introduced two defining criteria of communication strategies: problem-orientedness and consciousness. In their taxonomy Faerch and Kasper (1983) distinguish between formal reduction strategies, functional reduction strategies, and achievement strategies. They include cooperative strategies as part of the achievement strategies, which is different from Tarone’s taxonomy. According to Tarone’s interactional concept, all communication strategies are by definition cooperative because when a communication problem arises both interlocutors are to be engaged in negotiation until they reach understanding. On the other hand, in Faerch and Kasper’s view, a problem indeed can be solved by both participants, but it is initiated by one person and it is up to that person to decide whether to find a solution alone or whether to appeal for assistance.

Dörnyei and Scott (1997) provided a comprehensive review of the relevant research on communication strategies by comparing the major definitions and taxonomies. They also proposed a threefold division of direct, indirect and interactional strategies. Direct strategies provide an alternative way of solving the problem and getting the meaning across (e.g. circumlocutions). Indirect strategies “facilitate the conveyance of meaning indirectly by creating the conditions for achieving mutual understanding at times of difficulty” (e.g. fillers) (Kouwenhoven & Ernestus, 2016). In interactional strategies, the participants carry out trouble-shooting exchanges cooperatively (e.g. clarification requests) (Dörnyei & Scott, 1997).

Smith (2003b) claimed that probably the most exhaustive studies into communication strategies were conducted by the Nijmegen project during the 1980s and 1990s. According to Smith (2003b) the Nijmegen project tackled communication strategies from a psycholinguistic perspective, focusing especially on the so called compensatory strategies so as to investigate the relationship between these strategies and learner proficiency. According to the Nijmegen group, when learners are faced with the linguistic inability to convey their message, they can abandon the message or revise their original output, the so called avoidance and reduction strategies. Learners can also resort to a compensatory strategy. Smith (2003b) goes on to explain that there are two types of compensatory strategies, namely conceptual strategies and linguistic or code strategies.

As Kost (2008) claims, despite the fact that the taxonomies “vary in their terminologies, in their levels of specification, and in the approach they use (focus on the speaker, interactional, psycholinguistic), they nonetheless share similar concepts”. In 1990 Bialystok expressed the same idea as follows:

[T]he variety of taxonomies proposed in the literature differ primarily in terminology and overall categorizing principle rather than in the substance of the specific strategies. If we ignore, then, differences in the structure of the taxonomies by abolishing the various overall categories, then a core group of specific strategies that appear consistently across the taxonomies clearly emerges. (p. 61)

However, in order to explore a wider range of communication strategies which might be used in more general contexts, such as in more flexible discussions and unguided interactions, especially in synchronous videoconferencing environment, the above-mentioned taxonomy might seem restrictive to some extent and not offer enough useful categories. Therefore, many researchers who use taxonomies often expand the categories of communication strategies by adding their own categorizations, “while making implicit inferences about the different psychological processes that produced them” (Kost, 2008). Kost (2008) goes on to express her concern whether these different approaches are at all applicable to a computer-mediated environment. She assumes that the structure and dynamics of online

communicative interactions “are inherently so different that taxonomies are only partially helpful in dealing with the rich data that this environment provides”.

In their latest article, Cohen and Henry (2020) argue that communication strategies have mostly been used to deal with linguistic problems or breakdowns in communication. Learners may, for example, use communication strategies to direct the conversation away from potential linguistic hindrances, to convey their meaning in different ways, to gain time to think and to negotiate with their partners. Besides, the authors claim that communication strategies also “include conversational interaction strategies and strategies for maintaining the floor which learners who are not experiencing gaps in their knowledge may use”.

As we have already mentioned above, researchers have used different taxonomies in order to categorize strategies. Cohen and Henry (2020) add two other approaches to classify them. One is according to whether they are cognitive, metacognitive, affective or social, and another is according to the skill area to which they are associated.

- 1) Cognitive strategies, as they define them, “encompass the language learning strategies of identification, grouping, retention and storage of language material, as well as the language use strategies of retrieval, rehearsal and comprehension or production of words, phrases and other elements of the L2”
- 2) Metacognitive strategies are those practices which learners consciously use in order to supervise or manage their language learning.
- 3) Affective strategies aid to regulate emotions, motivation and attitudes
- 4) Social strategies are the actions which learners take in order to interact with other learners and with native speakers

Cohen and Henry, however, state that this kind of classification of strategies might be problematic due to a fluctuation or “dance” from one of these categories to another. The other classification type of strategies that these authors propose is by skill area, which is associated with the four basic skills of language – the receptive skills of listening and reading, the productive ones of speaking and writing, vocabulary learning, the learning of grammar and the use of translation

There is, indeed, substantial research into the nature and role of communication strategies in student interaction (see Bialystok, 1990; Dörnyei and Scott, 1997; Poulisse, 1990a; Yule and Tarone, 1997, for overviews). In what follows, we provide an overview of some of the most recent and relevant research into the communication strategies used in FL learning environment.

Ting and Lau (2008), for instance, designed a study in which they investigated the use of lexical and discourse-based communication strategies. The results demonstrated that strategy use for message enhancement was half that of problem-solving. They also revealed that when students faced a problem of understanding they usually restructured their output and hardly ever used discourse based strategies, such as comprehension checks and clarification requests. Tonicity and lexical repetition were mainly used by the more proficient learners for message enhancement.

In 2012 Ismail and Kaur demonstrated that, irrespective of the different levels of English proficiency, learners use similar types of circumlocution strategy. Their study showed that when faced with a lexical hindrance and a need to use a circumlocution, learners used three common types of circumlocution strategies to ensure the flow of the interaction. Moreover, depending on their proficiency levels, learners rather frequently resorted to descriptions, references and citing examples in their speech. These findings suggest that the proficiency level of the learner has a great impact on learner's communication strategy choice. Another study that is worth mentioning is that conducted by Mei and Nathalang (2010) which involved undergraduate students of English at Chinese Universities. The results from their research demonstrated that student use of CSs was influenced by three variables: task type, English proficiency level, and academic major.

In the recent years there has been an emerging interest and hence a body of research that specifically explores computer-mediated negotiation and CS use (Pellettieri, 2000; Smith, 2003; Lee, 2001; Sánchez Sola, 2014). Chun (1994) was considered the first researcher to study communicative strategy use during CMC from an interactionist perspective. In a longitudinal study which lasted for two semesters, she looked into beginning German

learners' use of interactional features, discourse management, and complexity of expression in 14 computer-based sessions. She discovered that students used a variety of discourse moves and communicative functions, such as initiating and expanding on a topic, asking and answering questions, requesting clarification, apologizing, giving feedback, and others. Students interacted with each other a lot more compared to interacting mainly with the teacher and they also produced more complex sentences during the second semester.

In 2001 and 2002, Lee conducted two separate studies with intermediate learners of Spanish and found out that learners used a variety of communication strategies when they engaged in weekly chat discussions during computer-mediated communication. In small groups students discussed open-ended questions on everyday topics. Usually, when students negotiated meaning and form, they used requests for help, clarification and comprehensions checks. They also resorted to self-repairs in order to make their input more comprehensible to their partners.

Smith's (2003b) study explored the communication strategy use and task type in a CMC environment. The data was derived from a five-week project in which intermediate-low level ESL students used chat to perform different jigsaw and decision-making tasks. Smith developed his own coding categories by combining elements from existing taxonomies of communication strategies. He found that the most commonly used strategies were substitution, framing of a topic, fillers, and politeness markers. What is more, he discovered that the task type did not play a role in the use of communication strategies, but it did have effect on the use of compensatory strategies.

A rather similar but more recent study describing the use of communication strategies in a synchronous computer-mediated communication environment was conducted by Altun (2013). He investigated whether task type affected the frequency and variety of communication strategies (CS) used in this specific setting. For this purpose, he examined the use of CSs in three different communicative task types: jigsaw, decision-making and opinion-exchange. The data for this study was collected from 36 ELT students studying in a Turkish university. The findings indicated that the participants used of a variety of CSs that

were previously detected in face-to-face communication, and they used some CSs which are typical for CMC environment. Altun also demonstrated that task type shaped the frequency and type of CS used, favoring jigsaw task types in resulting more use of CSs.

In 2004, Kost investigated the effects of synchronous CMC on the interlanguage development with specific focus on accuracy, proficiency, and communication strategies. The findings revealed that beginning learners of German who engaged in online discussions during one semester perceived them as valuable for the development of their oral and written language skills. Besides, an overall increase in language production and accuracy was detected in low- and medium-proficient learners. According to the author, the findings support the hypothesis that online discussions enhance the development of the same processes that trigger oral speech. For this reason, Kost (2004) claims that CMC discussions are a beneficial addition to the foreign language classroom.

Zhao's study (2010) is one of the very few that investigated both meaning negotiation and communication strategy use in text chat and videoconferencing. In her study Chinese and Japanese university students took part in telecollaboration through text chats and videoconferencing. Results of the discourse analysis of the data suggested that both modes promote meaning negotiation and aid second language acquisition. Compared to videoconferencing, text chat enhances lexical acquisition; while videoconferencing encouraged more meaning negotiation related to cultural issues. In her study Zhao also discovered that the communication mode affects the negotiation of meaning and learners' use of communication strategies. As for strategy use, text chat offers opportunities to use discourse markers as a paralinguistic strategy, and videoconferencing urges participants to use fillers most often.

Research addressing communication strategy use in videoconferencing is not sufficient. One possible reason, as Zhao (2010) claims, is the assumption that videoconferencing resembles face-to-face communication as it provides audio and video cues. However, as mentioned earlier, negotiation of meaning in videoconferencing and face-to-face communication seems to share different features, and therefore, "it may not be reasonable to assume learners use

similar strategy in videoconferencing as in face-to-face communication” (Zhao, 2010b). Brown (1987) considered communication strategies to be one of the “sources of errors” (Triassanti, 2018). Presently, however, this view is no longer shared by researchers, quite the reverse, the CS are believed to be beneficial for learner’s SLA (Ellis, 1985). As Triassanti (2018) claims “by allowing learners to remain in conversation, communication strategies help them, on the productive side, to get some useful feedback on their own performance, and on the receptive side, to exercise some kind of control over their intake, for example, by enabling them to prompt their interlocutor to modify his or her utterances”. One benefit of the current study is that it intends to investigate the types of strategies use as well as the negotiation of meaning process between adolescent NNS learners when a problem of understanding or expressing arises specifically in telecollaborative environment.

As we have explained in Section 2.6 above, one of the main focuses of this study is on the patterns of negotiated interactions, that is, we are interested in examining by whom the communication problem was indicated and resolved. More specifically, we wished to look into whether it was the speaker or the listener who signaled and resolved the linguistic trouble when communication breakdown occurred. Thus, the present study also intends to identify which kind of communication strategies FL learners of English use in telecollaborative situation to indicate and to resolve a communication problem.

2.8. Research Gaps and Research Questions

With the fast development of computer technology and the recent COVID-19 crisis resulting in confinement periods and necessary online teaching, worldwide CMC and, more specifically videoconferencing is bound to become more popular in the FL classrooms. Hence, it is important to know the potential of this innovative tool in order to use it more efficiently in foreign language learning and teaching environment.

Some significant gaps were identified during the literature review of the available studies in the field of telecollaboration presented in the previous sections. Firstly, we discovered that there are a large number of studies focusing on different aspects of telecollaboration, yet the setting of those studies was nearly always the same. The majority of the studies focused on

interactions between native speakers (NS) and non-native speakers (NNS) (Bates, 2014, 2017; Diez-Bedmar & Perez-Paredes, 2012; Der Zwaard, 2017, 2019; Zakir, Funo, & Telles, 2016; Tudini, 2018; Hauck & Youngs, 2008 among many others) and very few aimed at investigating the interactions between non-native speakers of the target language (Kohn & Hoffstaedter, 2017b; Dooly & Davitova, 2018). In their article on ICC development through telecollaboration and virtual exchange, O'Dowd and Dooly (2020) claim that those common models of telecollaboration (between NS and NNS) present challenges to the many language educators who are often "confronted with the reality that there are simply not enough classes of 'native speakers' of the target language". In fact, the authors criticize these models arguing that "today's university graduates are more likely to use a language such as English with other non-native speakers as a lingua franca in their future employment. In the global workplace, professionals will need intercultural and linguistic skills to use English for online collaborative work with other non-native speakers just as much if not more than with native speakers". Kohn and Hoffstaedter (2017) and Dooly and Davitova (2018) are some of the few researchers who have conducted studies on telecollaboration for intercultural communication in foreign language school contexts focusing on conversations between non-native students. Dooly (2015) also observes that "research in this area appears to be moving away from the notion that "intercultural" is limited to one specific target language focus towards more studies that hold a "global" notion of the intercultural" (p. 176). Therefore, we trust that there is a need for more research within this "global" aspect of intercultural communication, especially between non-native speakers of the language.

Another gap in research detected in the review of literature shows that intercultural studies, and more specifically research in telecollaboration, are primarily focused on higher education institutions, where the "student population is highly heterogeneous and international" (Awad, 2019). In 2016, for instance, O'Dowd provided an overview of the most significant emerging trends and tendencies in telecollaborative practice, reviewing the recent literature in the area and identifying recurring themes from the Telecollaboration in Higher Education conference which took place in Trinity College Dublin, Ireland. In the same way, in her study Akiyama (2018) synthesized 55 distinct telecollaboration projects that took place in university foreign

language classes and utilized synchronous computer-mediated communication (SCMC) tools, comparing the typical arrangements of SCMC-based telecollaboration (e.g., participants, project set-ups, and interaction set-ups).

In her systematic review on intercultural communicative competence and online exchanges Avgousti's (2018) mentions the need of diversification of participants. In her article she reviewed online intercultural exchanges (OIEs) and ICC development in relation to the modality that was used. The specific focus on university contexts was due to the fact that the universities serve as contexts for OIEs more often, specifically, more than two-thirds of the reviewed studies. Avgousti revealed that regarding the academic status of the participants, most of the studies were conducted in university contexts (81%), while 10 studies (19%) were carried out with secondary and elementary school students.

Based on our standpoint that online exchanges offer a different kind of learning experience that provides opportunities for adolescents to engage with language in ways that are different from the conventional language classrooms (Ware & Kessler, 2014), we aimed at offering in-depth understanding of how learners build successful relationship with their partners and how they obtain the information that they need to learn about foreign cultures in telecollaborative context. For this reason, we provide a rich, descriptive account of how adolescent students engage with telecollaboration in the classroom context and offer an overview of the interactional and negotiation patterns together with an analysis of the communication strategies used by the learners. Additionally, we offer students' perspective and their perceptions as regards the development of these skills in telecollaborative environment.

As the review of literature above suggests, telecollaboration is perceived as a very complex learning context that requires investigation from different theoretical perspectives (O'Dowd & Ware, 2009). As Akiyama (2020) claims, for the further development and establishment of telecollaboration as a field of rigorous empirical research, it is essential that more studies examine it from various theoretical perspectives in an integrative manner. In an attempt to bridge the above-mentioned gaps, the current study looks into telecollaboration by focusing

on the analysis of interaction from several angles. Thus, it offers detailed insights into interactional and meaning negation patterns, as well as communication strategies, which we consider as three pillar constituents of interaction. We do so by examining telecollaborative interactions between secondary school, non-native adolescent FL learners in task-based classroom setting and, thus, contributing to a lesser investigated type of participants in that interaction as compared to those in post-secondary level.

This dissertation investigates the following:

- 1) What interactional strategies do secondary school learners of English as a foreign language use during task-based telecollaborative interactions with secondary school learners of English from a different cultural and linguistic background?
- 2) When encountered with a communication problem, what patterns of negotiated interactions do such learners follow in order to indicate and resolve that problem?
- 3) What communication strategies do such learners use in order to indicate and resolve communication problems during such interactions?

CHAPTER 3: METHODOLOGY

The methodology chapter contains eight sections. The first section introduces the research approach of the study, the second section describes the process of the research implementation and the third section both describes the participating schools and explains the process of integrating the schools' technology into the research project. The following sections provide details about the procedures and design, as well as the methodological challenges in telecollaborative research that the study met, the participant classrooms and the selection of case study participants. Finally, the data collection instruments, the data analysis procedures, and limitations of this study are presented.

3.1. Research Approach

This investigation uses a case-study exploratory approach as multiple sides of the telecollaborative exchange are investigated. Our purpose is to explore the interactional patterns students used in two telecollaborative projects, what negotiation techniques they employed when they encountered a hindrance in their communication, and, what communication strategies they used in order to indicate and solve this problem. For this reason, both quantitative analysis with descriptive statistics and qualitative data analysis are provided. Various data collection instruments were used in order to provide triangulation of the findings and avoid ambiguity. The main source of data came from the video recorded telecollaborative interactions; however, the pre-project and post-project interviews, questionnaires and field notes were extremely valuable as they provided additional context for the analysis of the data.

The quantitative analysis involved the quantification of the relevant frequencies of each of the features under qualitative investigation. We offer descriptive statistics of the results as well as averages and comparison of the coded features. In this study, content analysis has been used for the qualitative analysis of different sets data, namely, audio/video recordings of the computer mediated communication, transcripts of the interviews, questionnaires and

observations. More details about the research design and the data collection and analytical methods are provided below.

3.2. Research Implementation and the Integration of the Technology of Participant Schools

As I mentioned before In Chapter 1, at the beginning of 2016 I managed to organize a very short intercultural project (only two sessions) with my students at the school where I was teaching English (Anglia School), which was met with great enthusiasm and motivation. Their positive feedback, together with my interest and eagerness to investigate deeper into the opportunities that an intercultural real-time, videoconferencing project might offer to the learners made me determined to explore it more profoundly. I was particularly intrigued to research the way students display their interactional skills and what communication strategies they use to negotiate meaning when they encounter a problem in the production or understanding of language in synchronous video interactions. So, in 2016 I embarked on the exciting journey of investigating into telecollaborative exchange projects for adolescent students. Unfortunately, at the beginning it was not possible to organize the project at the academy where I was teaching due to the very limited number of potential participants, that is, I was mainly teaching Official Cambridge Exam preparation classes and it was absolutely impossible to fit a project of this kind in their very tight schedule. However, in May 2016 (See Figure 3.1 below) I contacted the director of Mundi School¹ in Bulgaria and she expressed her willingness and readiness to participate in such a challenging experience. Mundi School is the second largest private language academy in Blagoevgrad, Bulgaria, providing foreign language classes to children and adults. Learners enroll in the school voluntarily, namely, it does not form part of their school curriculum. Shortly after our first contact, we started discussing the details about our telecollaborative exchange, specifically the goals and the task content of the sessions. We did not know back then, though, that our biggest challenge was going to be finding a partner school, which turned out not to be an easy task. In the meantime, we organized two pilot sessions, connecting students via Skype

¹ The names of the participating schools are anonymized.

with schools from other countries for short Mystery Skype activities (<https://education.skype.com/>); we have also discussed the design of tasks and activities, technological issues and potential problems that might occur during the project.

In December 2016 we found a Turkish school that was willing to participate in the collaboration but then suddenly, in February the following year, the teacher informed us that the project will have to be cancelled due to restrictions in the school policy and the complicated and difficult political situation they were currently experiencing in their country.

Two months later, in April 2017, thanks to the help of Mr. Libor Štěpánek, who is the director of the language center at Masaryk University in the Czech Republic, we got in contact with a school in Brno, the Czech Republic, named Hrabal School, that was interested in collaborating in the intercultural project through videoconferencing. After certain discussions and arrangements, in May the same year, we planned sessions through Skype with the participants in the project. Unfortunately, in January 2018, again due to restrictions imposed by the headmaster of the Czech school, we were only allowed to organize three videoconferencing sessions, which was undeniably insufficient for the purpose of this research and the data we collected served as a pilot study (a detailed description of the pilot studies and the telecollaborative projects is provided below in the *Procedures and Design* section).

Finally, in April 2018, after struggling with these unsuccessful attempts to find a partner school, I met and exchanged ideas with Dr. Ricard Garca, language teacher, teacher trainer and web editor, and Dr. Susan Dreger, both working at the Department of Education in Catalonia on cutting edge technologies and their applications in Catalan schools. It was Dr. Dreger who introduced me to Aina, the English teacher at Lluís Anton School, a primary, public school near Barcelona where the research reported in this dissertation finally took place. Detailed information about the school and the participants is provided in Section 3.5.

Figure 3.1 summarizes the stages described above for the organization of telecollaborative projects for the present research.

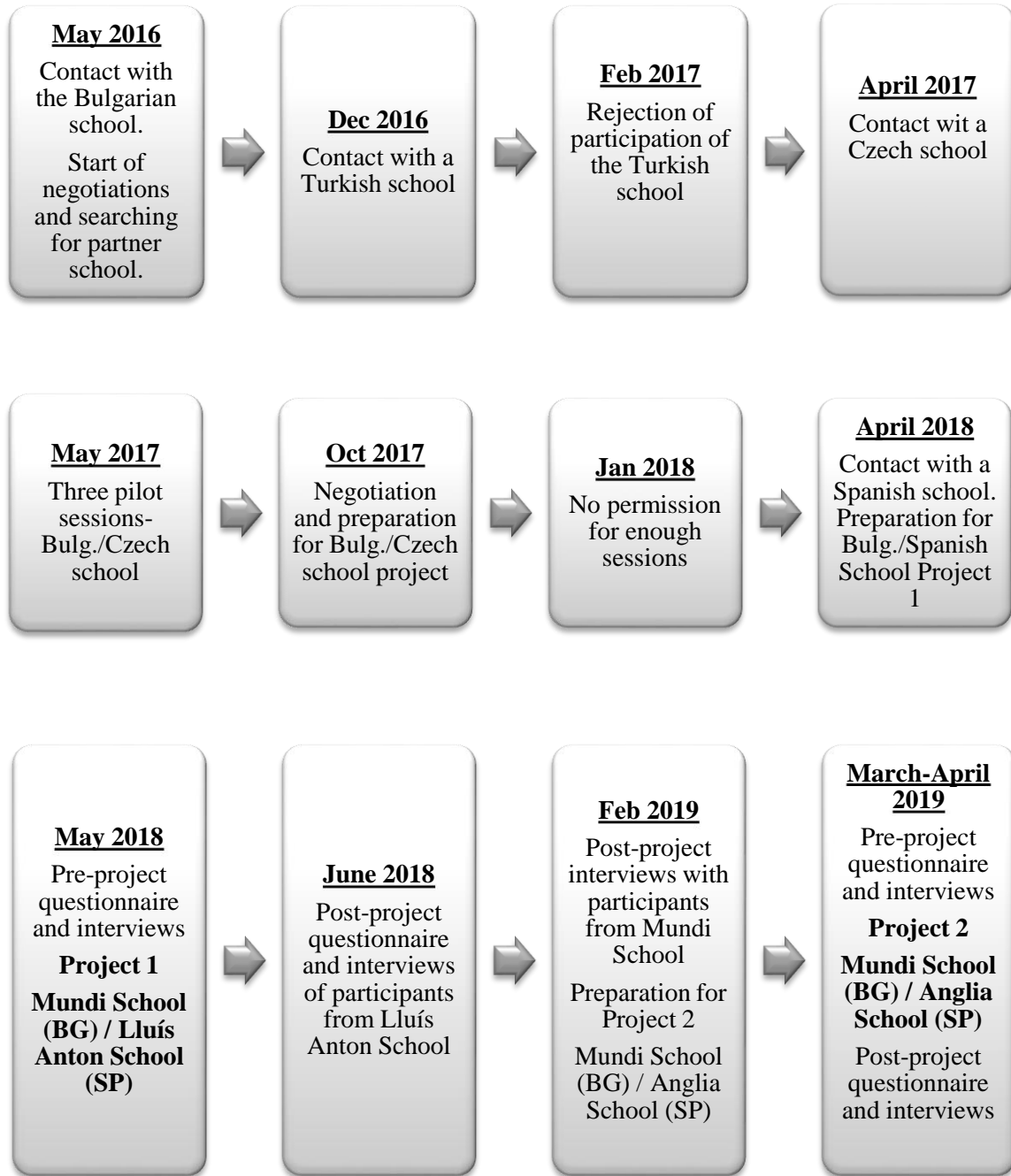


Figure 3. 1: Timeline of implementation process and data collection.

Differences in course schedule and availability forced us to ask students from Lluís Anton School to stay after their class time in the computer lab. Since all the participants were under the age of 18, their parents signed a consent form allowing their children to stay thirty minutes

after school classes so as to participate in the videoconferencing intercultural exchange. The participants were paired with their Bulgarian partners and participated in five one-to-one sessions, discussing a different topic each session.

Despite the fact that there was a significant difference in the English level between the two groups of participants - namely, most of the students from Lluís Anton School had approximately intermediate level and those from Mundi School had upper-intermediate level or higher - the outcome of this partnership was fully successful. At the end, as will be analyzed in the sections below, the learners' feedback was very positive, demonstrating great interest, motivation and eagerness to participate again in a similar project in the future.

The participating teachers, both from Spain and from Bulgaria, played a vital role for the successful outcome of our partnership. The organization of a telecollaborative exchange is extremely complicated as instructors must consider factors, such as different schedules, curricula, students' flexibility, technology, and so on. That is why it is of paramount importance that the partner teachers are flexible, responsible and share common pedagogical goals (Martin, 2013a).

It was the positive feedback from the participants in the project and my desire to enrich and supplement the data for this dissertation that encouraged me to organize a second, similar project. This time I was determined to resolve the limitations I had encountered in the first project, namely, difference in level of English, student attendance, pairing of participants, and teacher's support among other issues. A detailed description will be provided in the *Methodological challenges in Telecollaborative research* chapter.

So, in February 2018 the post-project interviews were conducted in Bulgaria and the future implementation of the second project was discussed and organized with both students and teachers.

The second project was initiated in March 2019. Six participants from Mundi School (Bulgaria), five of which had participated previously in the first project with Lluís Anton School, were paired for a five-session intercultural exchange, discussing similar topics, with

six participants from Anglia School of English (Spain). Anglia School of English is a private language academy, similar to Mundi School, where learners enroll for a foreign language course. At that point in time, I was a teacher, as well as a manager and Director of Studies of the language academy, which facilitated the process of organization and completion of this online intercultural exchange.

When I initially contacted Diana², the managing director of Mundi School, Bulgaria, and I told her about my idea of a telecollaborative exchange project, she was absolutely thrilled and willing to participate. She was a little bit worried, though, as the school did not have any previous experience with online collaborations and it did not have a computer lab, so the students were to use their personal mobile phones for the purpose of the project. This meant that the partner school needed to provide the video recordings of the telecollaborative sessions.

In the first pilot session that we organized between participants from Mundi School (Bulgaria) and Hrabal School (the Czech Republic) we used *Skype* application. Students from Mundi School used their mobile phones (as mentioned above) and the participants from the Czech School used the school's *Ipads*. After the first pilot session, though, we realized that *Skype* did not allow then for video recording of the meetings; specifically, we were only able to record the audio but not the video, which was a major hindrance for the data collection of the present research. Subsequently, I began exploring other software options which would guarantee the legal possibility to record both the audio and video of the sessions, store the files on the device and be able to transfer and operate with them later. I was recommended the *ZOOM* application (<https://zoom.us/>)³ as very reliable and user-friendly. After doing some research and testing the software myself at home, we were ready to test it in the forthcoming pilot session. Unfortunately, it appeared that we could not record the meetings for the reason that at that time the recording option was exclusively available for computers,

² The names of the managing director and the instructors are anonymized.

³ <https://zoom.us/about> Zoom (2018) is one of the leading enterprises in video communications, with a user-friendly and reliable cloud platform for video and audio conferencing, collaboration, chat, and webinars. The version available in 2018 was used in the projects.

but not for *Ipads*. The following pilot session was, therefore, held in the computer lab of Hrabal School. In the subsequent meeting everything worked smoothly, the audio/video recordings were successfully stored on the schools' computers and then transferred to me via Google Drive. Therefore, ZOOM (2018) software was used to conduct the telecollaborative meetings for the present research. ZOOM is a videoconferencing system that includes features such as online meetings, video webinars, conference rooms, telephone system and business platform, all of these features also allow for file sharing and chat option. We only used the online meeting feature, as well as the audio/video recorder for each session.

When I first met Aina (the participating teacher at Lluís Anton School) she explained me that she had already organized some videoconferencing class-to-class sessions with her students, connecting them with a school from a different country. These were sporadic meetings in which students met so as to play *Mystery Skype*, which is an education game, invented by teachers, played by two classrooms on *Skype*. The aim of the game is to guess the location of the other classroom by asking each other questions. She also informed me that the school had tablets and new *Ipads* that all students have been using for any educational purposes, projects or activities at the school, and they also had a computer lab. Consequently, for technical reasons described above, students' from Lluís Anton School held the telecollaborative exchange project with Mundi School in their school's computer lab. Additionally, Aina ensured that an IT technician would always be present to provide any help or support needed during the meetings, which was of utmost importance for the positive outcome of the exchange.

The lab technician created institutional accounts for all the participants from Lluís Anton School and those from Mundi School and Anglia School created their own accounts in ZOOM. Once the students logged in, they had to send an invitation to their partners and after they accepted, they were connected and ready to begin their telecollaborative experience. Below is a screenshot of ZOOM once you log in (See Figure 3.2). As soon as the student had logged in, they only had to press *Start a meeting (Reunir)*. Once it started dialing our technician made sure that the microphone, camera and the recording feature were working properly and then the students could proceed with their session. The participants sat in front

of computers in the computer lab and could hear their partners through a headset (See 3.3 below). A divided screen allowed them to see both themselves and their partner during the telecollaborative meeting.

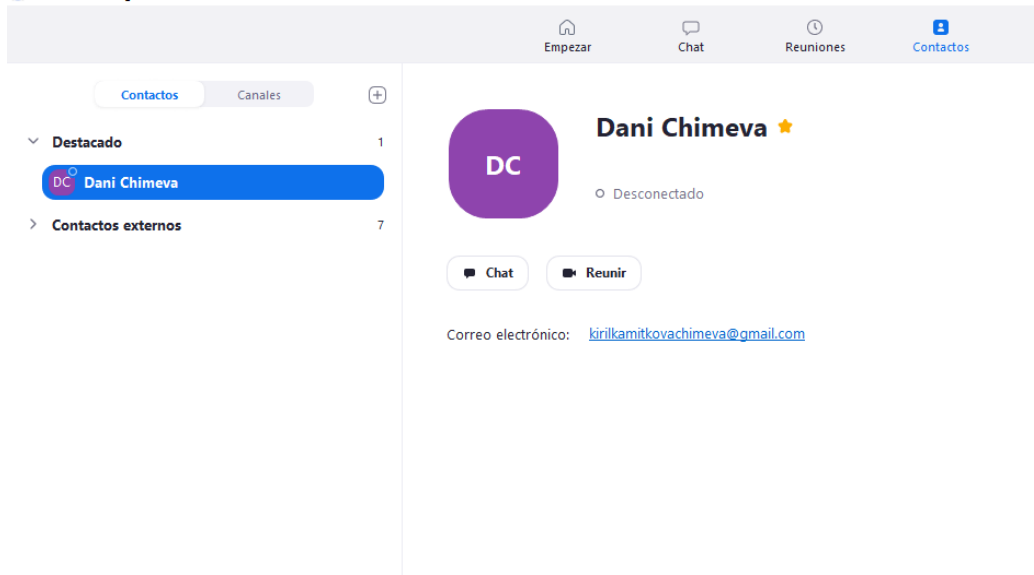


Figure 3. 2: ZOOM interface

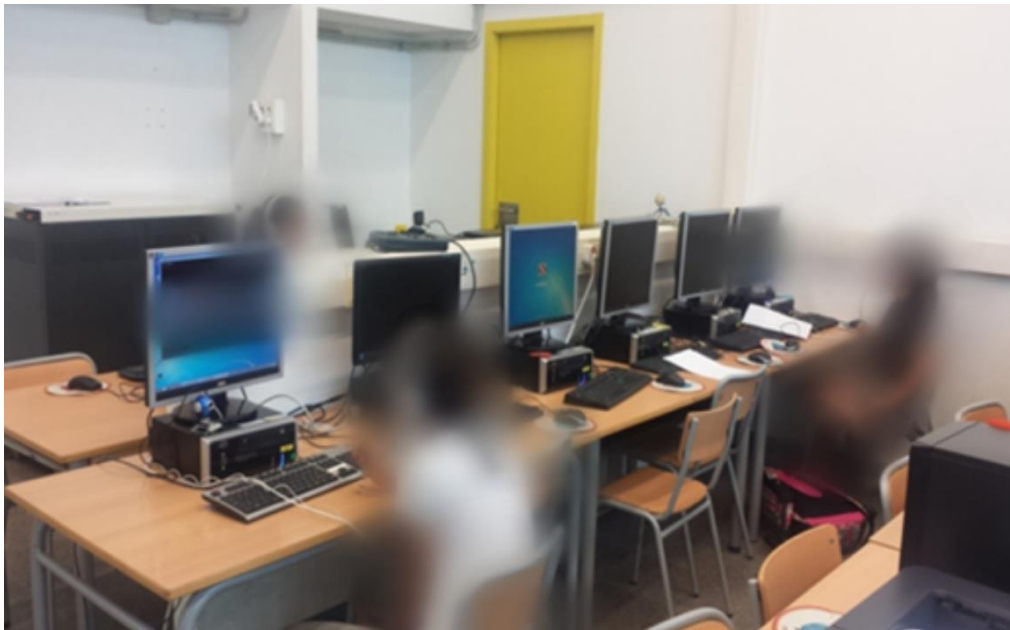


Figure 3. 3: Students engaged in telecollaboration at Lluís Anton computer lab.

3.3. Research Procedures and Design

3.3.1. Pilot Study

When in 2016 I contacted Diana, the managing director of the Bulgarian school, and we agreed to organize an intercultural exchange project, we were both aware that we had almost no experience in this challenging field. As I mentioned above, I had organized two short sessions with the students at the school where I was teaching English. The learners connected via videoconferencing with schools in two different countries and asked and answered questions of their interest, such as routine, school life, music, technology, films and others. This, certainly, was way insufficient and not enough to prepare us for the challenges we were about to face. Mundi School, Bulgaria, in turn, did not have any previous experience with online projects. Consequently, Diana and me were aware and agreed on the necessity of planning some short, independent telecollaborative sessions in order to prepare both learners and ourselves for the project. So, when in 2017 we contacted Hrabal School in the Czech Republic and we started negotiations, we all agreed on conducting some pilot sessions before organizing the telecollaborative exchange project. Finally, we had three pilot sessions.

As there were a lot of uncertain and vague issues that concerned us and limited time to resolve them, we needed to set clear goals in order to make sure that the pilot sessions would be efficient and helpful. Accordingly, some of the main aims of the pilot sessions were to investigate: a) students' response to the telecollaborative exchange, b) data collection methods for audio/video recording, c) institutional limitations (schedule restraints, time limits, technology use), d) task design (Martin, 2013, Cabrero, 2013), and e) dyad formats (i.e. class-to-class, pair-to-pair, one-to-one).

The first pilot session was a class-to-class meeting through Skype in which students played the Mystery Skype game (explained above, see Section 3.2) and afterwards they could ask each other personal questions. This session proved very useful because it helped us spot some problematic issues: firstly, Skype did not allow for video recording of the meetings but only audio; secondly, the class-to-class format did not allow for equal participation of the students; and lastly, we realized we needed to provide the learners with meaningful and engaging

discussion topics. After the session, I had a short discussion with the children from Mundi School through a *Viber* group I had created. *Viber* is a mobile application in which users are registered and identified through their telephone number and allows for exchanging instant messages and media. A *Viber* group can be created between members where they can like and reply to messages in group conversations. The teacher at the participating Czech school had a meeting with the students, with the purpose to investigate into their opinion about the project. The feedback we received was very similar: they all enjoyed the experience and found it thrilling and fun, but also revealed that they would prefer a more personal approach, in which they could communicate with the children, get to know each other better and maybe make friends.

Thus, in order to be able to record the telecollaborative exchange meetings both audio and video *Zoom* software (explained above) was used for the second pilot session. We came to a decision to apply a pair-to-pair format this time and give the students the opportunity to not only have a meaningful conversation using English as a common language, but also discuss topics of their interest and learn about other cultures and traditions. After the second pilot session we detected yet another problem with technology: it turned out that *Zoom* software only allowed for free video recording on computers and did not on any other portable electronic devices. We should point out that this was so at the moment of the implementation of the projects and might have changed later, due to the quick development of software and applications. The feedback we received from the learners was very positive with some participants commenting that they did not know what to talk about by the end of the session. This, consequently, meant that we needed to design the tasks more carefully, provide help and support before, during and after the meetings and choose the discussion topics together with the students.

For the purpose of this research study, that is, to ensure the audio and video recording of the telecollaborative exchange meetings, the last pilot session was conducted from the computer lab at Hrabal School. In this meeting each student from Hrabal School (Czech Republic) was paired with another student from Mundi School (Bulgaria); the Czech participants were in the school's computer lab, each sitting in front of a computer, and the Bulgarian participants

had downloaded the application on their personal mobile phones. Six students from Hrabal School and equal number from Mundi School participated in the pilot sessions, randomly selected by their instructors. We received excellent feedback from the students after the third pilot session and we were at last able to successfully record both the audio and video of the meeting, store it and transfer it to my personal Google Drive account.

The pilot study helped me detect certain potential problems, primarily technological ones which required the support of a technician. Likewise, I realized that it was very important to select discussion topics which were interesting and meaningful to the students and be especially cautious as far as pairing is concerned. I also became conscious of the fact that I had to be more active and engaged with students during the preparation phase of the exchange. The results of this preliminary study were crucial for establishing the design features and procedures of the final study, which began in the spring of 2018.

3.3.2. Research Design

The present research consists of the analysis of the interactions in English between non-native students of this language within two internet-based videoconferencing intercultural projects. In the first project, students from Mundi School (Bulgaria) and Lluís Anton School (Spain) participated in five telecollaborative sessions, starting in April and finishing in June 2018. In the second project students from Mundi School (Bulgaria) and Anglia School (Spain) participated in five telecollaborative sessions, starting in March and finishing in April 2019.

a) First Telecollaborative Exchange Project (Mundi School - Lluís Anton School)

● Procedures and Limitations

As a result of time restrictions, space limits within the school premises and students' curriculum, only ten participants from Mundi School were able to participate in the project. As this was an extracurricular activity for all of them, after finishing school they had to rush to arrive at Mundi School on time for the telecollaborative project (very often without even having time for lunch). Five students would participate on Wednesday and five more on

Friday each week. Consequently, taking this into account, Aina, the instructor at the participating Spanish school and I had to adapt and organize the exchange so as to meet these requirements. This meant that the ten participants from Lluís Anton School had to stay after their class time; therefore, their parents signed a written consent allowing their children to stay half an hour after school with the purpose to participate in a videoconferencing intercultural exchange with participants from a different country. This was a serious challenge and limitation for the project as it caused students' attendance problems. Occasionally, and just before the beginning of the meeting, students would warn us that due to personal issues it was impossible for them to stay for the exchange that day. This left us with no other option but to be flexible and resort to other students who, on that day, were willing to participate. On some days, however, there were many volunteers who wanted to take part in the project. As a result of this, students from Mundi School could not always meet the same partner for each session, despite our wish and planification.

Prior to the project, all participants were given a consent form (Appendix 1) to be signed by their parent(s) and also a pre-project questionnaire (Appendix 2) (See Figure 3.1). After filling it in at home and having the consent form signed, they handed both documents back to their English teacher. The teacher from Mundi School (Bulgaria) scanned them and sent them via e-mail. The pre-project questionnaire helped us gather basic demographic information, such as age, gender and origin; interests and hobbies; students' expectations; their attitude towards the target culture, cultural differences, and students' knowledge of the target culture (See Appendix 2). All interviews were tape recorded and saved for further analysis. All participants from Lluís Anton School were interviewed before the beginning of the research but, unfortunately, due to time limitations and incompatibility in schedules, it was not possible to conduct pre-project interviews to students from Mundi School. Besides, the pre-project questionnaire and pre-project interview for students contain questions that provide data about students' expectations before the sessions, what they would like to learn about their partner, what they think they will gain from the experience, students' attitude and expectations regarding the target culture, cultural differences and others (See Appendix 2 and 4).

Based on results from the pilot study, the pre-project questionnaire and the pre-project interviews we compiled a list of possible topics for the telcollaboration project which learners indicated as appealing and interesting. Thus, in an attempt to motivate and stimulate the participants while providing them with the opportunity to communicate in English in meaningful environment, the instructors at the participating Bulgarian and Spanish schools selected five final discussion topics for the project out of the list. The topics were related to vocabulary, grammatical structures or themes familiar to the students or subject matters that would be included in their school curriculum. The participants were informed that the sessions would be video recorded and that the data will be part of a research study as regards educational technology but they were not aware of the specific focus of the investigation. In the case of Lluís Anton School the recording software was installed on the computers in the computer lab by the technician. Participants from Mundi School utilized their personal telephones; thus they downloaded the mobile application themselves and registered using their personal email account.

One day before the event I conducted a test call with the instructor at the participating Bulgarian school in order to make sure that internet connection was reliable and the audio/video and recording features worked well. Each online session lasted approximately half an hour; depending on the students' dynamics some sessions were longer and more successful than others. I was present in the computer lab during task performance in order to make observations, monitor and provide technical or linguistic support if necessary. The Spanish participants were given task sheets with questions before every session, prepared by their teacher, which they could use in order to facilitate their conversation. This decision was taken by the instructor at the participating Spanish school as she wanted to provide her students with additional support and make sure that it was a comfortable and enjoyable experience for the learners. The instructor at the Bulgarian school, however, decided not to do so. At the beginning of each session the technician at the Spanish school made sure that the microphones, cameras and the recording functions were working properly. Each videoconferencing meeting was recorded on the computer and then transferred to a hard drive and to my Google Drive account.

● Project Design

In the first telecollaborative session ten students from Mundi School were paired with ten participants from Lluís Anton School in one-to-one dyads. Based on information that students provided in the pre-project questionnaire and interview about their interests and hobbies, the school instructors paired the students taking into account common or similar topics of interest. As the participants had not met before, the first session was dedicated to getting to know each other and in the subsequent sessions they were supposed to discuss different topics. As mentioned above, the instructors selected the discussion topics based on themes students have indicated as appealing, as well as concepts they have discussed in class, such as introducing yourself, talking about routine actions and hobbies, describing your family and friends, talking about traditions and celebrations in your country, typical food, drinks and so on. In the same way, as the instructors revealed in their pre-project interview, they purposefully selected these topics so that the learners would be able to utilize grammar structures they have been studying in class, such as present simple and continuous tenses, prepositions, adjectives, expressing likes and dislikes, among others. A list of the topics discussed in the first telecollaborative project is provided below in Table 3.1.

Table 3. 1: Discussion topics in Mundi School-Lluís Anton School project

Session	Discussion topics
Session 1	Getting to know each other- talk about you, your family and friends, free time activities and hobbies.
Session 2	Talk about your daily routines – when you get up, go to school, have breakfast, lunch and dinner, when you do sport, play games, et. Talk about your school life – what are your favourite subjects and teachers, when you have a break, how many hours a day you spend at school.
Session 3	Typical customs, traditions and celebrations - explain very well and with details what it is, when, how and why a tradition is celebrated.
Session 4	Typical food and drinks – explain about the typical food and drinks of your country. Think of something that is unique and only eaten in your country. Explain it with details and say if you eat it during a specific occasion or holiday.

Session 5	Talk about the typical games that you play, how you play them and with whom. Talk about popular fairytales.
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Once the telecollaborative project was over, a post-project questionnaire was distributed to all participants. It contained questions concerning learners' own attitude towards this kind of interaction, the strategies they used to negotiate meaning, their opinion of the experience after the session, technology effectiveness, what they thought they had benefitted from this session, suggestions for potential improvements, and what students liked most and least about the experience (see Appendix 3). This data gave us valuable information about participants' retrospective and reflection after the completion of the telecollaborative project.

In addition, immediately after the completion of the online exchange, post-project interviews were conducted with the Spanish students at Lluís Anton School. The interview is, undeniably, one of the most powerful methods of data collection in the qualitative research which "gives us the opportunity to step into the mind of another person, to see and experience the world as they do themselves" (McCracken, 19889). Hence, in the present study it concerned similar topics as in the post-project questionnaire, yet providing us with more-in-depth information in a less rigid and obtrusive format. A couple of months later, I organized a trip to Bulgaria with the purpose of interviewing the Bulgarian participants, as well as investigating into their interest in taking part in yet another similar intercultural project, at the same time exploring potential additional or distinct discussion topics of their interest for the second project. What I encountered was their strong desire, interest and motivation to discover and learn about different countries, cultures, people and their traditions. Consequently, for this reason and for the sake of enriching and supplementing the data collected for the present study, I decided to organize the next telecollaborative project between Mundi School (Bulgaria) and Anglia School (Spain).

The following chronogram (Table 3.2), shows the various research instruments used in the implementation of Mundi School-Lluís Anton School telecollaborative project and the time of the data collection. Ticks are used to mark the month and year.

Table 3. 2: Chronogram of the research instruments used in the implementation of Mundi School-Lluís Anton School telecollaborative project and the time of the data collection

School	Research instrument	Month/Year		
		May 2018	June 2018	Feb 2019
Mundi	1.Consent form and pre-project questionnaire	✓		
	2. Pre-project interview			
	3. Telecollaborative sessions	✓		
	4. Post-project questionnaire		✓	
	5.Post-project interviews			✓
Lluís Anton	1.Consent form and pre-project questionnaire	✓		
	2. Pre-project interview	✓		
	3. Telecollaborative sessions	✓		
	4. Post-project questionnaire		✓	
	5. Post-project interviews		✓	

b) Second Telecollaborative Exchange Project (Mundi School - Anglia School)

● Procedures and Limitations

As mentioned previously, at that point I was an English teacher, as well as a manager and Director of studies at Anglia School (Spain) which significantly facilitated the organizational process for the second telecollaborative project to be recorded. Similarly, as Mundi School (Bulgaria) had already participated in the first project, this time it was much easier and effortlessly to organize the second online intercultural exchange. What is more, my goal was, if possible, the same students from Mundi School to take part in the second project, this time with Anglia School. For the present project, however, I was determined to modify certain crucial features, which in the case of the first project had been unfortunately beyond my control, such as:

- a) similar level of English of the participants
- b) students' attendance issues
- c) pairing of dyads according to common interests
- d) teachers' support.

The second project started in March 2019 (See Table 3.4) and continued for five consecutive weeks, except for one week when Bulgarian students had their Easter holiday, and one week for an organized school trip for the Spanish participants. Luckily, at the end, we managed to organize for the same participants, except one new student, from the Bulgarian Mundi School to take part in the second telecollaborative project. The participants from the Spanish side were teenagers, aged between 10-15 years old, whose level of English was B2-C1, attending Anglia School, a private language academy where they enrolled voluntarily in order to improve their English. The population for this study from the Bulgarian side had similar background. They were adolescent students aged between 11-14 years old, who had B2-C1 level of English and attended Mundi School twice a week as extracurricular activity. Their participation in both projects was entirely voluntary and it was not part of any assessment or school's assignment. As a matter of fact, students from Mundi School connected from their homes, using their personal mobile phones.

Some weeks before the beginning of the project, I introduced the project to the Anglia School students; we discussed potential topics, tasks, and ideas and cleared any doubts they had. The participation in the project was on a voluntary basis. At the end, six of the Anglia School students who presented their wish to participate were able to match with Bulgarian partners. It was a great challenge for the Bulgarian school to provide the participation of the same students as in the previous project due to school schedules, time restrictions and limits. These had to fit the Spanish students' available time as the Spanish participants conducted the meetings during their class time. For these reasons and complications with technology use we could finally match six dyads, meeting online once a week for a videoconference intercultural exchange. Fortunately, in this project we managed to coordinate and adjust everything so that the pairs remained stable, namely, participants met the same partner each of the five sessions.

As mentioned above, learners from Mundi School used their personal mobile phones, as they did in the first project. Participants from Anglia School had to bring their personal computers to the school on the days when the project meetings were scheduled. It was of utmost importance that the devices of the Spanish participants were explicitly computers/laptops, not I pads or tablets, since the recording feature of ZOOM software was solely available for computers and laptops (See Section 3.2).

The instructor at the Bulgarian participating school and I were capable of pairing the dyads with more precision and care this time as I was already relatively familiar with the personalities and interests of the Bulgarian students. This was thanks to the fact that I got to know them during the first telecollaborative project and later during the interviews which I conducted in person in Bulgaria. I also knew the students at Anglia School quite well as I had been teaching them for six months before the initiation of the project. The pairing process was complex as the topics of interest were not the only factor taken into consideration. In fact, in this project we also paid attention to L2 skill levels when forming the dyads. All participants were required to inform their instructor in advance in case they were to miss a session for any reason. Therefore, a *Viber* group (explained above in section 3.3) was created for all the students, with the researcher being the Administrator of the chat group. In this way, in cases when a participant had to miss a session he informed his instructor and also wrote a message in the common *Viber* chat group so his partner would also be informed immediately. The dyad was required to arrange another day for the meeting in time convenient for both of them.

Prior to the beginning of the telecollaborative exchange, all participants filled in a pre-project questionnaire and handed in a Consent form signed by their parent (See Appendix 1 and 3) (See Table 3.4). The Bulgarian instructor scanned and sent them via email. Pre-project interviews were also conducted. Students met once a week for a half-an-hour videoconferencing intercultural session, discussing a different topic each meeting. The instructors made a final list of five discussion topics based on the themes students suggested themselves; areas which participants considered curious, thought-provoking, inspiring and modern-day. A list of the five discussion topics, which was distributed to all the participants

before the beginning of the exchange, is provided below in Table 3.3. A few months after the end of the second project I contacted some of the parents of the participating students and asked them for permission to use certain photographs. Only those photographs for which I was granted explicit consent are included in this dissertation (See Appendix 7).

● Project Design

The prompts for the discussion topics were adapted from a study conducted by Ware and Kessler (2014) in which they investigated the interactional patterns that emerge in a classroom learning environment shaped by the introduction of an online intercultural project.

Table 3. 3: Discussion topics in Anglia - Mundi School project

Session	Discussion topics
Session 1	Getting to know each other- talk about routine, family, school life, free time activities and hobbies.
Session 2	Typical food, drinks and traditions- prepare images to show to your partner and make sure to explain very well and with details what it is, when, how and why a tradition is celebrated.
Session 3	<p>Movies, Music, Education, Future plans and careers- talk about your favourite movies and music: Share three songs from YouTube with your partner the day before the meeting and be sure to explain during the meeting why you chose each of these songs:</p> <ol style="list-style-type: none"> (1) A song that you listen to when you are in a great mood (2) A popular song that you do not personally like (3) A song that you think fits a stereotype of Spain/Bulgaria <p>Talk about the education in your country- what you like and don't like about it and what you would change if you could. Talk about your future plans and careers and why you have chosen it.</p>
Session 4	<p>Diversity in your country Every country is made up of many different types of individuals, families, communities, geographic locations, ethnicities, languages, ages, interest groups, and careers - and so many more ways that we are different within our country's borders. Your activity is to help your partner understand the diversity within your country:</p> <ol style="list-style-type: none"> (1) Choose ONE way of categorizing the diversity in your country (e.g., ethnic diversity, geographic diversity, or language diversity)

	(2) Describe the different groups. Be sure to give examples. Some examples will probably be stereotypes, and some will be counterexamples to the stereotypes. Give as much information as you can in the time you have.
Session 5	Volunteering, Fashion and Travelling

In the same way as in the first project, the day before the beginning of the second project I conducted a test call with the Bulgarian instructor to ensure that the internet connection was stable and the audio/video and recording features worked properly. Both Spanish and Bulgarian participants had installed ZOOM software on their own device and they brought it with them on the days assigned for the meetings. In the same way as in the first project, the Spanish participants send an invitation to their Bulgarian partners and after they accepted the dyads could begin the online intercultural exchange. All students dedicated a certain amount of in-class time, both before and after the sessions, to discussing issues of cultural differences between the two countries, impressions, feelings, doubts and hesitations, ideas, things that have surprised them, curious facts about the partner country and so on.

At the beginning of each meeting I made sure that the technology was working correctly, the recording feature was on and the pairs were in contact. Afterwards, I would go out of the classroom, but was always in close proximity in case they needed any help, which only happened in very few occasions when a breakdown in the connection interrupted briefly the communication process. Other than that, the Spanish students never asked for any language support in the course of the live sessions. Unlike the first project, in the current project learners were not given task sheets with questions to facilitate their conversations but were rather encouraged to do their own research and preparation on the respective topics before each meeting. The reason for this decision was the fact that the participants' level of English was high enough and they did not need additional assistance in the form of ready-made questions or vocabulary. Each videoconferencing session lasted approximately half an hour and if necessary they were allowed to talk ten minutes more. The recorded meetings were automatically saved on the students' computers and immediately after the session transferred to a hard drive and then to my personal Google Drive account. Once the project finished post-

project questionnaires were distributed and post-project interviews were conducted. All research data was stored and classified and was ready for analysis.

The following chronogram (Table 3.4), shows the various research instruments used in the implementation of Mundi-Anglia School telecollaborative project and the time of the data collection. Ticks are used to mark the month and year.

Table 3. 4: Chronogram of research instruments used in the implementation of Mundi-Anglia School telecollaborative project and the time of the data collection

School	Research instrument	Month/Year	
		March 2019	April 2019
Mundi	1.Consent form	✓	
	2.Pre-project questionnaire		
	3. Pre-project interview		
	4. Telecollaborative sessions	✓	✓
	5. Post-project questionnaire		✓
	6.Post-project interviews		
Anglia	1.Consent form	✓	
	2. Pre-project questionnaire	✓	
	3. Pre-project interview	✓	
	4. Telecollaborative sessions	✓	✓
	5. Post-project questionnaire		✓
	6. Post-project interviews		✓

3.4. Methodological Challenges in Telecollaborative Research

As Magnan (2008) suggests, “although online CMC can provide unprecedented opportunities for quick, extensive, and reasonably authentic exchanges and collaborations between learners in different countries and cultures, there are a number of inherent challenges that can be obstacles to successful L2 learning, and particularly to successful C2 or intercultural learning” (See O’Dowd & Ritter 2006, who developed a structured inventory of factors, suggesting 20 different factors at four different levels: individual, classroom, socio-

institutional, and interaction). We will see all these levels reflected in the kind of challenges that were encountered when conducting data collection for the present research.

Throughout our two telecollaborative projects, the teachers involved and I were able to fit within different course curricula and time limits (socio-institutional level), and managed to agree on common pedagogical goals', not without obstacles and complications. We did not, however, have control over learners' motivation (individual level), groups' dynamics, technology issues and pre-exchange briefing time in the first project (classroom level).

At the beginning of the first project there were more students from Lluís Anton School willing to participate in the project than from Mundi School, which caused problems as far as student pairing and project design was concerned. This meant that occasionally one student from Mundi School had to share his online time with two students from Lluís Anton School and he ended up being a bit frustrated and demotivated at times as he had to repeat everything all over again. Another very serious problem that we encountered was the students' attendance at Lluís Anton School. Since this factor was beyond our control we had to be flexible and quick in finding substitute students, which caused serious pairing disruption. However, as the project was out of their class time and was not part of the course curriculum we were not capable to resolve this problem. Additionally, since the project was an extracurricular activity and because of students' busy schedule, our pre-exchange briefing time was extremely limited. For this reason, and to minimize the risk of breakdown in communication, all participants from Lluís Anton School were given task sheets with questions related to the topic that was to be discussed in the current meeting. On the other hand, students from Mundi School were able to dedicate in-class time to project preparation and discussions. In a few occasions participants from Mundi School complained about their partners' English level or the fact that they did not demonstrate enough interest in the topic under discussion (interaction level in O'Dowd & Ritter, 2006).

In the second project (Mundi School-Anglia School) most of the abovementioned risks of potential "failed communication" were minimized. Due to the fact that I was at that time rather well familiar with both Spanish and Bulgarian participants, I took into account

language proficiency levels, personality, and attitude toward the project (Martín, 2013) and pairing was successful without any significant breakdown in communication or reduced group dynamics. Furthermore, enough time for pre-exchange briefing was provided and students' attendance issues were insignificant.

Although both the instructors and I tried to anticipate and prevent potential problems with technology through tests and experiments during the pilot study, some technological hindrances did appear in the course of the projects. In spite of the invaluable support and help of the technician in the first project, we lost the recordings of three conversations due to software issues. In another occasion, as a result of a heavy storm in Bulgaria, the internet connection was constantly going down and we had to postpone and repeat the session. Likewise, during the second project one participant lost the recordings of two sessions, most likely as a result of the personal settings of his electronic device.

3.5. Participant Classrooms and Selection of Case Studies

a) Participant Classrooms

This research used data from two telecollaborative projects, namely the project between Mundi School and Lluís Anton School in 2018 and the one between Mundi School and Anglia School in 2019.

Mundi School is a private language academy in a town in Bulgaria, which offers English, Spanish and German classes to children and adults. The school also prepares students for IELTS, TOEFL and the official Cambridge exams. It has approximately 200 students which attend the school twice a week, from September until July. The teachers follow a syllabus and a timetable; nevertheless, the managing director authorized the implementation of the project after discussing it with the instructors. Finally, five sessions were assigned for the telecollaborative project, which were out of students' class time. Additionally, some in-class time was allowed to be dedicated to the preparation of the students.

All participating students had Bulgarian nationality and their native language was Bulgarian. They all studied English as a subject at school and in the meantime attended Mundi School,

so as to improve their level of English. Besides, they had never used it outside of the classroom nor had native English teachers. As indicated in the pre-project questionnaire, most of the learners had travelled to neighboring foreign countries, such as Greece, Macedonia and Turkey, and only a few have visited English speaking countries. However, none of them had stayed abroad for longer than a month. The participants were young teenagers, aged between 11-14 years old. The English proficiency level of these Bulgarian students was considered to be Upper-Intermediate/Advanced (B2/C1), based on the scores of the schools' entrance examinations, which use as reference the Common European Framework of Reference for Languages (CEFR). Mundi School holds entrance exams at the beginning of the academic year in order to accurately determine students' language proficiency level. The exam assesses all four language skills – Reading, Writing, Listening and Speaking.

In 2016 Mundi School (Bulgaria) was selected, first, because of my personal connections with the managing director and the instructors from the Bulgarian school. Before I decided to move to Spain I spent twelve years as an instructor at this school, teaching both English and Spanish. Knowing all of the teachers and the managing director personally made it very easy to organize and plan the project, without any potential problems in miscommunications or late responses. Second, the school's students had high level of English language proficiency, which was important for the successful outcome of the project. Mundi School provided me with the academic records of all participants - results from tests, school projects and class participation assessment. Third, the school was accessible and flexible, that is, they were open to adjust to potential changes in timetable, discussion topics and use of technology. Fourth, the managing director and the teachers were interested in the research; they collaborated during the pilot study and dedicated some of their extra-class time to the preparation of the telecollaborative project. They were motivated and willing to include innovative tools as part of the educational process in the school.

In 2018 Lluís Anton School in the Barcelona metropolitan area agreed to participate in a telecollaborative exchange project for the present research. Lluís Anton School is a public school that depends on the public educational system on the Department of Education of the

Generalitat de Catalunya. As stated in the school's website (<http://escolalluisvives.grupcomm.com>), it is an innovative and modern institution whose mission is to promote cultural and social differences, encouraging tolerance and collaboration among its students. The school offers pre-school education (Educación Infantil), for students aged between 0-6 years old, and primary education (Educación Primaria) for children between 6-12 years old. The school is fully equipped with all necessary educational resources. Every classroom has a projector and an electronic whiteboard, the school provides tablets and had recently bought twenty new Ipads, there is also a big computer lab, science lab, music, art and religion cabinets, reading corners, and so on. The school, therefore, provided all the necessary technological support and equipment for the current telecollaborative project. The educational process is not totally digitalized, that is, students predominantly use paper books, but teachers resort to technological tools so as to enhance the learning process. The teacher, Aina, is a young professional teaching English as a foreign language and other subjects in English and had previously organized a few videoconferencing sessions which proved to be very appealing and motivating for the students. For this reason, she demonstrated great interest and desire to collaborate in this project and contribute to the future research in this field.

Finally, we had twelve learners from Lluís Anton School who were willing to take part in the project and their parents allowed them to stay after class for an extra half an hour. The majority of the participants had Spanish origins, except three students, namely Amira and Malek, whose families were from Pakistan, and Noah, whose father was Brazilian and whose mother was French. Noah only participated in one session, when substituting a missing student. Noah spoke Spanish, Catalan, Portuguese and French and his native language was English, due to the fact that he was born in UK and lived there for six years. Notably, the participating students from Lluís Anton School had more diverse language backgrounds, that is, all of them spoke Spanish and Catalan, two participants spoke Urdu as well, two participants spoke French as a third language and one participant spoke Italian as a third language. At the time of the project there was a native language assistant at the Lluís Anton School, helping the students with conversation English classes. Most of the participants had

travelled to their neighboring countries (Portugal, France and Andorra); some had travelled to English-speaking countries, but never stayed for longer than a month. They were between 10-12 years old, that is, they were the eldest students at the school, but yet, some participants were younger than their Bulgarian partners. The English proficiency level of the participants from Lluís Anton School was also lower. It was considered to be Intermediate (B1) level, based on the results of the schools examinations and end-of-term tests.

Despite the discrepancies mentioned above, Lluís Anton School was selected to participate due to fact that the students had already taken part in similar projects. Importantly, they were not complete novices in this field, as they were familiar with the use of videoconferencing and had already used it in the classroom, which eased and facilitated the organization and accomplishment of the data collection process. Another reason for selecting this school was that the English instructor, Aina, had accepted to incorporate such virtual exchange in the classroom; she was thrilled by the idea of providing her students with the opportunity to use English in real situation, and so they realize the need to use the language to communicate with students from different cultures. The participants were only from the classes that Aina was teaching as she was ready to face the challenges of organizing an online exchange, such as obtaining permission from the Headmaster of the school, discussing the project with her students, organizing the meetings with both parents and children, providing all the necessary help regarding the technology, and so on. The other English classes were taught by other instructors who did not participate in the project.

In 2019 Anglia School (Spain) participated in the second telecollaborative project with students from Mundi School (Bulgaria). The two institutions are fairly similar. Likewise, Anglia School is a private language academy in Barcelona which offers English, French, German and Spanish language courses for children and adults. It is a small school with approximately 150 students who come twice a week, for the course of the academic year, that is, from September until July. Anglia School was founded by a British lady more than 30 years ago and is currently managed by me and my business partner. It is our belief that applying new technologies to the classroom is a motivation tool and the future of education cannot be understood without the use of New Information Technology (ICT). I think the use

of ICT can and must have a positive effect and should be used to foster new classroom methodologies, to enhance new ways of teaching and learning in a more attractive and pedagogical way. Finally, I decided to choose Anglia School to participate in the second project for a number of reasons. First, my students were interested and motivated by the implementation of such innovative project in the curriculum. Second, it was much easier for me to organize, change or make adjustments if necessary so as the second project could be as similar as the first one as possible. Third, the students that I was currently teaching had almost the same age and English proficiency level and I was convinced that they would make a successful telecollaborative project out of this experience. Lastly, the time was another crucial factor; I had to organize the second project as soon as possible as I needed the same participants from Mundi School to take part in the second project as well.

In the end, six Spanish learners, aged between 10-15 years old took part in the project. All of them had Spanish origins. There was only one participant, Andrea, whose mother was Spanish and whose father was from Taiwan and for this reason, she had travelled widely across Asia, spending long periods of time there. Patricia had spent three months in Ireland, living with an Irish family and Pablo has lived in the United States for a year with his family. The other three participants had travelled to English-speaking countries but none of them had stayed for longer than a month. All of them spoke Catalan and Spanish, and English as a foreign language. The students from Anglia School had Upper-Intermediate/Advanced English proficiency level (B2/C1) according to the scores of the school's entrance examinations that were conducted at the beginning of the academic year. Unlike public institutions, private language academies group their students not predominantly according to age but rather language proficiency level. For this reason, in one group the age of the students may vary, sometimes significantly. Such is the case with the participants from Mundi School and Anglia School. The learners from B2 and C2 levels were between 11-14 years old in Mundi School and between 10-15 years old in Anglia School.

Table 3. 5: Distribution of participants

Participating School	Mundi	Lluís Anton	Anglia
Number of participants	10	12	6
Age	11-14	10-12	10-15
English proficiency level	Upper-Intermediate/Advanced (B2/C1)	Intermediate (B1)	Upper-Intermediate/Advanced (B2/C1)
Previous experience of participants with videoconferencing projects	NO	YES	NO
Travel experience	Short travels to non-English-speaking countries	Short travels to English-speaking countries. One participant had long stay in English-speaking countries	Short travels to English-speaking countries. Two participants had long stay in English-speaking countries.

b) Selection of Case Studies and the Hierarchical Clustering Methodology

As Patton (2002) states, case studies are “particularistic, descriptive, holistic, and inductive” and are concerned with understanding and describing process as well as interpretation. In order to provide in-depth analyses of interactional features and negotiation of meaning techniques emerging in the data as well as illustrative examples of interactional phenomena, three students - Tania, Maria Jana and Daniel - were chosen as case studies to be analyzed in depth. Several were the criteria for selecting these three students:

- a) As previously described, students from Mundi School (Bulgaria) participated in two telecollaborative projects: first, with students from Lluís Anton School (Spain) in 2018 and, in the following year, with learners from Anglia School (Spain). Therefore, in the first place, I wanted to select the case studies from among those students from Mundi School that had participated in both projects. Hence, initially five participants were naturally determined by this restraint. Within this group of five participants, two

students were weeded out. One participant was excluded because the recordings of two of his sessions had been lost due to technological issues (as explained in *Methodological challenges in Telecollaborative research* section). The second participant was removed because he missed class meetings in both projects. The final sample size was reduced to three participants, namely Tania, Maria Jana and Daniel.

- b) Another criterion that confirmed the suitability of these three students in the selection process was the total time of communication recorded from these three participants. Initially, I aimed at choosing students with high total time of communication as this would provide us with extensive video recordings of the intercultural collaborations and thus allow us to present a more accurate and comprehensive picture of the phenomena under investigation. Tania, Maria Jana and Daniel are the three participants with the highest time of communication in both projects. More specifically, Tania's total time of communication was 173 minutes, Maria Jana's was 179 and Daniel participated for a total time of 174 minutes.
- c) It was also of utmost importance for the purpose of our research study to select case study participants that would be representative of the rest of the students who took part in the telecollaborative projects. Namely, we aimed at participants who would represent different groups as regards online behavior. For this reason, a *hierarchical cluster analysis* method was applied to the data once it had been coded (See Figure 4.1 in Section 4.1 *Overview of the interactional patterns of all participants in both projects*).

Cluster analysis is a technique within the fields of data mining and statistical analysis that is used to divide a dataset into smaller, more homogeneous and similar groups. Within the context of cluster analysis, similarity can be defined in several ways, and those definitions all revolve around the opposite concept of "distance" between points or groups of points. Distance, in turn, should not be understood in a geographical sense but in a more general context of measuring the differences or dissimilarities between participants' responses (see, for example, Murtagh and Contreras (2012) for an abridged review of distance metrics).

One of the most popular clustering methodologies using the concept of distance - and the one we⁴ used in this study - is “Hierarchical Clustering” (hereafter, HC). The HC methodology uses a set of dissimilarities (or distances) to build a hierarchy of groups that, as we move down the hierarchy, become more dissimilar among groups, but more similar within each group. The results of the HC technique are usually shown as an inverted tree diagram, where the whole data set is depicted as a single “tree trunk” at the top. As we descend the diagram, subsequent divisions create branches that sprout sideways until we reach the bottom of the diagram, where individual data points - in this study, the participants - represent the tips of the smallest branches. At the bottom of the HC inverted tree, all clusters in this methodology are formed by one single individual and, hence, there are as many clusters as there are data points. However, this extreme splitting of the data is trivial - indeed, individuals are identical to themselves - and it would not be useful for this study at all (For a review of the HC methodology, see Murtagh and Contreras, (2012).

Therefore, we used one clustering tool, the “pvclust” (Suzuki & Shimodaira 2006) that: (1) automatically (i.e. without subjective human judgment) groups the data points (i.e. our participants) into non-trivial subsets, and (2) is able to assess the results in a statistical sense. Clusters so calculated separate the participants into groups that share more common characteristics between them (i.e. intra-group distance) than with participants included in other groups (i.e. inter-group distance). In addition, by assessing the statistical significance of the resulting groupings we can gauge whether the clusters are meaningful. Significance here is determined by assigning p-values (based on bootstrap resampling) to clusters. We have used the commonly used criteria of $p\text{-value} < 0.05$ as threshold. As a result, after applying these substantial criteria, each of the three participants mentioned above, Tania, Maria Jana and Daniel, clearly fell within the three different groups that the hierarchical clustering method detected (See details of the resulting hierarchical tree in Figure 4.1, Chapter 4).

In the telecollaborative projects, Tania, Maria Jana and Daniel had different partners (See Figure 3.4). During the first telecollaborative project, Tania’s partners were Malek, Hugo

⁴ This analysis was carried out by a statistical consultant.

and Berta. Tania had one session with Malek, three sessions with Hugo and one with Berta in a total time of 75 minutes. In the second project she met Matias for four telecollaborative meetings and they communicated for 98 minutes in total. Similarly, in the first project Maria Jana had one session with Manuel, one with Malek and one with Carla, the total time of their collaboration was 64 minutes. Maria Jana’s partner in the second project was Patricia, with whom she collaborated for 115 minutes in five sessions. In the first project Daniel met Noah in one session, Hana in one session and Eric in three sessions for a total of 108 minutes and in the second project he was paired with Pablo, with whom he had four sessions and collaborated for a total of 66 minutes.

Figure 3.4 below shows the three case study participants and their partners in both projects. It also shows in which session they collaborated (S1- first session; S2- second session, etc.)

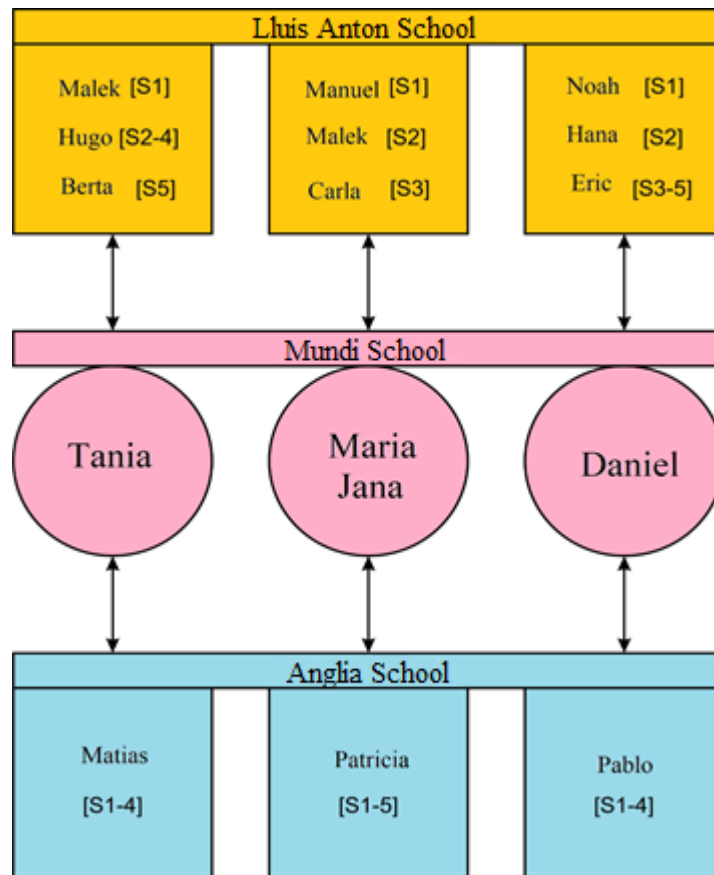


Figure 3. 4: The three case participants from Mundi School and their partners in both projects and in which session they participated (“S” stands for “Session”).

c) Portraits of the Three Case Study Participants

Finally, three participants - Tania, Maria Jana and Daniel - provide the main data corpus for the case study analysis. Below we introduce each case study participant by providing an overview of relevant information about their profiles from two secondary data sources. Questionnaires and interviews are the data sources in which Tania, Maria Jana and Daniel report on several issues of interest for the present research, namely, foreign language use, attitudes toward and experience with intercultural communication and foreign travel, hobbies and personal interests, their own beliefs, values and practices and those of their culture, as well as expectations and opinions about the current telecollaborative project and the use of videoconferencing to enhance intercultural exchange. The profiles resulting from the analysis constitute an important part of the case study analysis because they may highlight “selected features of the case that are valuable for the interpretation of the data” (Martin, 2013a)

Portrait of Tania

At the time of the project Tania is a twelve-year-old student from a small town in Bulgaria. As mentioned in the *Participant classrooms* section, she has an excellent command of English, uses wide variety of vocabulary and structures. According to the academic records at Mundi School, Tania gave outstanding results during all tests, school projects and class participation assessment. She has advanced level of English equivalent to a C1/B2 in the CEFR, according to the scores of the school’s examinations. Her average grade was 5.50 out of 6 (in the Bulgarian educational system 2 is the lowest grade and 6 the highest). Tania was always diligently prepared for the topic to be discussed during the telecollaboration projects, not only with factual information: In fact, during some of the meetings, she brought examples of typical foods or objects, such as the typical Bulgarian salad, that she had especially prepared for the meeting, or yogurt, traditional souvenirs and others. She was dedicated and inquisitive and was very eager to learn about the Spanish culture and traditions, frequently requesting more details and clarifications.

She studies English at this school and attends a language school as an extracurricular activity twice a week with the intention of improving her English level. When, at the interview, I mentioned that I was trying to organize a second project, similar to the first one, and, that if they wanted, they could participate she reacted very excitedly with “*Yes, can we? Great! I want to, please!*” (my translation from Bulgarian). At the interview, Tania also shared with me that she was “*very thrilled by the opportunity to speak with a person who is hundreds of kilometers away and yet be able to communicate perfectly in English*”. Furthermore, she revealed that, after the first project, she had learned many interesting facts about the Spanish culture, such as “the ingredients and spices of popular dishes” and her biggest surprise was that “*we like the same style of music and even listen to the same singers*”. She was passionate to learn about people, different cultures and their traditions and added that in the second project she “*would like to discuss more profound topics and learn more about the people and what they do*”. At the interview, again, when I told her that they will have to decide on the discussion topics she replied: “*.....and culture of course, this is clear. When you speak with people from different countries you expect it to talk about their culture. You are always curious to know and you ask them about their culture and food....*” In another occasion she remarked that, after the first project, she went out with her mom to eat “tortilla” and that she liked it a lot.

At the interview, Tania stated that she had spoken with a native speaker before the project; nonetheless, she reported to have felt “*very shy and nervous at the beginning of the project*” while after the first session she was more relaxed and confident. She expressed great interest in using English as a means of communicating with children from different cultures. What is more, Tania declared her great desire to travel around the world and expressed her speculation that “*it would be great if we could visit them in Barcelona and they could show us around and in this way we could communicate in English*”.

Interestingly, despite her initial nervousness, her willingness, confidence and strong desire to communicate with her partners are present throughout all video recordings. These illustrate her positive attitude, openness and readiness to use her skills and knowledge in order to be able to identify and interpret values in her own and other cultures to use Byram’s terms

(Byram, 1997). Actually, in her post-project questionnaire Tania stated the fact that her project partners spoke “*too little*” and she wished there was another project in which they could talk more and discuss more in-depth topics. She also expressed her dissatisfaction with the internet connection, which was not very stable in the first project. Nonetheless, she ends the questionnaire with a very emotional conclusive sentence saying: “*I hope we can see each other again next year and many more ahead. Goodbye! With very warm feelings, Tania*”

Portrait of Maria Jana

Maria Jana is a thirteen year old student at the time of this research project and is from the same town in Bulgaria as Tania. Just like her, Maria Jana attended a language school twice a week in order to improve her English level. She was doing an advanced course of English at the language academy at the time of the project, an equivalent to a C1/B2 in the CEFR. According to the scores of the school’s examinations she had excellent grades, an average of 5.60 (the maximum grade in the Bulgarian educational system is 6). She interacted with ease, contributing to and widening the scope of the interaction, using a wide range of complex grammatical structures and appropriate vocabulary to exchange views on various topics. Her contributions were relevant, coherent and wide-ranging (<https://www.cambridgeenglish.org/images/168620-assessing-speaking-performance-at-level-c1.pdf>).

Maria Jana was very dedicated to the telecollaborative projects and always expressed and reasoned her opinion. Despite the fact that she defined herself as an “introvert and shy” person, she participated actively in the projects, was very amicable and approachable, supportive and open-minded. She quickly formed a strong bond with Patricia (Anglia School, Spain) and they agreed to stay friends after the end of the project.

In spite of Maria Jana ‘s claim that she lacks any confidence in herself, she stated that this project had helped her a lot to overcome it. Furthermore, when confessing about her opinion about the first telecollaborative project (with Lluís Anton School, Spain) she remarked: “*I*

expected that the children would be more serious maybe. I am a very serious and responsible person.”

Maria Jana was always prepared for the meetings and was very active in the discussions. In her interview, Maria Jana stated that she had never communicated with other people who did not speak Bulgarian and she expected it to be a strange experience and then, suddenly she added: *“but I sometimes think in English”*. Despite the fact that she had not been exposed to the language or English culture she wanted to emphasize her interest, curiosity and good language skills. In the same way she responded: *“I am curious to know about people’s interest and what they do in their free time”* when I commented on the idea of organizing a second project, she added: *“I would participate, yes. I am a serious person.”*

Interestingly as well, when in the interview after the first project I asked what she had learned about the Spanish culture she answered: *“I found out everybody likes football but this is not a surprise as this is Barcelona”* whereas in the post-project questionnaire, after the second project, she replied to the same question with: *“I learned a lot. The Spanish educational system is quite different from the Bulgarian and this is what we mainly talked about. I also learned more about some big and important Spanish holidays and festivals.”* Moreover, when requested to comment on the similarities and differences she had found between her and her partner, she stated that she discovered a lot of differences related to the lifestyle but yet they *“managed to find common topics”* and at the end *“it was a very pleasant experience”*. It is important to note that Maria Jana had very limited exposure to different cultures, that is, she had only visited Macedonia and Greece, which are two of the neighboring countries of Bulgaria, and she had never had foreign friends before. Nevertheless, she was very receptive to the opportunity to participate in both telecollaborative partnerships and eager to interact with students with a different cultural and linguistic background. In more than one occasion throughout the telecollaborative sessions, Maria Jana revealed her inquisitive mind and great curiosity towards travelling and learning foreign languages. When her partner asked her if she wanted to travel, Maria Jana answered *“Ohh, everywhere basically, I want to go to Japan, China, South Korea, Thailand, Taiwan, France, Italy, England...all of these!”* She, then, went on to explain that the following year

she was going to start to learn French and in two years' time Japanese. At that moment she was learning Korean alone because as she shared "*there are no teachers of Korean here so I learn it alone*". She also added "*this project helped me a lot to improve my self-esteem. I like very much to learn about other cultures and countries. And not to forget, I met one incredible girl*" in response to the question in what way the project contributed to her.

In all, Maria Jana proved to be very motivated and interested in the telecollaborative projects and, despite her personal claim that she is a quite shy and nervous person, she showed high level of comfort and self-confidence during the meetings. I found noteworthy the dyad's rapport and Maria Jana's value and appreciation of her partner Patricia. They were both sensitive to each other's difficulties, provided support and advice. Illustrative examples are provided below in order to demonstrate these claims. The dyad also offered interesting insight into the language choices they made and the negotiation process which will be further discussed in the following chapters.

In her first telecollaborative project, with participants from Lluís Anton School (Spain), Maria Jana communicated with three different students, namely Manuel, Carla and Malek, and we recorded a total time of 64 minutes of real-time, synchronous videoconferencing interaction. In the second project Maria Jana's partner was Patricia from Anglia School (Spain). Their partnership consisted of five telecollaborative sessions for a total time of 115 minutes.

Portrait of Daniel

Daniel is an eleven-year-old student from the same small town in Bulgaria. Just as the other two focal students, he studies English at his school and attends a language school twice a week. He was doing an upper-intermediate course at the time of the project, an equivalent to a B1/B2 in the CEFR. According to the scores of the school's examinations she had very good grades, an average of 5.10 (the maximum grade in the Bulgarian educational system is 6). Daniel had a wide control of vocabulary and used complex sentence structures but he sometimes had difficulties finding the right word to express himself or could not understand

his partner. At times he seemed very active, enthusiastic and thrilled to ask questions and clarifications or to voice his ideas, in other occasions he was hesitant to participate actively. As a matter of fact, his attitude was quite different in the two projects. In the first one, with participants from Lluís Anton School, he was keener and more engaged in asking questions and requesting detailed information. One possible reason for that is he might have felt more confident and assertive when communicating with people who had similar or lower level than his. In contrast, in the second project (with Anglia School) his partner was Pablo, who had spent one year living in the US, therefore his pronunciation and command of English was quite advanced. During the second project Daniel appeared more silent and hesitant, using a much lower voice than in the first project and requesting less details and information.

Curiously, he was the only participant from Mundi School who indicated in his interview that he did not notice any difference between his English level and that of his partners from Lluís Anton School. All the other students from Mundi School mentioned the low level of their partners as one of the major drawback of the telecollaboration, stating that the bad internet connection and the difference in their language skills were the factors that hindered the flow of communication and understanding between the dyads.

The rest of the answers that Daniel provided were consistent with those of the majority of the students. Like most of the participants, he stated that at the beginning of the project he felt very nervous and worried to speak and he expected that he would not understand his partner, and next he adds:

“The project helped me a lot, especially about the speaking. Before, when we went on holiday abroad with my parents it was me who had to speak in English and I was very nervous and now a lot less. I speak more freely now.”

Daniel’s travelling experience was only limited to family trips abroad but never longer than two weeks. In the pre-project questionnaire he stated that he had visited Greece, Egypt and Italy with his family for holidays, lasting approximately ten days each. Accordingly, he had not been exposed to a foreign culture and language for a substantial period of time. Yet, he declared that he was very interested in the opportunity to speak in English with children from

a different culture. In his interview, he revealed that before each session he prepared himself at home: *“I prepared the topic we would discuss, words I might need. I even practiced with my mom. I noticed that they (the Spanish students) had something written down in their notebooks, so I prepared myself as well.”* This comment highlights Daniel’s preparedness and awareness of the importance of his language skills, as well as his display of consideration and value for his telecollaborative partner.

It is noteworthy to mention a particularity of Daniel’s, which was present in all data sources - interview, questionnaires and video recordings, precisely, his explicit interest and curiosity about the knowledge or stereotypes that the Spanish participants had about Bulgaria and its culture. In his interview he acknowledged: *“I liked the fact that they knew about Hristo Stoichkov⁵, who won a Golden ball.”* As Daniel is a great Barcelona football club fan himself, he frequently asked his Spanish partners whether they knew about Hristo Stoichkov. He was also curious to know whether there was any news about Bulgaria on the Spanish TV, whether they knew what the capital of Bulgaria is, how many people live in Bulgaria, or if they had tried Bulgarian yoghurt.

As will be demonstrated in the sections that follow, Daniel showed more curiosity and interest in the first project, he expressed himself more freely and intended to gather more information about his partner. In the second project, though, he did not seem to have control on the tasks, appeared more restrained and reserved, very rarely initiated a debate or provided in-depth information about him.

3.6. Data Collection Instruments

Qualitative data consists of detailed descriptions of situations, events, people, interactions, and observed behaviors (Patton, 1980. p. 22; Merriam, 1988). Qualitative case studies, therefore, rely greatly upon qualitative data obtained from interviews, observations, and documents. We should, however, bear in mind that the construction of questionnaires and interviews that provide valid and reliable data is much more complex than it might be

⁵ Hristo Stoichkov is a Bulgarian football player who played for Barcelona Football Club for many years and won the Golden Ball in 1994.

thought. Nunan (1992), therefore, suggests that, in order to guarantee the reliability and validity it is best to obtain data from more than one source. In his article “*Online data collection*”, Androutsopoulos (2013) states that data can be collected through different instruments, such as interviews, group discussions, questionnaires or by “observation of people’s literacy practices in front of their computer”. He further suggests that each choice results in different methods of data handling, including recordings and transcriptions. In view of the importance of triangulation, multiple instruments should be used to guarantee the validity of the data analysis (Bogdan & Biklen, 2006; Patton, 1990). According to Bogdan and Biklen (2006:115-116), “multiple sources lead to a fuller understanding of the phenomena”. Moreover, Patton (1990:467) argues that in order to triangulate data within qualitative methods “cross-checking the consistency of information derived at different times and by different means” can be used. Consequently, with the aim of providing a deeper understanding of the participants’ perceptions, communicative, interactive and meaning negotiation strategies, four different types of research instruments were employed for data collection: questionnaires, individual semi-structured interviews, video recordings and observations.

The data collection instruments were defined by taking into consideration the research questions, the results of the pilot study, the technological affordances and participants’ scheduling and availability. In the following section we provide a detailed description of the data collection instruments used. In Table 3.6 we present a summary of the data collection instruments in line with the objectives of this research.

Table 3. 6: Objectives of the research and instruments used to collect data

Objectives	Instrument
To collect data on the interactional strategies that secondary school learners of English as a foreign language use during task-based telecollaborative interactions with secondary school learners of English from a different cultural and linguistic background.	1.Field observations and video recordings
	2.Post-project questionnaire for students
	3. Interviews with students
To collect data on the patterns of negotiated interactions that such learners follow when encountered with a communication problem in such interactions in order to indicate and resolve that problem.	1.Video recordings
	2. Interviews with students
To collect data on the communication strategies that such learners use in order to indicate and resolve communication problems during such interactions.	1.Pre-project questionnaire for students
	2.Post-project questionnaire for students
	3.Interviews with students
	4. Interviews with teachers

The following chronogram (Table 3.7), shows which research instrument was used and when the data were collected during the research.

Table 3. 7: Chronogram of data collection process.

School	Research instruments	Month/Year of data collection and schools involved				
		2018 Mundi- Lluís Anton		2019 Mundi-Anglia		
		May	June	Feb	Mar ch	Apr
Mundi	1.Pre-project questionnaire for students	✓				
	2.Pre-project interviews for students					
	3.Video recording and observations	✓			✓	✓
	4.Post-project questionnaire for students		✓			✓
	5.Post-project interviews for students			✓		
	6.Post-project interviews for teachers			✓		
Lluís Anton	1.Pre-project questionnaire for students	✓				
	2.Pre-project interviews for students	✓				
	3.Video recording and observations	✓				
	4.Post-project questionnaire for students		✓			
	5.Post-project interviews for students		✓			
	6.Post-project interviews for teachers		✓			
Anglia	1.Pre-project questionnaire for students				✓	
	2.Pre-project interviews for students				✓	
	3.Video recording and observations				✓	✓
	4.Post-project questionnaire for students					✓
	5.Post-project interviews for students					✓
	6.Post-project interviews for teachers					

3.6.1. Video Recordings and Field Observations

The main corpus of data for this research comes from the audio/visual recordings of all sessions of two telecollaborative projects with the participants and the accompanying notes of field observations. My intention was to conduct and record a maximum number of sessions but we should consider the challenges and complexity accompanying the organization of an online intercultural project, such as course schedules and differences in institutional

calendars, technological problems, coordination of participants' availability and interests, students' commitment and dedication to the project, communication between instructors and others. Yet, at the end, I managed to record eleven hours and twenty-six minutes from the Mundi School-Lluís Anton School project (See Table 3.8) and seven hours and twenty-six minutes from the Mundi School-Anglia School project (See Table 3.9), a total of almost nineteen hours of synchronous telecollaborative sessions. Despite the crucial help and support of the technician at Lluís Anton School, due to software and server problems, the recordings of three sessions were lost. Regrettably, as we have already mentioned, in the second telecollaborative project one participant from Anglia School lost the recordings of two of his sessions as a result of personal settings of his own device. Each session was recorded with the ZOOM recording feature and stored on the computer/laptop; immediately after the end of each session the files were transferred to a hard drive and to my Google Drive account.

In Mundi School-Lluís Anton School project there were thirty-five recordings resulting in a total of 676 minutes of communication. Seventeen of the recordings lasted between 7-20 minutes and eighteen lasted between 20-38 minutes. All participants in the telecollaborative projects were given thirty minutes to communicate. Normally, it was the participants who put an end to the session but in some occasions the meeting was brought to an end due to problems with the internet connection. It is worth noticing that as a result of internet connection problems that Daniel was experiencing in his interactions with Eric, the dyad had to interrupt the communication and connect again. This resulted in a seemingly higher time of communication during which they sometimes struggled to keep the conversation going smoothly. In Mundi School-Anglia School project there were twenty recordings and altogether 436 minutes of communication. Six of the recordings lasted between 9-20 minutes and fourteen lasted between 20-31 minutes. As mentioned previously, these conversations were not part of any school assessment; therefore, the participation in the project was voluntary. Tables 3.8 and 3.9 show the number of recordings, the dyads and in which session they collaborated, as well as the time of communication of each recording and the total time of communication of the participants in each telecollaborative projects.

Table 3. 8: Number of recordings in **Mundi School-Lluís Anton School** project, dyads and number of sessions they collaborated, time of communication of each session and total time of communication.

Number of recording/Dyad Mundi School-Lluís Anton School	Number of session	Time of communication in minutes (´)
1.Tania-Malek	S1	10´
2.Tania-Hugo	S2	21´
3.Tania-Hugo	S3	15´
4.Tania-Hugo	S4	17´
5.Tania- Berta	S5	12´
6.Maria Jana-Manuel	S1	21´
7.Maria Jana-Malek	S2	19´
8.Maria Jana-Carla	S3	24´
9.Daniel-Noah	S1	12´
10.Daniel-Hana	S2	18´
11.Daniel-Eric	S3	35´
12.Daniel-Eric	S4	38´
13.Daniel-Eric	S5	35´
14.Raya-Angela	S1	22´
15.Raya-Angela	S2	25´
16.Raya-Angela	S3	31´
17.Raya-Angela	S4	23´
18.Raya-Angela	S5	30´
19.Galia-Manuel	S1	9´
20.Galia-Amira	S1	20´
21.Galia-Angela	S2	29´
22.Ivo-Malek	S1	20´
23.Ivo-Angela	S2	11´
24.Ivo-Eric	S3	9´
25.Ivo-Amira	S4	14´
26.Ivo-Hugo	S5	13´
27.Manuela-Manuel	S1	16´
28.Manuela-Malek	S2	9´
29.Nadia-Manuel	S2	26´
30.Nadia-Hana/Manuel	S3	22´
31.Nadia-Manuel	S4	22´
32.Magda-Malek	S1	9´

33.Magda-Amira	S3	7´
34.Magda-Jimena	S4	25´
35.Magda-Julia	S5	7´
Total time:		676 (11 hours and 26 min)

Table 3. 9: Number of recordings in **Mundi School-Anglia School** project, dyads and number of sessions they collaborated, time of communication of each session and total time of communication.

Number of recording/Dyad Mundi School-Anglia School	Number of session	Time of communication in minutes (´)
1.Tania- Matias	S1	25´
2.Tania- Matias	S2	26´
3.Tania- Matias	S3	23´
4.Tania- Matias	S4	24´
5.Maria Jana-Patricia	S1	12´
6.Maria Jana-Patricia	S2	31´
7.Maria Jana-Patricia	S3	23´
8.Maria Jana-Patricia	S4	24´
9.Maria Jana-Patricia	S5	25
10.Daniel-Pablo	S1	19´
11.Daniel-Pablo	S2	9´
12.Daniel-Pablo	S3	17´
13.Daniel-Pablo	S4	21´
14.Iana-Andrea	S1	16´
15.Iana- Andrea and Olivia ⁶	S2	25´
16.Iana-Andrea	S3	30´
17.Iana-Andrea	S4	25´
18.Iana-Andrea	S5	27´
19.Ivo-Arnau	S1	25´
20.Ivo-Gabriel	S1	9´
Total time:		436´ (7 hours and 26 min)

⁶ Olivia did not have a collaborative partner but was very willing to participate, therefore, I allowed her to share this session with Andrea.

In accordance with similar studies (Yanguas, 2010; Sánchez Sola, 2014; Westberry, McNaughton, Billot, & Gaeta, 2015; Van der Zwaard & Bannink, 2014; Hobaght, 1997; Kern, 2014), I believe that using video recordings provides richer data on students' interactions which could be stored, organized and analyzed over a period of time. In 2018 Dooly and Davitova, conducted a study which focused on how learners use multiple resources to creatively mediate their communication and to resolve problems that emerge during their interaction in the foreign language. These researchers used video recording of the Skype sessions of the participants as a data compilation tool. In the same way, video recordings were used as data collection instrument in a study conducted by Lee (2009), in which she explored how students collaboratively created blogs and podcasts using task-based activities and how blogs and podcasts facilitated cross-cultural exchanges. A similar study conducted by Lim and Lee in 2015 reports on the benefits of synchronous online exchanges between university students participating in a one-to-one videoconferencing telecollaborative project. Data in this study was collected from the video recordings of the sessions, students' journals, and post-conferencing interviews. Lee and Markey (2014), Cabrero (2013), Monteiro (2014) and many others have employed video recordings as data in their studies.

Another very common instrument of data collection used in most studies investigating the employment of real-time internet-mediated interaction in the foreign language classroom is field observation. Here, it was chosen as a method of data collection so as to provide triangulation of the findings, that is, verification through multiple sources of data. The overall role of the researcher in the present study can be classified as that of an active observer, as I visited the classes at Lluís Anton School and participated in the presentation of the project, explained how it would be organized and was also present during the videoconferencing meetings. Nonetheless, it should be noted that the researcher and the class teachers intended at all times to have minimum impact on the data which was produced during the telecollaborative sessions. Field notes were taken unobtrusively and logs were created for each session observed so as to make notes concerning the activities, the informal conversations between the students and between the students and their teacher. Additionally, I observed and took notes on the interactions, attitudes and behavior of the participants

before, during and after the sessions. I strongly believe that observation notes provide a high level of measurement precision and statistics and add greater depth of information about how people experience and perceive events (Frey, et al., 1991). As Ashley (2010) stated in her study, “methods of data collection for the qualitative portion of studies should include observations, interviews, appropriate written documents, and/or audio-visual material”.

3.6.2. Interviews

In case-study educational research interviews are the most common instrument for data collection. Thus, we used it in order to collect data for all research questions. Pre-project and post-project interviews were conducted. Many studies use the term ‘pre-session’ and post-session’ interviews and Lim and Lee (2015), for instance, employed the term ‘ post-conferencing interviews’. For the purpose of our study, I adapted this terminology and used the term ‘pre-project’ and ‘post-project’ interviews.

Since the interviews are not as rigid as questionnaires, they allow for greater flexibility and depth of information. As Patton (1980) explains, researchers interview people to find out what is happening in their mind, to observe behaviors, feelings, thoughts and intentions, to “enter into other person’s perspective ” (p.196). In order to collect all points of view on the experiences of telecollaboration, I decided to offer the perspective of all the participating students and teachers. The content analysis of the interviews provides complementary data regarding students’ and teachers perceptions of the telecollaborative interactional context as well as their perceptions of the impact of the telecollaborative project on learners’ communication skills.

a) Interviews with Students

Pre-project and post-project interviews were conducted with most of the participants in the projects. Unfortunately, due to time limitations and incompatibility in schedules, it was not possible to conduct pre-project interviews to students from Mundi School before the beginning of the first project. All students were informed that the interview would be recorded and permission was granted. The interviews were audio recorded, stored and later

transferred to a hard drive and my Google Drive account and prepared to be transcribed. The pre-project interviews aimed at finding out more about students' availability and comfort in using new technology, the effects of real-time virtual communication on the learning process, personal beliefs and perceptions towards learners' own oral skills and the use of this tool to foster interactivity. Develotte et al. (2010), Lee (2007) and Xiao (2007) have also used interviews as an instrument to collect data in their studies when exploring similar topics.

In their studies, Guth and Helm (2012) and Yang and Chen (2014) employ interviews as a data collection instrument, when conducting research on telecollaboration using web-based tools. In our study we also used the pre-project interviews to help us learn more about learners' cultural background, international travels and exposure to different languages and cultures, as well as their perceptions, feeling and fears of the virtual intercultural interaction (See Appendix 4). Students' answers allowed for better understanding of their attitudes towards the strategies they use in order to adapt to cultural differences. They also allow for a more exact assessment of the impact of the technology-enhanced cross-cultural interaction on students' development of intercultural awareness.

The semi-structured post-project interviews with students helped us gather more in-depth information on their attitudes towards the communicative and interactive strategies they used to negotiate for meaning and their perceptions as whether this virtual learning interaction with other cultures enhanced their intercultural communication skills. Not all studies investigating similar topics have used interviews as a data collection method. In our research we, in the same way as Wang (2013) and Sánchez Sola (2014), used post-project interviews to collect data in a retrospective way and thus learn more about students' learning styles and strategies.

b) Interviews with Teachers

Students are the main focus of our study; nonetheless, we consider it is not only appropriate but also necessary and enriching to look into teachers' viewpoint, attitudes and beliefs towards the use of synchronous video interaction to foster interactivity and negotiation of meaning in the ELT classroom and to enhance ICC. The semi-structured interviews with

teachers explored their perspectives on videoconferencing projects which is important in “that it offers an opportunity for teachers to reflect on their teaching efforts and preparedness, so that they can adapt their instruction strategies and approaches to meet their learners’ needs and interests” (Yu, 2018) (See Appendix 5). Teachers’ interviews, however, were only considered complementary data that provided context for the findings in this study.

The teachers played an essential role in the research as they were in the classroom with the students and were, therefore, very often the researcher’s “eyes” and “ears” (Jacob Abad, 2013). Likewise, in their studies Westberry, McNaughton, Billot and Gaeta (2015), Hampel and Stickler (2012), Comber, Lawson and Cullum-hanshaw (2004) and McCabe (2006) used interviews as a data collection instrument to explore teachers’ adaptation to technological change, their experience and attitude towards videoconferencing and their reflections on the use of this tool for foreign language learning. In this way, I aimed at triangulating the findings, providing the students’, the teachers’ and the researcher’s points of view (in this regards, by means of my direct observation in the classroom), which gave us a more complete and detailed picture of the questions under exploration.

3.6.3. Profile Questionnaires

All participants were given a pre- and post-project questionnaire (See Appendix 2 and 3). The pre-project questionnaire was distributed a few days before the beginning of the project and the post-project questionnaire was given to the participants on the last day of the project. The researcher handed out both questionnaires to the Spanish participants and after completing them students handed them back to their instructor, who collected all the documents and passed them on to me. The researcher e-mailed both questionnaires to the Bulgarian instructor, who handed them to the participants. Once the students had completed the questionnaires, they turned them in to their instructor; the Bulgarian instructor then e-mailed them back to me. In the first project (Mundi School-Lluís Anton School) 7 out of 10 Bulgarian students completed the pre-project questionnaire (See Table 3.10) and 6 out of 10 the post-project questionnaire; 9 out of 12 Spanish students completed the pre-project questionnaire and 8 out of 12 the post-project questionnaire. In the second project (Mundi

School-Anglia School) all Spanish students filled out the pre-project questionnaire and 5 out of 6 completed the post-project questionnaire; 5 out of 6 Bulgarian participants filled out the pre-project questionnaire and the same number handed back the post-project questionnaire.

Table 3. 8: Number of participants that completed pre-project and post-project questionnaires out of the total number of participants in each project.

Mundi School- Luís Vives School project	Mundi School		Lluís Anton School	
	Pre-project questionnaire	Post-project questionnaire	Pre-project questionnaire	Post-project questionnaire
	7 [10]	6 [10]	9 [12]	8 [12]
Mundi School- Anglia School project	Mundi School		Anglia School	
	Pre-project questionnaire	Post-project questionnaire	Pre-project questionnaire	Post-project questionnaire
	5 [6]	5 [6]	6 [6]	5 [6]

The questionnaires were built so as to collect data for various research objectives. In view of that, we will provide a short description of the two questionnaires and the purpose of their use.

a) Pre-Project Questionnaire: Personal Background and Expectations

The pre-project questionnaire contained questions about basic demographic information, such as age, gender and origin; students expectations before the session (what they think they will learn, what they expect of the other participants, what they think they will gain from the experience); students' attitude towards the target culture, cultural differences, and students' knowledge of the target culture (Schenker, 2012b) (See Appendix 2).

b) Post-Project Questionnaire: Feedback and Retrospective on the Telecollaborative Project

The objective of the post-project questionnaire was to compare and contrast the phenomena observed in the analysis of the synchronous interactions, which were video recorded, and the learners' own perceptions towards this kind of interaction and to the strategies they used to negotiate meaning (See Appendix 3). The same kind of instrument was also used in Zhao's (2010) study investigating the communication strategy use and negotiation of meaning in text

chat and videoconferencing. The participants were asked to comment on how they or their partner reacted when there was a communication problem, why they think they chose this approach when communication breakdown occurred, the strategies they used and their opinion of this activity. This instrument included questions illustrating students' level of agreement as regards several areas, namely, learners' experiences after the session, technology effectiveness, session objectives, whether it was interesting, thought provoking, boring or motivating for them; questions about what they think they gained from this session, suggestions for potential improvements, what students liked most and least about the experience.

3.7. Data Analysis

This particular study uses a case-study approach as online intercultural projects are socially and culturally unique learning experiences, which “allows for substantial exploration of a new or emerging area using multiple forms of evidence from many stakeholders' perspectives” (P. Ware & Kessler, 2014). In this exploratory case study, multiple sides of the telecollaborative exchange were investigated. Our purpose was to explore which interactional patterns students used in the telecollaborative projects, what negotiation techniques they employed when they encountered a hindrance in their communication, and finally, what communication strategies they used in order to indicate and solve this problem. As Belz (2001) has demonstrated, the length and “frequency of correspondence should not be interpreted as a direct representation of interest in the partner and openness to intercultural encounters” and, therefore, she suggests that “quantitative appraisals of telecollaborative interaction are insufficient to gauge the relative success of a telecollaborative partnership” (Belz, 2001, Belz, 2005). Hence, I decided to offer both quantitative analysis with descriptive statistics and of qualitative data.

The analysis of the data collected by means of recordings of dyadic interactions included both quantitative and qualitative procedures after having coded all these recordings. The quantitative analysis involved the quantification of the relevant frequencies of each of the features under investigation per participant. The main goal of this quantification was not for

statistical inferential purposes, but rather to provide a numerical overview of the communalities and differences between all participants. All coding of the data was conducted using qualitative analysis software MAXQDA, offering descriptive statistics of results. After the quantification of frequencies, averages of the coded features were presented and compared.

The qualitative analysis consisted of content analysis as a method that is commonly used in educational research (Malinowski, 2014; Ryshina-Pankova, 2018; Ellis, 2005; Helm, 2009; Srijbos, J. W., 2004). Content analysis has been defined by Stemler (2001) as a “systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding” (Berelson, 1952; GAO, 1996; Krippendorff, 1980; Weber, 1990). This method enables researchers to simplify large volumes of data with relative ease in a systematic fashion (GAO, 1996). In this study, content analysis has been used for the analysis of different sets of data, namely, audio/video recordings of the computer mediated communication, transcripts of the interviews, questionnaires and observations. (Bueno-Alastuey, 2011; Bueno-Alastuey & Esteban, 2016; Mason & Romiskowski, 1996). To begin with, analytical categories were developed initially relying on findings of studies investigating similar features of telecollaborative partnerships (Long, 1985; Pica and Doughty, 1985; Tarone, 1980; Smith, 2003b; Lee, 2001; Zhao, 2010; Bates, 2017; Sánchez Sola, 2014, V. Der Zwaard, 2017, Teng, 2010). Once we started coding and categorizing the data, new or sub-categories started to emerge from the data themselves, thus, completing the final list of categories. In order to analyse the interactional features used by the participants we applied analytical categories which have been used in previous studies in secondary school context by Ware (2013a) and (P. Ware & Kessler, 2014). More specifically, we investigate students’ use of emotive lexical words, alignment, boulogmaic modality, audio-visual resources and question types (general inquiry, follow-up, and personal opinion) (See categories in Section 4.1, Chapter 4). Similarly, based on similar research, we analysed the negotiation patterns and communication strategies used by the learners when communication breakdowns occurred (See categories in Sections 5.1 and 5.2, Chapter 5).

3.8. Limitations of the Study

This study faced the constraints and affordances of working with technology for real-time interaction in an intercultural context (Martin, 2013b). Researchers on telecollaboration have, on numerous occasions, emphasized on the challenging issues, such as the complexity of matching institutional calendars, course curricula, numbers of students, proficiency levels, media literacy, and target language valuation (Belz, 2002; O'Dowd & Ritter, 2006) among others. In our study, owing to a successful collaborative partnership, as well as to comparable curricula, learning objectives and relative flexibility with online meeting times, the partner teachers and I as the researcher were able to deal with some of the anticipated issues on an early stage, but yet some remained.

First, despite our consciousness of the importance of similarity in proficiency levels this was one of the major problems that we encountered during the first telecollaborative project; in the second project, however, we managed to minimize the linguistic difference between the participants. Second, another problem that we ran into was the differing number of students on both sides willing to participate. As a result, some students had to share their time online with various partners, which led to motivation issues and sometimes caused frustration and loss of interest (See Section 3.4 *Methodological challenges in Telecollaborative research*). These factors also affected the length of the sessions which was at times unequal among the dyads which, consequently, played a role in the analysis and the comparison of the data. This issue, however, was considered and taken into account in the analysis and discussion of the findings. In addition, technological and internet connection problems appeared at times, mostly concerning the sound quality and the recording of some sessions. Thus, high quality internet connection and hardware (headsets and microphones) on both sides of the exchange are crucial factors for the success of videoconferencing synchronous projects (Martin, 2013b).

Other issues that we did not have control over were learners' motivation, students' attendance matters and, in the case of Lluís Anton School, pre-exchange briefing time in class. These factors were beyond our control as the projects were not part of the students' official course

curriculum and they participated on voluntary basis, willingly fitting it within their busy schedule. On account of all these factors, the originally intended and desired number of online sessions got reduced so as to fit the institutional calendars of the participating schools. Similarly, we had to adapt the number and the selection of participants to teacher's/schools' suggestions.

I would also like to add a few remarks with respect to my role in this study. During these years of organization and implementation of the two telecollaborative projects I shared various responsibilities and functions, playing the roles of a language instructor, organizer and mediator between teachers and students, assistance provider during the online sessions, research designer and research analyst. Consequently, my own background, values and beliefs might have leaked into the study. As researchers have claimed, the role of the instructor/researcher is essential and it expands and enriches telecollaborative process (Belz, 2003). Yet, in order to minimize potential biases in the interpretation of the data and to ensure the validity of the analysis and the findings, I used multiple data collection sources for the purpose of triangulation.

Some limitations should be taken into consideration when interpreting the findings of the present study. First, the context of telecollaboration and the participants in this study are unique, and generalization needs to be made with caution. For example, the model of telecollaboration, the tasks, and/or the frequency of telecollaborative exchanges might lead to different findings. Second, the small number of participants has certain limitations on the generalizability as well. Additionally as Akiyama (2020) argues, it is possible that “the voice of those who talked more is more represented than those who did not talk as much”. And lastly, since it was not the focus of the current study; we have not developed a deep analysis of other semiotics signs and paralinguistic features, such as face movements, gazing, intonation of voice, and gestures among others.

In sum, the findings of this study concern this very specific learning environment and therefore, we should be cautious as for generalizing the conclusions drawn. I, thus, leave it

to the reader of this dissertation to carefully select which findings could be related to other telecollaborative environments (Martin, 2013 b).

CHAPTER 4: RESULTS: INTERACTIONAL PATTERNS IN THE TELECOLLABORATIVE PROJECTS

In this chapter we present descriptive statistical analysis of all interactional features used by the students in both telecollaborative projects as well as detailed analysis of three case studies: Tania, Maria Jana and Daniel. In Section 4.1 descriptive statistics of question types and emotionally tagged responses is presented in order to provide an overview of the interactional patterns followed by all participants in both projects and Sections 4.2, 4.3 and 4.4 provide an in-depth analysis of the three case studies. These case studies are “information rich” and illustrative, that is, they “offer useful manifestations of the phenomenon of interest” (Patton, 2002) and aim at offering insight about the type and the frequency with which participants made use of each interactional feature in both telecollaborative projects and thus allow us to find similarities and differences as regards learners’ display of the skills of information discovery and interaction. Section 4.5 provides students’ and teachers’ perceptions of this interactional context and finally, Section 4.6 offers a summary of the chapter.

4.1. Overview of the Interactional Patterns of All Participants in Both Projects

In this section we present descriptive statistical analysis of all participants’ online interactions in both telecollaborative projects in order to provide a numerical overview of the similarities and differences as regards students’ interactional discourse skills. Tables 4.1.1, 4.1.2, and 4.1.3 below provide the following information for each of the three participating schools, Mundi (Bulgaria), Lluís Anton (high school, Spain) and Anglia (language school, Spain):

- (a) how many times (i.e. total number of occurrences) students used each interactional feature within each student's total time of communication in both telecollaborative projects
- (b) the relative frequency of students' use of each interactional feature per hour
- (c) the mean relative frequency of use of each interactional feature per hour.

Tables 4.1.1, 4.1.2, and 4.1.3 below provide information about students' id number, gender and total time of communication in minutes for each participant. As mentioned above, the tables also present the total number of occurrences of each interactional feature within each student's total time of communication. Since the total time of communication is different for each student, we provide a relative frequency of students' use of each interactional feature. This allows for comparison and helps in identifying emerging patterns of interaction, as well as commonalities and differences between the participants from Mundi, Lluís Anton and Anglia School. And finally, as our intention is to provide a descriptive statistical analysis of the online interactions, we present the total number of uses of each interactional feature by all students within their total time of communication in both telecollaborative projects and the mean relative frequency of use of each interactional feature per hour.

Table 4.1.1: Number of times that participants from **Mundi School** (Bulgaria) used each interactional feature within their total time of communication and relative frequencies per hour

Mundi School Student's name and id number	Fem./ Male	Total time of commun. in min.	Interactional features													
			Emotive lexical choices		Alignment		Boulomaic modality		Audio- visual resources		Question types					
			№ of uses	Rel. freq. per hour	№ of uses	Rel. freq. per hour	№ of Uses	Rel. freq. per hour	№ of uses	Rel. freq. per hour	General inquiry questions		Follow-up questions		Personal opinion questions	
№ of uses	Rel. freq. per hour	№ of uses	Rel. freq. per hour	№ of Uses	Rel. freq. per hour	№ of uses	Rel. freq. per hour	№ of uses	Rel. freq. per hour	№ of uses	Rel. freq. per hour	№ of uses	Rel. freq. per hour			
1.Maria Jana	<i>F</i>	179´	61	20.45	45	15.08	11	3.69	10	3.35	41	13.74	57	19.11	5	1.68
2.Daniel	<i>M</i>	174´	25	8.62	26	8.97	0	0.00	13	4.48	78	26.90	26	8.97	0	0.00
3.Tania	<i>F</i>	173´	99	34.34	60	20.81	20	6.94	27	9.36	54	18.73	67	23.24	11	3.82
4.Raya	<i>F</i>	131´	60	27.48	37	16.96	4	1.83	7	3.21	42	19.24	30	13.74	2	0.92
5.Iana	<i>F</i>	123´	51	24.88	23	11.22	3	1.46	3	1.46	68	33.17	33	16.10	1	0.45
6.Nadia	<i>F</i>	70´	30	25.71	11	9.43	0	0.00	2	1.72	29	24.86	32	27.43	1	0.96
7.Ivo	<i>M</i>	68´	11	9.71	4	3.53	0	0.00	0	0.00	21	18.53	16	14.12	0	0.00
8.Galia	<i>F</i>	58´	29	30.00	12	12.41	1	1.03	2	2.07	21	21.72	26	26.90	2	2.07
9.Magda	<i>F</i>	49´	25	31.61	11	13.47	0	0.00	3	3.67	21	25.71	27	33.06	0	0.00
10.Manuela	<i>F</i>	25´	10	24.00	6	14.40	0	0.00	2	4.80	11	26.40	11	26.40	2	4.80
TOTAL № of uses:		1050´	401		245		39		69		386		325		24	

MEAN of rel. freq. per hour:				23.58		12.63		1.50		3.41		22.90		20.91		1.46
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Table 4.1.2: Number of times that participants from **Lluís Anton School** (Spain) used each interactional feature within their total time of communication and relative frequencies per hour

Lluís Anton School Student's name and id number	Fem./ Male	Total time of commun. in min.	Interactional features													
			Emotive lexical choices		Alignment		Boulomaic modality		Audio- visual resources		Question types					
			Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour	General inquiry questions		Follow-up questions		Personal opinion questions	
Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour	
11. Angela	<i>F</i>	170'	59	20.82	34	12.00	0	0.00	3	1.06	36	12.71	19	6.71	0	0.00
12. Manuel	<i>M</i>	100'	20	12.00	16	9.60	0	0.00	0	0.00	25	15.00	17	10.20	0	0.00
13. Eric	<i>M</i>	90'	21	14.00	15	10.00	0	0.00	5	3.33	30	20.00	14	9.33	0	0.00
14. Malek	<i>M</i>	66'	12	10.91	6	5.45	0	0.00	2	1.82	26	23.64	17	15.45	0	0.00
15. Hugo	<i>M</i>	60'	23	23.00	7	7.00	0	0.00	3	3.00	18	18.00	17	17.00	0	0.00
16. Amira	<i>F</i>	41'	23	33.66	9	13.17	1	1.46	1	1.46	19	27.80	8	11.71	1	1.46
17. Hana	<i>F</i>	27'	3	6.67	3	6.67	0	0.00	0	0.00	9	20.00	2	4.44	0	0.00
18. Jimena	<i>F</i>	25'	4	9.60	4	9.60	0	0.00	0	0.00	7	16.80	2	4.80	0	0.00
19. Carla	<i>F</i>	21'	5	14.29	4	11.43	0	0.00	0	0.00	8	22.86	2	5.71	0	0.00
20. Noah	<i>M</i>	12'	2	10.00	2	10.00	0	0.00	1	5.00	5	25.00	2	10.00	0	0.00
21. Berta	<i>F</i>	12'	3	15.00	3	15.00	0	0.00	0	0.00	4	20.00	2	10.00	0	0.00
22. Julia	<i>F</i>	7'	1	8.57	1	8.57	0	0.00	0	0.00	9	77.14	2	17.14	0	0.00

TOTAL № of uses:		630'	176		104		1		15		190		92		1	
MEAN of rel. freq. per hour:				14.88		9.87		0.12		1.31		24.91		10.21		0.12

Table 4.1.3: Number of times that participants from **Anglia School** (Spain) used each interactional feature within their total time of communication and relative frequencies per hour

Anglia School Student's name and id number	Fem./ Male	Total time of commun. in min.	Interactional features													
			Emotive lexical choices		Alignment		Boulomaic modality		Audio- visual resources		Question types					
			№ of uses	Rel. freq. per hour	№ of uses	Rel. freq. per hour	№ of uses	Rel. freq. per hour	№ of uses	Rel. freq. per hour	General inquiry questions		Follow-up questions		Personal opinion questions	
№ of uses	Rel. freq. per hour	№ of uses	Rel. freq. per hour	№ of uses	Rel. freq. per hour	№ of uses	Rel. freq. per hour	№ of uses	Rel. freq. per hour	№ of uses	Rel. freq. per hour	№ of uses	Rel. freq. per hour	№ of uses	Rel. freq. per hour	
23.Andrea	F	123'	50	24.39	29	14.15	2	0.98	9	4.39	26	12.68	35	17.07	2	0.98
24.Patricia	F	115'	40	20.87	21	10.96	5	2.61	5	2.61	26	13.57	35	18.26	3	1.57
25.Matias	M	98'	34	20.82	12	7.35	0	0.00	8	4.90	25	15.31	27	16.53	0	0.00
26.Pablo	M	66'	10	9.09	5	4.55	2	1.82	4	3.64	13	11.82	7	6.36	0	0.00
27.Arnau	M	25'	4	9.60	4	9.60	0	0.00	2	4.80	10	24.00	2	4.80	0	0.00
28.Gabriel	M	9'	2	13.33	1	6.67	0	0.00	0	0.00	4	26.67	1	6.67	0	0.00
TOTAL № of uses:		436'	140		72		9		28		104		107		5	
MEAN of rel. freq. per hour:				16.35		8.88		0.90		3.39		17.34		11.62		0.42

Table 4.1.4 below shows the mean relative frequency of use of each interactional feature per hour used by all participants from Mundi (Bulgaria), Lluís Anton (Spain) and Anglia School (Spain). As the results reveal, the most frequently used interactional feature is general inquiry questions about personal background (22.57), followed by emotionally tagged lexical choices (18.30), follow-up questions (14.33) and alignment (10.64). The least frequently used interactional features in the two telecollaborative projects are audio-visual resources (2.50), boulomaic modality (0.78) and personal opinion questions (0.67).

Table 4.1.4: Mean relative frequency of use of each interactional feature per hour used by all participants from **Mundi School** (Bulgaria), **Lluís Anton School** (Spain) and **Anglia School** (Spain)

	Interactional features						
	Emotive lexical choice	Alignment	Boulomaic modality	Audio-visual resources	Question types		
					General inquiry questions	Follow-up questions	Personal opinion questions
MEAN of rel. freq. per hour:	18.30	10.64	0.78	2.50	22.57	14.33	0.67

All the above tables offer comprehensive insight into the relative frequencies with which the participants use the interactional features and display their skills of information discovery and interaction based on Byram's framework of intercultural communicative competence (Byram, 2008a).

The student with the highest total time of communication in both projects is Maria Jana from Mundi School (Bulgaria), who collaborated with three participants from Lluís Anton School (Spain) and one from Anglia School (Spain) for a total time of 179 minutes. On the other hand, Julia, from Lluís Anton School, is the participant with the lowest total time of communication, only 7 minutes. She only took part in one session while substituting a student who had cancelled his participation in the last moment.

A detailed observation of the results that the tables above yield reveals valuable information about the highest and the lowest relative frequencies with which the participants used the

interactional features of interest. Strikingly, one participant scored highest relative frequency per hour (from now on RFH) in four out of seven of the interaction features under investigation. Of all participants, Tania (Mundi School, Bulgaria) scored the highest RFH in her use of emotive lexical choices (34.34), alignment (20.81), boulomaic modality (6.94) and audio-visual resources (9.36). As regards the personal opinion questions, it was Manuela (Mundi School, Bulgaria) who scored highest (4.80) in this interactional feature, yet it is worth mentioning her low total time of communication, only 25 minutes. Tania, nevertheless, scored 3.82 in this interactional feature, which is still way ahead of the rest of the participants, most of which scored 0.00. The student who scored the highest RFH in her use of general inquiry questions about personal background is Julia (Lluís Anton School, Spain) (77.14) but considering the fact that she is the participant with the lowest total time of communication (7 min), we would also take into the account the participant with the second highest score in this feature - Iana (Mundi School, Bulgaria) (33.17). Magda (Mundi School) is the learner who scored the highest RFH in her use of follow-up questions (33.06). As far as the lowest RFH is concerned, it is Hana (Lluís Anton School) who scored 6.67 in her use of emotive lexical choices, Ivo (Mundi School) who scored 3.53 in alignment, Pablo (Anglia School) scored 11.82 in general inquiry questions and Hana (Lluís Anton School) scored 4.44 in follow-up questions. As for the lowest RFH of boulomaic modality, audio-visual resources and personal opinion questions, many participants scored 0.00 in their use of these interactional features.

Further useful insights were achieved by employing a mathematical descriptive analytical tool: hierarchical cluster (HC) analysis. In this case, the HC analysis is not used as a separate methodological approach, but rather as a complementary method for validating and supporting results, as well as for providing a better insight into the interactional features students used in the two telecollaborative projects. Such analysis allows a more specific look at the *similarities* and *differences* between the participants and/or groups of participants, thus identifying groups of students with similar use of the interactional features under investigation. For details about the HC methodology, see Section *Participant classrooms and selection of case studies* in the Methodology chapter.

After counting the relative frequencies presented in the Tables 4.1.1, 4.1.2, and 4.1.3 above, a HC analysis was carried out with the “pvclust” R package. Results are shown in Figure 4.1, where we can see that the HC technique has found 3 clusters (enclosed by rectangles with red lines) that are statistically significant. One participant, Julia, is so different from the other participants that represents a cluster on her own and is shown apart. Notice that, as we move down the diagram, there are other branches that point to the existence of other smaller, more specific possible groups. However, none of those clustering possibilities is statistically significant and, therefore, they are not considered in our subsequent analysis.

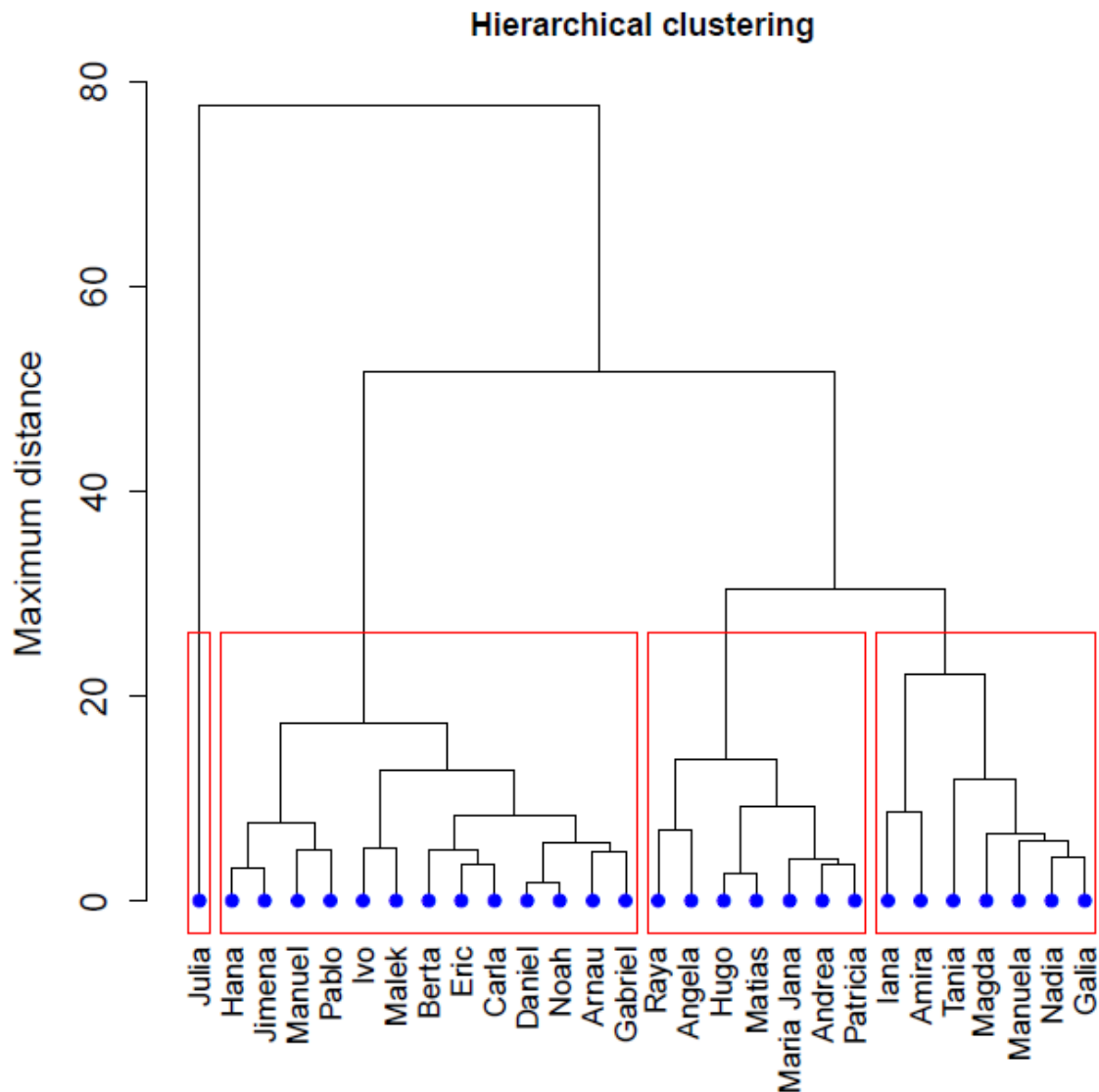


Figure 4. 1: Hierarchical cluster analysis of students’use of interactional features. Statistically significant ($p\text{-value} < 0.05$) clusters are enclosed in red lines.

The current study focuses on those three clusters in Figure 4.1 and we chose one case study from each of the clusters. Each cluster, which is marked in red in Figure 4.1, represents a group of students who share similar characteristics and features. For instance, the first cluster groups all the students from Ivo to Carla, the second one groups all the participants from Hugo to Patricia and the third cluster groups all the students from Iana to Galia. The closer the participants are to one another, the more similar they are. That is, Daniel is more similar to Arnau, Noah or Hana than he is to Raya, Patricia, Magda or Nadia. Similarly, Maria Jana

is much more similar to Patricia, Matias or Raya than she is to Jimena, Gabriel or Galia, for example. And, Tania is more comparable to Manuela, Amira or Iana than to Hugo, Eric or Malek.

4.2. Case Study: Tania

4.2.1. Emotive Lexical Choices

As part of the analysis, we coded for students' interactional features that could be tagged as demonstrations of emotive attitudes (P. Ware & Kessler, 2014) through emotive lexical choices, such as "love", "amazing", "wow" and "great". In order to review Tania's use of emotive lexical choices throughout the video recordings we start with the analysis of the first project, namely with participants from Lluís Anton School followed by the second intercultural project, with students from Anglia School. Furthermore, we want to explore which emotive lexical choices she utilizes, in what context, and what is their contribution to the interaction. In the first project Tania communicated with three different participants, Malek, Hugo and Berta, and the total time of the recordings with them is 75 minutes (see Table 4.2.1 below). In the second project Tania had a stable partner; she interacted only with Matias, and the total length of the video recorded sessions is 98 minutes. Table 4.2.1 below shows Tania's collaborative partners in both telecollaborative projects, their gender and the total time of communication with each student. Next, we present the number of times that Tania (Mundi School, Bulgaria) used emotive lexical choices with each partner within her total time of communication and the relative frequencies per hour. The relative frequency of her use of emotive lexical choices per hour with Malek (Lluís Anton School, Spain) was 10; with Hugo (Lluís Anton School, Spain) – 20 and with Berta (Lluís Anton School, Spain) – 15. The RFH of her use of this interactional feature with Matias (Anglia School, Spain) was significantly higher – 47.14. As will be demonstrated below, Tania expressed strong desire to show value and appreciation of her partners through the use of emotionally tagged words in both projects, which had different degrees of contribution to the interactions.

Table 4.2.1: Number of times that Tania (Mundi School, Bulgaria) used emotive lexical choices with each partner within her total time of communication and relative frequencies per hour

Tania's collaborative partners in both projects	Fem./ Male	Total time of commun. in min.	Emotive lexical choices	
			Nº of Uses	Rel. freq. per hour
Hugo (Lluís Anton)	<i>M</i>	51´	17	20
Malek (Lluís Anton)	<i>M</i>	12´	2	10
Berta (Lluís Anton)	<i>F</i>	12´	3	15
Matias (Anglia)	<i>M</i>	98´	77	47.14
TOTAL Nº of uses:		173´	99	34.34

Tania's most commonly used emotive words are "love", "cool" and "great", as can be seen in the following examples:

Extract 1:

Hugo: Do you like music?

Tania: I love it.

Extract 2:

Hugo: I love meat.

Tania: Ok, cool.

Extract 3:

Berta: We have traditional songs but they are for kids.

Tania: Ok, that sounds great!

Tania made use of emotionally tagged words rather frequently throughout the conversations, with "cool" and "great" prevailing over others. In the first project, nevertheless, her use of emotive words is mainly aimed at displaying interest towards her partner and commitment to the intercultural partnership rather than alignment or desire to reveal similarities and differences between her and her partner. When Hugo says he loves meat (Extract 2), she only replies: "Ok, cool" and after Berta's explanation (Extract 3) that the traditional songs in her country are mainly for children, Tania responds: "Ok, that sounds great." In these, as well

as in many other cases, she does not invite her partner to expand the topic or provide further, more detailed information; she proves to be “less open to identifying similar and dissimilar processes of interaction” (Byram, 1997).

On two occasions she did display readiness and curiosity to discover common activities and resemblance between her and her partner. In Extract 4 after Hugo’s remark that he likes technology, Tania responded with “This is great”. By keying her message with emotive words she goes on to display alignment with Hugo by saying that it was her favourite subject too and that they do amazing things, at the same time elaborating on the topic and providing her personal opinion.

Extract 4:

Hugo: I like technology.

Tania: This is *great!* Technology is my favourite subject at school and we do *awesome* things.

But then, when Hugo revealed that at their school they use iPads (Extract 5), Tania’s reaction was “that’s so cool”, followed by her statement that in their school they only use paper books and they have computers in the computer room, thus identifying dissimilarities in the educational tools between the two countries. However, eliciting this difference does not hinder their communication, quite the reverse, she expresses her surprise and admiration by the fact that they use iPads in class, which to her seems like an innovative and cutting-edge implementation of technology in the classroom.

Extract 5:

Tania: Do you use books or tablets in your school?

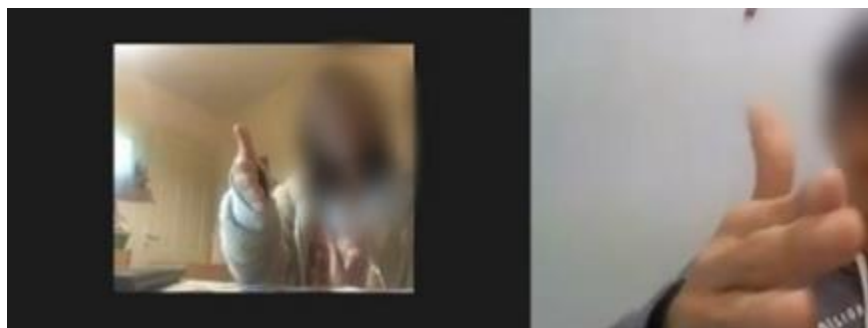
Hugo: In my school we have iPads.

Tania: That’s so *cool*. In my school we only have books and we have computers in the computer room, we don’t have iPads.

Hugo: Our iPads are new and we use it in class.

Tania: *Wow!* This is so *cool!*

In the second project, with Anglia School, Tania's partner was Matias, with whom she established a rapport almost immediately. She was highly motivated and very dedicated to this collaboration. Tania spoke with a relaxed and polite tone of voice throughout all the sessions, she was the one who primarily initiated a topic, but surely expressing interest and great value for her partner, constantly inquiring about his preferences; apologizing when the internet connection was cutting and patiently repeating her words. She was very precise when answering Matias' questions, constantly making an effort to provide the most in-depth responses possible and trying to establish a close personal relationship with him. Their very first session Tania started with apologizing that she could not connect the previous week and afterwards she introduced herself by offering him a virtual handshake (photo below⁷).



Extract 6:

Tania: Hello, sorry that the other day I could not talk but now I am here (offers a handshake). My name is Tania.

Matias: My name is Matias.

Tania: Matias! Did I pronounce it right?

Matias: Yes.

Tania: Ok, *cool*. I like that name.

Matias: Thank you.

Tania's desire to establish a close, friendly relationship can also be perceived by her reaction when after Matias introducing himself, she not only keyed her message with an emotive

⁷ Permission was granted from participants' parents for the photographs to be shown as they are.

word: “ok, cool” but she added: “I like that name” (Extract 6). As we mentioned above, it was normally Tania who initiated the topic under discussion. This is demonstrated with the following examples in Extract 7.

Extract 7:

Tania: Hello, how are you?

Matias: I am good. And you?

Tania: I am fine, thank you. So, today’s theme... actually we have two themes to discuss today but as we talked about our countries and traditions already we can only talk about the second theme which is music.

Matias: OK...I have some favourite songs in Spanish.

Tania: Hello, how are you today?

Matias: I am fine.

Tania: (arranges her earphones and fixes the sound) I don’t remember actually what is our last theme.

Matias: (checks his paper with topics) I think it’s fashion and travelling.

Tania: Okk, Good theme, shall I start?

Matias: Ok.

Tania: I actually don’t know anything about fashion, I am not interested in it so I can talk only about travelling.

Matias: Me too.

Extract 8

Tania: If there is project like this would you like to talk again?

Matias: Yes, for me yes. It’s a good way to learn English.

Tania: Yeah, and it’s funnier than learning it in school, for me.

Matias: Yes, for me too.

Tania: Whaaat should I ask you?! ...Where do you plan to go in summer?

Matias: I went to a little village on the coast with my family and friends.

Extract 9

Tania: (talks about her teachers) My favourite teacher is my English teacher. She is so nice to us.

Matias: Yeah, my English teacher too is nice.

Tania: This is our last meeting and we don't know what to talk about!!!!.....Do you have a brother?

Matias: Yes, I have one brother.

Tania: Oh, yes you told me in the first session.

Extracts 7, 8 and 9 above illustrate Tania's motivation and desire to not only initiate a topic but also to keep the flow and sustain the conversation. She also wants to make the talk attention-grabbing and appealing to Matias by giving a lot of detailed information and providing visual materials about the traditions and customs that she is describing. This is demonstrated with the extracts below.

Extract 10:

Matias: And what are your traditions for Christmas?

Tania: (shows a photograph on her computer) This tradition is called "kukeri" in Bulgaria. It's something like Halloween but we do it at New year's eve and so you see, people put scary masks on them to ...(internet connection cuts)

Tania: Hello, do you hear me now? Did you understand about the tradition because the internet connection was bad?

Matias: Repeat, please! I don't listen.

Tania: Ok, ...so, this tradition is called "kukeri" and we do this tradition to scare the bad ghosts out of our towns. So, you see, people put on their masks and there's a competition of which group of people in a town has the best masks and it wins a reward.

Matias: Ok, now yes, I understand.

Tania: *Great.*

After that, in Extract 10, Tania goes on to tell Matias more about her country, always accompanying her detailed explanations with images she shows on her computer. She first shows him a map of Bulgaria, explaining about the neighboring countries, the biggest cities and her own town. Afterward, Matias asks her a question (Extract 11):

Extract 11:

Matias: And did you know where is Spain?

Tania: Yeah, I know. Wait....(checking on her computer) Let me just search it, please! ...Just wait a second, I am so sorry but my internet is so slow.

(she shows him a map of Europe on her laptop) So, this is Europe here is Spain, Italia is right there and here is Bulgaria...so, now you see, it's not that far away.

Matias: (smiles) Yes!

In the second project Tania used a wider variety of emotionally tagged words. Besides “cool” and “love”, which were the most predominant ones, she utilized also “beautiful”, “wow”, “interesting”, “really funny” (Extract 12) and others.

Extract 12:

Matias: When people eat “calçots” they wear in front this thing that the babies wear when they eat.

Tania: Ohh *interesting* tradition. This is very *funny*.

Matias: Yes, it is but I don't like “calçots” very much. (Matias shows a photograph of people dancing a traditional dance and explains about it)

Tania: Oh, *cool*. The costumes they are wearing are very *beautiful*.

Likewise, when Matias showed her the photo of a typical Catalonian dance, Tania was able to identify and appropriately elicit a culturally different phenomenon and, by noting that the

costumes are very beautiful, she expressed curiosity and appreciation of a culture that is different from her own.

From the very beginning, Tania tried to establish a very friendly and personal relationship with Matias. They both seemed rather uneasy during the introduction phase; Matias was giggling nervously and was looking away from the camera and Tania felt rather tense when her mother entered her room for only a brief moment and interrupted her during their communication. Yet, it was quite obvious in the video recordings that they established a good rapport with each other and were making an effort to sustain a personal connection. In Extract 13 Tania offered that they exchange their Instagram addresses and stay in touch even after the end of the project; Matias happily accepted her proposition and gave her his Instagram address straight away. Moreover, Tania added during their first telecollaborative session:

Extract 13:

Tania: My country is not big but it's very nice. One day if you come and visit me I can show you around. I am sure you will like everything.

Matias: (smiling) Yes, thank you.

In the following Extract 14 Matias and Tania are discussing music, their preferences of style, songs and performers.

Extract 14:

Tania: I don't like this song.

Matias: I hate this song, too.

Tania: Ohhh *gooooo!* You don't like it, too..... I love Shawn Mendes, by the way.
(Matias plays a song by Shawn Mendes on his phone)

Tania: This song is so *emotional* that I cry every time I hear it.

Matias: I like this song.

Tania: Ohh, you love it? How *cool!*

.....

Tania: Because you are Spanish I wanted to ask you something. Can you explain the meaning of *Despacito* song to me?

(Matias provides his interpretation of the song)

Tania: Oh wow! How *interesting!*....I also *love* Ed Sheeran. Everyone *loves* him, I guess. We all *love* English songs.

(Matias says a friend of his has been to his concert and Tania asks what her name is. Matias says her name is Elara)

Tania: Oh, *interesting*. I *love* this name.

The above Extract 14 is very representative of Tania's use of emotionally tagged words and expressions throughout all video recordings of her sessions with Matias. Not only does she express alignment with Matias ("ohh good! You don't like it, too") but also interest towards her partner ("Oh, you love it? How cool"). After Matias's interpretation of "Despacito" lyrics, her response "Oh, wow! How interesting!" demonstrates again her inquisitiveness and openness towards concepts or events that are different from her own culture (Byram, 1997), her receptiveness and responsiveness to these phenomena. Tania was also ready to reveal her emotions after Matias played the song, confessing that this song is so emotional for her that she cries every time she hears it. Sharing her feelings with her partner is a possible indication that she intends to establish a close personal connection and form a strong bond with Matias. Tania appeared to be always positive and cheerful even when she identified differences between her and Matias' context, as in the following Extract 15:

Extract 15:

Matias: We normally finish school at 5 o'clock.

Tania: Wow!!!! This is very late. We normally finish at about 1.30. But you have a long lunch break, I guess.

Tania's use of these interactional discourse skills was present all over the video recorded sessions. Table 4.2.2 shows that she used less emotive lexical choices in the first project than in the second one. Yet again, we wanted to find out what were the function and the contribution of these emotive lexical choices to the interaction. As was demonstrated in this section, Tania's use of emotionally tagged words during the first project was generally aimed at displaying interest towards her partners and dedication to the telecollaborative experience.

In the second project, however, she additionally expressed alignment with her partner, aimed at providing more detailed information, detected cultural phenomenon different from her own and attempted to establish a close personal relationship with Matias. In this manner, she voiced strongly her ability to express her skills of information discovery by acquiring “new knowledge of a culture and cultural practices and the ability to operate knowledge, attitudes and skills under the constraints of real-time communication and interaction” (Byram, 1997), unlike the first project where her skills were much less evident, veiled and covert.

4.2.2. Alignment

Participants in telecollaborative projects change their roles between a speaker and a listener when interacting. When in the role of listeners, they display their involvement in the conversation by verbally or non-verbally demonstrating their understanding of their partner’s message and/or by providing personal attitude and standpoint to their interlocutor’s statements (Ware, 2013, Cabrero, 2013a). These interactional devices are called *alignment*. One of the aims of this study is to describe the alignment moves and explore the degree of alignment expressed by the learners to respond to their partners’ message in both videoconferencing intercultural exchanges.

Table 4.2.2 below provides information about the number of times that Tania (Mundi School, Bulgaria) used alignment with each partner within her total time of communication and the relative frequencies per hour. It also presents the number of times that she used alignment moves tagged with high and low degree and their respective relative frequencies per hour. The results from the table demonstrate that the relative frequency of Tania’s use of alignment per hour was highest with Matias (Anglia School, Spain) – 24.48, followed by Malek (Lluís Anton, Spain) – 20, and Hugo and Berta (Lluís Anton, Spain) – 15.29 and 15 respectively. Interestingly, the relative frequency per hour of her use of alignment moves tagged with high degree is considerably higher with Matias – 19.59 than with the rest of the participants, whose RFH is nearly 5 each. The results regarding the relative frequency per hour of Tania’s use of alignment tagged with low degree show that, conversely, with Malek she used 15; with Hugo and Berta 10.58 and 10 respectively and with Matias – 4.89. In sum, Tania’s relative

frequency of use of alignment tagged with high degree per hour in both projects is 13.17 and with low degree of alignment 7.63.

Table 4.2.3: Number of times that Tania (Mundi School, Bulgaria) used alignment with each partner within her total time of communication and relative frequencies per hour; number of times that she used alignment tagged with high and low degree and respective relative frequencies per hour

Tania's collaborative partners in both projects	Fem./Male	Total time of commun. in min.	Alignment					
			Nº of uses	Rel. freq. per hour	Nº of uses of high alignment	Rel. freq. per hour of high alignment	Nº of uses of low alignment	Rel. freq. per hour of low alignment
Hugo (Lluís Anton)	<i>M</i>	51'	13	15.29	4	4.70	9	10.58
Malek (Lluís Anton)	<i>M</i>	12'	4	20	1	5	3	15
Berta (Lluís Anton)	<i>F</i>	12'	3	15	1	5	2	10
Matias (Anglia)	<i>M</i>	98'	40	24.48	32	19.59	8	4.89
TOTAL Nº of uses:		173'	60	21.81	38	13.17	22	7.63

During Tania's conversations in the first project with participants from Lluís Anton School, she used "vocal cues" to convey her understanding of her partner's message or to indicate that she is ready to continue the conversation (*ah!*, *oh!*). Most frequently she used "agreement markers" (Cabrero, 2013a) such as "yes", "ok", "good", "too", which normally appeared after her partner had ended his turn, as exemplified in the following Extracts 16, 17, 18 and 19.

Extract 16:

Malek: I game Fortnite.

Tania: I play Fortnite, too.

Extract 17:

Tania: What's your favourite subject at school?

Hugo: Science.

Tania: Me too.

Extract 18:

(Hugo explains he doesn't want to have a pet because his house is small)

Tania: Ok.

Extract 19:

Hugo: Now we study about the Middle Age in history.

Tania: Ok, me too.

Overall, the analysis of Tania's alignment moves shows that she undeniably made use of these interactional devices to express her understanding of the previous turns of her partner. In the first project she used 20 alignment moves in total. Nonetheless, the most frequently used expressions of acknowledgment found in the data of Tania's communication in the first project were tagged as low degree of alignment as their purpose was to evaluate the content of the speaker's previous turn without making a judgment, following up on the previous comment or showing empathy.

Extract 20:

Hugo: I like listen to pop.

Tania: Me too.

Extract 21:

Tania: Do you play Fortnite?

Hugo: Yeeees (smiles).

Tania: Me too.

Extract 22:

Berta: My favourite food is pizza.

Tania: I like pizza, too.

Berta: I play gymnastic.

Tania: I go to gymnastics, too.

Tania's ability to assess her partner's contributions were present in the video recordings of the first project but, as Extracts 20, 21 and 22 above exemplify, rather limited in terms of complexity. Out of the total of 20 alignment moves that she used, 14 were tagged as low degree of alignment.

Extract 23:

Hugo: My class is "A".

Tania: Cool! My class is "A", too.

Extract 24:

(Malek says his hobby is playing football)

Tania: Cool! I sometimes I play football with the boys, too...but only sometimes.

These conversations show Tania's ability to provide a more elaborate assessment, rather than simply noticing an overlapping activity ("me too") (Extract 21), she also states her feeling ("cool") (Extract 23) and in Extract 24 goes on to offer contextualization of her comment by adding that she sometimes plays football with the boys, too. These conversations were, thus coded with high degree of alignment.

Extract 25:

Hugo: I like movies adventure.

Tania: Me too. I like adventure, horror and thriller movies.

Likewise, this conversation (Extract 25) was tagged as high degree of alignment due to Tania's readiness and desire to expand on the topic and provide details and contextualization.

Extract 26:

Tania: Do you play "Since 4"? This is my favourite game.

Hugo: No.

Tania: Okk, no problem. What's your favourite game?

In Extract 26 we can observe that, after Tania's inquiry if Hugo likes a video game, which is her favourite game, he responds with a short "No" and by this way he indicates a dissimilarity

in their interests. While stating “No” Hugo smiles and looks down, which could be interpreted as embarrassment. As Cabrero claims in her study, “disaffiliative comments are not only dispreferred but also face-threatening because they break social solidarity” (2013). Tania’s immediate reaction “Okk, no problem” expresses empathy and cooperation. In her next turn she asks him what his favourite game is, in this manner making a move to establish a new point of alignment and restore the harmony and amity of the interaction.

In Tania’s second project, with Matias from Anglia School, she indicated a much greater level of involvement in the conversations in comparison to that in the first project with learners from Lluís Anton School, who had lower language level than hers. While interacting with Matias she deliberately expressed her feelings, opinion and views. She constantly made an effort to stay engaged with her partner, responding also to his ideas and feelings, which require greater degree of participation, thus considered as expressing high level of alignment. In several occasions Tania responded to Matias’ contributions with only “cool”, signaling that she understood his message and at the same time provided a positive evaluative comment. Accordingly, these instances were tagged as expressing low level of alignment (Extracts 27 and 28).

Extract 27:

Matias: I play football after school.

Tania: Cool.

Extract 28:

Matias: We start school at 8 o’clock.

Tania: Yeah, we too.

In most cases, though, Tania not only provided her personal opinion but she also evaluated her interlocutor’s comment triggering a participatory response, that is, invited him to extend the topic under discussion, as in the following Extracts 29 and 30.

Extract 29:

Matias: “Tortilla” is a typical Spanish food.

Tania: Yeah, I think I have tried it before but I am not sure. What was it?

Matias: It is made of potatoes, onion and eggs and is like a cake.

Extract 30:

(Matias shows a photo of Castellers and explains about this typical Catalan tradition)

Tania: It looks really dangerous, no?

Matias: Yes, the child on the top wears a helmet.

In Extract 29 we can see that, after Matias' contribution that *tortilla* is a typical Spanish food, Tania demonstrated alignment with him saying that she might have tried it before but she was not sure. Then she asks "What was that?" thus indicating a participatory move, that is, she encourages him to follow up on the topic and provide more detailed information, in this way expressing her engagement and interest in Matias' contribution. In the same way, in the Extract 30 Matias showed her an image of "Castellers" and explained that this is a typical Catalan tradition, in which people make a human tower of several levels. Tania then not only expressed her own view stating "It looks really dangerous" but she also added a question tag "no?" signaling that she would like him to provide further explanation and details, in which way she again triggered a participatory response. This is an indication that rather than closing the topic she prefers to convey her involvement and attentiveness to her partners' contribution by requesting him to add more details or reason his statement.

Tania's alignment moves were tagged as high level in various occasions during her telecollaborative conversations with Matias. One more such example is illustrated in the following Extract 31.

Extract 31:

Matias: In the future I want to study journalism.

Tania: Oh, cool. My sister is actually a journalist.

In this Extract 31 we can see that Tania, not only provides a positive assessment to Matias' comment, but she also makes a move to add some personal information with "My

sister is actually a journalist”. In their next session Matias mentions his desire to become a journalist again (Extract 32).

Extract 32:

Matias: I want to work as a reporter.

Tania: Yeah, I know. Last time you told me and if you want some advice I can ask my sister to give you, maybe one day.

Extracts 31 and 32 are very representative of Tania’s effort to express her attentiveness to what her partner is saying, demonstrated by her words “Yeah, I know. Last time you told me.” and her wish to attune to Matias’ desires and dreams, showing her readiness to assist him by offering to ask her sister for any advice he might need.

In the second telecollaborative project Tania used a total of 40 alignment moves, 32 of which were tagged as high degree of alignment (see Table 4.2.2 above). Taken together, the analysis of Tania’s alignment moves in both videoconferencing intercultural projects indicated that she produced a greater number of moves tagged as high level of alignment during her conversations with Matias compared to those she used in her first project. Matias and Tania’s conversations were highly collaborative, as both participants assessed each other’s comments, provided opinion and expressed their feelings, using more numerous and more elaborate contributions, adding details and indicating interest (Cabrero, 2013b).

4.2.3. Boulomaic Modality

According to Ware and Kessler (2014), students who make a greater effort to provide depth and context to their responses and to make personal connections with their partners key such willingness through the use of boulomaic modality, namely, markers of emotional involvement that can be signaled through modal verbs (would like, would love, hope to). Boulomaic modality, as Belz (2003) states, “indicates the wishes and desires of the speaker”.

Table 4.2.3 below shows the number of times that Tania (Mundi School, Bulgaria) used boulomaic modality with each partner within her total time of communication and the relative

frequencies per hour. As the table below demonstrates, Tania used a significantly greater number of boulomaic modality in the second telecollaborative project with Matias (Anglia School, Spain). The relative frequency of her use of boulomaic modality with Matias was 11.63 per hour, compared to only 5 with Berta (Lluís Anton School, Spain) and none with Malek and Hugo (Lluís Anton School, Spain). This might be an indicator of her eagerness to form a more profound connection with her partner Matias as well as her desire to voice her motivation and commitment to the experience of real-time communication with a person from a different cultural background.

Table 4.2.4: Number of times that Tania (Mundi School, Bulgaria) used boulomaic modality with each partner within her total time of communication and relative frequencies per hour

Tania's collaborative partners in both projects	Fem./ Male	Total time of commun. in min.	Boulomaic modality	
			Nº of uses	Rel. freq. per hour
Hugo (Lluís Anton)	<i>M</i>	51´	0	0
Malek (Lluís Anton)	<i>M</i>	12´	0	0
Berta (Lluís Anton)	<i>F</i>	12´	1	5
Matias (Anglia)	<i>M</i>	98´	19	11.63
TOTAL Nº of uses:		173´	20	6.94

In the first project, with participants from Lluís Anton School, only one use of boulomaic modality was detected in Tania's interactions (Extract 33).

Extract 33:

Berta: Do you like travel?

Tania: Yes, very much. *I hope to* travel a lot in the future.

In her conversations with Matias, however, she did make use of it in many occasions, 19 times in total. The extracts below illustrate some of the cases in which she made use of boulomaic modality.

Extract 34:

Matias: (talking about calçots – typical food from Catalonia)

Tania: I *would like* to try it.

Matias: Yes, it's nice. When people eat "calçots" they wear in front this thing that the babies wear when they eat.

Tania: Ohh interesting tradition. This is very funny.

Matias: Yes, it is but I don't like "calçots" very much.

In this Extract 34 Matias' reaction is worthy of note because it illustrates his intention to stay aligned to Tania's interest and curiosity ("Yes, it's nice") to typical food which is representative of Matias' culture and unfamiliar for Tania, despite the fact that he later reveals that he does not actually like "calçots" very much. Yet, it is his wish to maintain Tania's inquisitiveness and eagerness for knowledge.

Extract 35:

(Tania playing a Bulgarian song on her computer)

Tania: I *hope* you can hear it.

Matias: Yes, I can.

Tania: Actually, if you know Bulgarian, you *would* know that this song is really sad.

Matias: (smiles) It sounds sad.

Extract 35 shows again that through the use of boulomaic modality ("I hope you can hear it" and "... if you know Bulgarian, you would know that this song is really sad") Tania intends to reinforce and strengthen their personal relationship, which is also marked by her emotional involvement ("...you would know this song is really sad"). Matias' responses are in line with Tania's positive attitude, revealing his willingness to align with her by saying "It sounds sad" even though he does not understand the lyrics of the song.

Extract 36:

(Matias says his friend has been to Shawn Mendes concert)

Tania: I *would like* to meet her.

Extract 37:

Tania: Have you been to Disneyland?

Matias: No.

Tania: Why?

Matias: Because when I went I was only four so I didn't decide.

Tania: Oh, if I was going to Paris, I *would* definitely visit Disneyland. That *would* be the first thing I would do.

Matias: Yes (smiles). And what countries you would like to visit in the future?

Tania: In the future I *would like to* visit Canada and Spain, of course (both laugh) and maybe Denmark. I don't know, they look like pretty cool countries.

Matias: I'd like to visit United States and Australia.

Tania: *Would you like to* visit Bulgaria?

Matias: Yes! (smiles)

Tania: Ok, good.

Extract 38:

Tania: Do you have a lot of homework for the summer holidays?

Matias: Yes, but few, not a lot. In my school we only have to read a book and do some exercises in math's and that's it. Not more.

Tania: Ohh I *wish* we didn't have homework but we have a lot.

Matias: Yes, it's bad.

Once more, Tania's responses demonstrate interest in her partner ("Have you been to Disneyland?", "Why?" "Do you have a lot of homework for the summer holidays?") (Extracts 37 and 38) and an attempt to align to his interests, display openness and involvement ("I would like to meet her", "I would like to visit Canada and Spain, of course", "if I was going to Paris, I *would* definitely visit Disneyland. That *would* be the first thing I would do"). By asking him "*Would you like to* visit Bulgaria?" (Extract 37) she intends to assess Matias' willingness and interest toward her country and after he responds positively she states "Ok, good" probably wanting to convey the message that he would be welcome to visit Bulgaria. As can be seen in the examples above, Matias' responses also indicate such an

attempt to tune in to his partner. He displays alignment (“Yes, it’s bad.”) (Extract 38) and interest toward her wishes and desires (“And what countries you would like to visit in the future?”), as well as to her country (“Yes” /answering her question whether he would like to visit Bulgaria/) (Extract 37).

4.2.4. Audio-Visual Resources

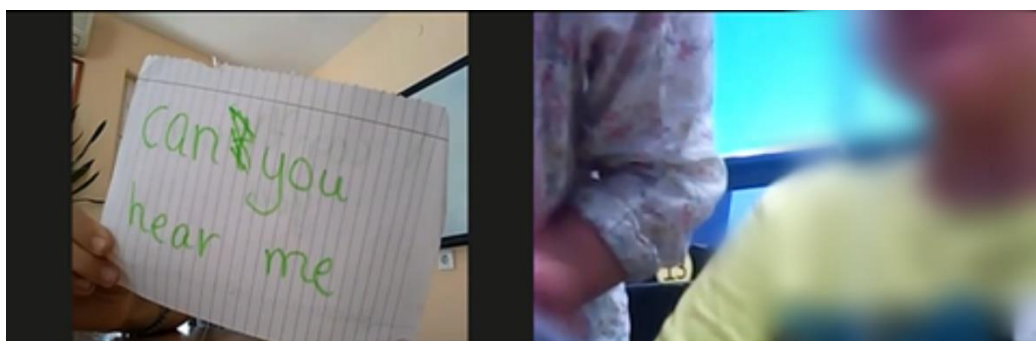
As mentioned before, non-verbal communication is not the focus of our study. Yet again, we looked for and analyzed instances in which the learners made use of the real-time videoconferencing mode to provide contextualization and as a means of reinforcing their interactional features. Surely, it is the nature of the current telecollaborative study to provide real time, face-to-face communication between students with different cultural background. Therefore, apart from the linguistic markers we included in our analysis the audio-visual resources that participants use in order to display (a) willingness to develop a personal relationship, (b) sensitivity to different styles of interacting, and (c) ability to offer “in-depth correspondence” (R O’Dowd, 2003). Dike (1993) defines audio-visual resources as “those materials which do not depend solely upon reading to convey meaning and present information through the sense of hearing as audio resources or through a combination of both senses” (<http://www.lisbdnet.com/definition-of-audio-visual-materials/>). Therefore, every instance in which the student used the audio-visual tool to convey meaning, aid the understanding process or negotiate for meaning was coded as audio-visual resource in this research.

Table 4.2.4 below shows the number of times that Tania (Mundi School, Bulgaria) used audio-visual resources with each partner within her total time of communication and the relative frequencies per hour. Yet again, the results from the table demonstrate the significant difference between the relative frequency of her use of this interactional feature with Matias (Anglia School, Spain) – 15.30 and with participants from Lluís Anton School, that is, with Malek -10 and none with Hugo and Berta.

Table 4.2.5: Number of times that Tania (Mundi School, Bulgaria) used audio-visual resources with each partner within her total time of communication and relative frequencies per hour

Tania's collaborative partners in both projects	Fem./ Male	Total time of commun. in min.	Audio-visual resources	
			Nº of uses	Rel. freq. per hour
Hugo (Lluís Anton)	<i>M</i>	51´	0	0
Malek (Lluís Anton)	<i>M</i>	12´	2	10
Berta (Lluís Anton)	<i>F</i>	12´	0	0
Matias (Anglia)	<i>M</i>	98´	25	15.30
TOTAL Nº of uses:		173´	27	9.36

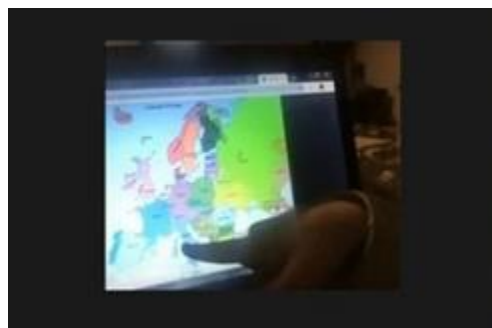
As we mentioned above, in her first project, Tania did not draw on this resource frequently. Only in two occasions did she show a piece of paper to her partner, on which she had previously written “Can you hear me” and on the other side of the paper “I can’t hear you”. As she explained at the interview, she had the piece of paper ready because she wanted to be prepared in case the internet connection was cutting; such was the case in the first telecollaborative meeting.



By sharing extralinguistic artifacts such as images, videos or audio recordings students demonstrate their ability to “independently contribute personal meanings as a collaborative member of a group” as well as to develop “collaborative autonomous language-learning abilities within computer mediated contexts” (Kessler & Bikowski, 2010). Tania’s display of these skills was very scarce in the first telecollaborative project and abundant in the second one (See Table 4.2.4 above).

Interestingly, in her collaboration with Matias, in the second project, Tania resorted to the audio-visual resource repeatedly. At the very beginning of the first session, when she introduced herself, she “gave her hand” as if offering a handshake, which is the accepted norm of introduction in her country. We can only suppose that this might have seemed unusual to Matias, as in Spain young people their age introduce each other by kissing twice on the cheek. He, therefore, was puzzled for a few seconds, but then quickly smiled and offered his hand in return (See screenshot in *Emotive lexical choices* section above).

Tania was meticulously prepared for each session, as she not only showed Matias images on her computer representing typical Bulgarian masks, roses, costumes, traditional folklore dances (of which she showed a video), the map of her country and others but she had also previously prepared the typical Bulgarian salad and brought Bulgarian yoghurt.



Matias was enjoying seeing and learning more about the foods, customs and traditions of a country that is different from his own. Therefore, by asking questions and making remarks, such as “Does every region have a typical costume?”; “Uff, it (the dance) looks difficult!”; “Is this Bulgarian yoghurt”?, he demonstrated curiosity, involvement in the topic and

openness to other cultures. According to Byram (1997, pp. 52–53) the ability to “interact successfully with members of other cultures and elicit information about their world view in real time, as well as critical cultural awareness” refers to the set of skills of discovery and interaction in Byram’s model for intercultural competence.

Tania’s used the audio-visual resources as a tool to present personal and more detailed information about her and thus build a stronger connection and rapport with Matias. In one occasion she showed him a poster of her favourite singer, telling him that she has many more. Matias was genuinely enjoying Tania’s initiative and responded with “oh, this is really cool”. In another instance, Tania played a *Youtube* video of her favourite Bulgarian song that she tends to listen when she is sad. Although Matias did not understand the lyrics, he replied “It sounds nice”. Certainly, Tania’s attempts and resourcefulness in her use of this interactional feature triggered Matias’ similar response. The screenshots below exemplify this.





In the screenshots above Matias shows images of typical Catalonian food and traditions. For instance, in the first screenshot he shows an image of “*calçots*”, a kind of scallion or milder green onion, grilled over a hot fire and wrapped in newspaper, only eaten in Catalonia. Tania remarks “It sounds tasty” and then Matias confesses that he, personally, does not like it but his parents love it. The next image he shows is of another Catalonian tradition called “*castellers*”. *Castellers*, a Catalonian word that means castles, are a cultural phenomenon particular to Catalonia and consist of erecting human towers. Tania, seemingly astounded, reacted with “Oh, it looks dangerous” but Matias reassured her “yes, but people wear...(he does not recall the word ‘helmet’ so he points to his head), “oh, a helmet”, adds Tania. In the last screenshot Matias shows a video on his mobile phone of a dance called “Sardana”, again typical of Catalonia, which people normally dance “in the streets and squares of Barcelona and other towns”.

During the next session, Matias plays his favourite song on his mobile phone, which turns out to be Tania’s favourite song as well, so she starts singing along and dancing. Both of them appear to be enjoying the process of discovering similarities, common interest, hobbies and viewpoints and building a closer personal relationship. It is Tania, who at the end of the session, asked him whether he would like to stay in touch “even after the end of this project” and Matias assented at once, offering his Instagram address to Tania, so that they could keep in touch after the project.

4.2.5. Question Types

a) General Inquiry Questions about Personal Background

General inquiry questions about personal background primarily occurred during the initial, introductory phase, in which participants were getting to know each other and introducing more general, personal information. Table 4.2.5 below shows the number of times that Tania used general inquiry questions about personal background with each partner within her total time of communication and the relative frequency per hour. Tania asked more numerous *general inquiry questions* with participants from Lluís Anton School (Spain) than with her partner from Anglia School (Spain) (See Table 4.2.5 below). The results from the table below demonstrate that the relative frequency of her use of general inquiry questions per hour was - with Malek (Lluís Anton School) – 30; with Hugo (Lluís Anton School) – 28.23; with Berta (Lluís Anton School) – 25; and with Matias (Anglia School) – 11.63.

Table 4.2.6: Number of times that Tania (Mundi School, Bulgaria) used general inquiry questions about personal background with each partner within her total time of communication and relative frequencies per hour

Tania's collaborative partners in both projects	Fem./ Male	Total time of commun. in min.	General inquiry questions	
			Nº of uses	Rel. freq. per hour
Hugo (Lluís Anton)	<i>M</i>	51´	24	28.23
Malek (Lluís Anton)	<i>M</i>	12´	6	30
Berta (Lluís Anton)	<i>F</i>	12´	5	25
Matias (Anglia)	<i>M</i>	98´	19	11.63
TOTAL Nº of uses:		173´	54	18.73

As we mentioned above, Tania posed many general inquiry questions in the first telecollaborative project with participants from Lluís Anton School (Spain). Some of the examples that were detected throughout the video recordings of all her sessions are the following:

“Do you have hobbies?”; “What’s your favourite school subject?”; “What’s your favourite color?”; “What’s the name of your school?”; “How old are you?”; “What do you do in your free time?”

In the second telecollaborative project, during her collaboration with Matias from Anglia School (Spain) she posed fewer *general inquiry questions* about personal background. Some of the examples taken from the data collected from the second project of her use of this type of questions are provided below.

“How old are you?”; “What are your hobbies?”; “Tell me something about your favourite food”; “Do you like travelling?”; “What kind of music do you listen in your free time?”

Naturally, we should take into consideration the fact that Tania had various partners during her first telecollaborative project with learners from Lluís Anton School, namely she collaborated with Malek, Hugo and Berta. This, understandably, means that she had to ask *general inquiry questions about personal background* every time she met a new partner. On the contrary, during Tania’s participation in the second project, with Anglia School, she only collaborated with one partner, Matias. Nonetheless, the function of this type of questions was similar in both projects; she aimed at collecting personal information about her partners about the following topics:

- Name and age (“What’s your name”; “How old are you”)
- Routines (“When do you get up?”; “When do you go to bed?”; “What time do you have breakfast?”; “What do you eat for breakfast?”; “When do you have dinner?”)
- Their school (“What’s the name of your school?”; “What grade are you?”; “What is your favourite school subject”; “Who is your favourite teacher?”)
- Interests and hobbies (“What do you like to do in your free time?”; “Do you like sports?”; “What is your favourite food?”; “Do you like animals?”; “What films do you watch?”)

- Family (“Do you have brothers or sisters?”; “What is the job of your parents?”; “Do you have a big family?”)
- Traditions and customs (“How do you celebrate Christmas?”; “How do you celebrate Easter?”; “Do you have many holidays in your country?”)

As we mentioned above, the purpose of this type of questions is to gather general information about her partners in the projects, get to know them better and thus form a stronger bond and rapport with them. Overall, Tania used more general inquiry questions with participants from Lluís Anton School compared to those she used with her partner Matias from Anglia School.

b) Follow-Up Questions

Follow-up questions aim at extending the topic that was previously mentioned by the speaker, building on the comment that had been made and in this way demonstrating attentiveness and interest to what the interlocutor is saying.

Table 4.2.6 below shows the number of times that Tania used follow-up questions with each partner within her total time of communication and the relative frequency per hour. The results reveal that Tania used most follow-up questions with Hugo (Lluís Anton School, Spain), the relevant frequency of her use of this interactional feature per hour was 31.76; with Malek and Berta (Lluís Anton School) - 20 times per hour each and with Matias (Anglia School) she used it 15.59 times.

Table 4.2.7: Number of times that Tania (Mundi School, Bulgaria) used follow-up questions with each partner within her total time of communication and relative frequencies per hour

Tania’s collaborative partners in both projects	Fem./ Male	Total time of commun. in min.	Follow-up questions	
			Nº of uses	Rel. freq. per hour
Hugo (Lluís Anton)	<i>M</i>	51´	27	31.76
Malek (Lluís Anton)	<i>M</i>	12´	4	20
Berta (Lluís Anton)	<i>F</i>	12´	4	20
Matias (Anglia)	<i>M</i>	98´	32	15.59
TOTAL Nº of uses:		173´	67	23.24

In the following Extracts 39, 40 and 41 we can see how Tania, instead of just making a closing move, chooses to develop the topic and ask Hugo additional questions:

Extract 39:

Tania: Do you have a pet? (*tagged as general inquiry question*)

Hugo: No.

Tania: Do you want to have a pet?

Hugo: No.

Tania: Why?

Hugo: Because my house is very small.

Tania: Ah! Ok.

Extract 40:

Tania: Do you like music? (*tagged as general inquiry question*)

Hugo: Yes, a lot.

Tania: What type of music do you listen?

Hugo: Pop.

Tania: What's your favourite singer?

Extract 41:

Hugo: I like reading books.

Tania: What's the last book that you read?

Hugo: I don't remember.

Tania: Did you read Harry Potter?

Hugo: Yes.

These extracts reveal Tania's motivation and interest in finding out more personal information about her partner. When Hugo says he doesn't have a pet, she inquires about his wish to have one, and when he says he doesn't want one she goes on to ask for the reason for his answer. Similarly, in the second extract after Hugo says he likes music very much, Tania wants to know more about his music taste and then about his favourite singer. Hugo's English level is not very high and his answers are rather short and without details but this does not

seem to discourage Tania from requesting more information. Likewise, in the third example after Hugo says he likes reading books, she asks him about the last book he has read. He answers with a short “I don’t remember” but yet, Tania poses an even more specific question, giving him a chance to provide some more personal information so that she could get to know him better.

Extract 42:

Berta: “Turrón” is a typical food for Christmas.

Tania: Ok. *Can you tell me about it?*

The conversation with Berta in Extract 42 demonstrates that Tania is not only interested in finding out more personal information about her partners but also in learning more about their culture, traditions and customs. As Berta does not provide any additional information about “turrón”, Tania demands more details about this traditional Spanish food, since she is curious to discover “new things about other cultures”, as she states in her interview. In the following Extract 43 Tania and Hugo discuss Christmas traditions in Spain and Bulgaria:

Extract 43:

(Hugo and Tania talk about Christmas traditions)

Tania: *How many meals do you have in Christmas, like in the table,...on the table...just like 9 or 12?*

Hugo: Yes....And you have presents?

This example (Extract 43) is interesting because it shows that Tania was not able to identify a cultural practice that is only common in her country, Bulgaria, but not familiar for Hugo. On Christmas Eve Orthodox Bulgarians celebrate one of the brightest Christian holidays known locally as Budni Večer. It is held in the family circle and its rites are observed by all Christians. Budni Večer or Christmas Eve is also called Small Christmas. For the feast the table is laid with an odd number of vegan meals. The dinner includes a special round loaf of bread with a coin inside. Whoever takes the bread piece with the coin will be the luckiest in the family during the year to come. By asking this question, Tania presumed that Hugo is

aware of the cultural meaning of this tradition but, unsurprisingly, he did not comprehend her question and ignored it.

Extract 44:

(Matias shows a picture and explains about Sardana, a typical Catalan dance)

Tania: The costumes are beautiful.

Matias: Yes... Usually old people dance it in the squares in Barcelona.

Tania: *Do you know how to dance it?*

Matias: Yes, but it's complicated.

In Extract 44 not only does Tania demonstrate interest in this Catalan tradition (“The costumes are beautiful”) but she is also curious to find out whether Matias can dance it, too. Tania’s curiosity about Matias’ hobbies, abilities, interests and opinion is evident in this Extract 44 and in the following Extracts 45 and 46.

Extract 45:

(Tania and Matias talk about when they start and finish school)

Tania: *So what do you learn at school now? What's your favourite subject?*

Extract 46:

(Matias explains about the meaning of “Despacito” song)

Tania: *Are there any other typical songs for Spain that you listen every day or at school?*

The extracts above illustrate Tania’s willingness to expand and develop the conversation, rather than close the topic. In the first extract they were talking about what time they begin and finish school in Spain and in Bulgaria and it was Tania who decided to extend on the topic and ask Matias what they are learning at school at the moment and what his favourite subject is. By doing so, she wants to express her wish to obtain more personal information about Matias, to know more about his routine, his day-to-day activities and interests. This is also evident in Extract 46 where, after Matias explained the meaning of the “*Despacito*”

lyrics, Tania carries on the conversation by requesting more details about his music taste and preferences.

c) Personal Opinion Questions

Personal opinion questions were the least frequent type of questions detected throughout the data corpus of both telecollaborative projects. Only in few instances did students ask this kind of questions. The lack of frequency of this type of questions in these particular telecollaborative exchanges may indicate that students preferred to position their partners as “information-providers” (Ware & Kessler, 2014) rather than opinion contributors. Of all three case study participants, Tania is the one that posed the greatest number of opinion questions. The relative frequency of her use of this interactional feature per hour was 4, compared to Maria Jana – 2 and Daniel – none. The RFH of her use of personal opinion questions was -10 with Hugo (Lluís Anton School, Spain); none with Malek and Berta (Lluís Anton School) and 5.51 with Matias (Anglia Schol, Spain) (see Table 4.2.7).

Table 4.2.8: Number of times that Tania (Mundi School, Bulgaria) used personal opinion questions with each partner within her total time of communication and relative frequencies per hour

Tania’s collaborative partners in both projects	Fem./ Male	Total time of commun. in min.	Personal opinion question	
			Nº of uses	Rel. freq. per hour
Hugo (Lluís Anton)	<i>M</i>	51´	2	10
Malek (Lluís Anton)	<i>M</i>	12´	0	0
Berta (Lluís Anton)	<i>F</i>	12´	0	0
Matias (Anglia)	<i>M</i>	98´	9	5.51
TOTAL Nº of uses:		173´	11	3.82

In the first project Tania asked only two opinion questions, both of them in her collaboration with Hugo (Extracts 47 and 48).

Extract 47:

Hugo: Typical food of Cataluña is bread and tomato.

Tania: *What is the taste like? What's the taste, like good or bad?*

Hugo: I think it's good.

Extract 48:

Hugo: My favourite subject in school is history.

Tania: *It's interesting, right?*

Hugo: Yes, very much...for me!

Extracts 47 and 48 above demonstrate Tania's ability to ask an opinion question in a very indirect and subtle way. She does not straightforwardly pose the question "What do you think about the taste?", in Extract 47, but instead says "*What is the taste, like good or bad*". Similarly, in Extract 48 she asks "*It's interesting, right?*" rather than directly ask "Do you think it's interesting?".

In the Extracts 49, 50 and 51 below, we can see how Tania asks for Matias' opinion directly ("*Did you like it?*", "*Is it cool there?*") In Extract 50, likewise, after Matias says he has been to Italy she asks about his opinion ("*Do you like it?*") and afterward she even invites him to give his personal advice as to the things she should see in Italy.

Extract 49:

(Tania plays a recent Bulgarian song for Matias on her laptop)

Tania: Listen, the video clip is not that good but the song is really beautiful.

(they listen to the song)

Tania: *Did you like it?*

Matias: Yes, it is good.

Extract 50:

Matias: I have been to Italy.

Tania: *Do you like it? I am going there soon with my family so can you give me some advice on what to do there?*

Matias: Yes, you have to visit Rome, the Coliseum, Napoli.....

Extract 51:

Matias: Next month I visit Germany.

Tania: *Is it cool there?*

Matias: I visit next month with the school.

In the following Extract 52 Tania initially provides contextualization for the reason of her posing the question (*“I know that you are Spanish so I will ask you about the “Despacito” song”*). She, then, calls for interpretation of the song (*“What does it mean?”*) and, finally, requests his personal opinion about it.

Extract 52:

Tania: I’m gonna ask you something. I know that you are Spanish so I will ask you about the “Despacito” song. What does it mean? *And what do you think about it?*

Matias: It’s about a relationship between a man and a women and the man shows his love to the other person.

Tania: Oh, yes! That’s been just like every songs says. But it’s good. It’s better than the other ones.

Matias provides his own interpretation of the lyrics of the song but he does not express his opinion as to whether he likes the song or not. Tania’s response in Extract 52 is also worthy of note. After Matias explains his version of the meaning of the song Tania states that this is what every song is about. Once saying this, she immediately decides to use hedging by adding *“But it’s good. It’s better than the other ones“*. A likely reason for her use of hedging could be because she might have wanted to avoid generalization or to reduce the impact of any potential harsh critique in her statement and to adhere to the politeness constraints between her and her partner. A rather similar phenomenon is observed in the following Extract 53 as well.

Extract 53:

Tania: One of my friends was in Spain last week and she told me that for her people from Spain are mean to people from different countries. Is that true?

Matias: Mmm.... Depend the case.

Tania: Cuz I don't think so.

Matias: I don't know. For me not true.

Tania: Yeah, me too. She is my friend and I was like "Nah, that's not true!" So that's why I wanted to ask you.

Extract 53 illustrates Tania's curiosity about Matias's personal opinion on a stereotypical belief about people from his country. Likewise, Tania initially provides contextualization and explains the reason for her question ("*One of my friends was in Spain last week and she told me that for her people from Spain are mean to people from different countries.*") and then goes on to ask him directly "*Is that true?*". Matias appears to be a bit hesitant and uncertain on what to answer ("*Mmm.... Depend the case*") but then momentarily Tania encourages him and restores his confidence by stating "*Cuz I don't think so*" showing her disagreement with the stereotypical statement. Matias, feeling more self-confident now, expresses his personal opinion by replying "*For me not true*". Tania closes the topic making use of hedging devices yet again in order to demonstrate politeness and indirectness ("*Yeah, me too. She is my friend and I was like "Nah, that's not true!"*") and with her final sentence ("*So that's why I wanted to ask you.*") she expresses appreciation and respect to Matias's personal opinion and believes.

The accounts of the video recorded sessions provide a detailed picture of Tania's use of interactional patterns as she builds relationship with her intercultural partners when introducing "innovative literacy practices such as telecollaboration into the secondary learning environment" (Ware & Kessler, 2014). As demonstrated above, Tania used more numerous interactional features in the second telecollaborative projects, except one – her use of general inquiry questions about personal background was slightly higher in the first project. This means that she displayed the skills of discovery and interaction more successfully when collaborating with Matias from Anglia School. We should bear in mind,

although, that the first telecollaborative project was less structured and more flexible and as a result of this Tania communicated with three different participants whereas in the second project she had one stable partner with whom she participated in four videoconferencing intercultural sessions. Her response to the telecollaboration after her second project evolved significantly. In her interview she stated that she didn't have any special expectation before the first project and that she was simply nervous about her language skills. Before the beginning of the second project she stated that she only hoped that *"we would understand each other better than with the children from the first project"* and finally, she adds *"after the second project my expectations did come true. I truly believe that my English has improved because I didn't have the opportunity to speak in Bulgarian and explain what I mean and I realized that the right pronunciation of the words is also very important in order to understand each other well."* At the end of the interview she reveals *"This is the second project in which I am participating and I am a lot happier with the connection, the conversations and the atmosphere."*

4.3. Case Study: Maria Jana

4.3.1. Emotive Lexical Choices

Maria Jana's use of emotionally tagged words was different in both projects. She drew more on this feature in her collaboration with Patricia compared to that with the three participants from Lluís Anton School. Table 4.3.1 below shows the number of times that Maria Jana used emotive lexical choices with each partner within her total time of communication and the relative frequencies per hour. The results from the table reveal that the relative frequency of her use of this interactional feature per hour was 11.42 with Carla (Lluís Anton School, Spain); 7.27 and 6 with Manuel and Malek (Lluís Anton School) respectively. With her partner Patricia from Anglia School (Spain) the RFH was 27.13, that is, significantly higher than with the rest of the participants. A likely cause for this considerable increase in this interactional feature in her collaboration with Patricia could be the fact that they formed a strong bond and friendly relationship throughout the project. Both provided advice and encouraged each other in many occasions which are illustrated with the examples that follow.

Table 4.3.1: Number of times that Maria Jana (Mundi School, Bulgaria) used emotive lexical choices with each partner within her total time of communication and relative frequencies per hour

Maria Jana's collaborative partners in both projects	Fem./ Male	Total time of commun. in min.	Emotive lexical choices	
			Nº of uses	Rel. freq. per hour
Manuel (Lluís Anton)	<i>M</i>	33´	4	7.27
Carla (Lluís Anton)	<i>F</i>	21´	4	11.42
Malek (Lluís Anton)	<i>M</i>	10´	1	6
Patricia (Anglia)	<i>F</i>	115´	52	27.13
TOTAL Nº of uses:		179´	61	20.45

Extract 54 illustrates that Maria Jana shares her worries about having to change her school and how nervous and anxious she is about it. As she defines herself as very shy and unsociable person, this change seems to be a rather difficult moment for her at this stage of her life and Patricia appears to understand and support her as she herself has gone through

the same difficult period a few years ago. Patricia intends to cheer her up by explaining that at the beginning she also felt nervous and worried but then at the end she managed to make new friends and “live more experiences”. Maria Jana does not seem to be very convinced because she considers that she will become distant to her friends. Nevertheless, having lived through similar difficult moments and sharing the experience undoubtedly strengthens their relationship and demonstrates that they value and care for each other, express respect, appreciation and closeness.

Extract 54:

Patricia: Do you like your school?

Maria Jana: Yes, but next year I will have to move to another school. It’s kind of sad!!

...because here it’s divided in Elementary, Middle School and High School...so I am now in the last year of Middle School and next year I have to move to another school.

Patricia: Are you nervous of it?

Maria Jana: Yes, because I am very shy, I am not good around people and communicating...

Patricia: Don’t worry! When two years ago I also had to move to another school.....first I was very nervous because everything was new for me but then you knew more people and you live more experiences, it fine!

Maria Jana: I am kind of sad because I have to leave my friends and we will become distant and we will not see other so often.

Patricia: Yeah, but you can see them during the weekends even though that you will not be with them during all the week and during all the hours during school days and then you will get used to it.

Maria Jana: Yes, I don’t know how to say it...I don’t want to have different friends, I like my friends now.

Likewise, Extract 55 below Patricia shares that she has problems finding clothes because she is “not that skinny” and Maria Jana expresses her support right away by saying “Ohhh don’t

worry about things like that” and later she aligns with Patricia’s problem stating “I am not skinny, too. I am in the middle, I guess” after which they both smile in a friendly way.

Extract 55:

(They talk about fashion)

Patricia: I have some problems with clothes because I’m not that skinny and I cannot find the size.

Maria Jana: Ohhhh don’t worry about things like that!

Patricia: (explains that not being skinny is not a problem for her but only to find her size is difficult)

Maria Jana: Yes, I am not skinny, too. I am in the middle, I guess (both smile).

Extract 56:

Patricia: I want to travel to Australia but it is very expensive. This is my dream.

Maria Jana: Don’t worry! You will work, make a lot of money and go to Australia!

Patricia: Yeah, well...it’s very expensive.

Extract 57:

(And at the end of their last session)

Maria Jana: It was nice talking to you and I would love to be friends with you outside this project.

(They both agree and exchange their Instagram accounts so as to stay in touch)

Maria Jana: We are friends now, right? We are frieeeeends!!!

Patricia: Yeeees! (both smile)

All the extracts above clearly demonstrate their mutual appreciation, respect and desire to maintain their friendship even after the end of the project. They demonstrate it in many occasions throughout all of the video recorded sessions. On the contrary, during the first project Maria Jana communicated with a different person in each session and she did not establish a close connection with any of the participants from Lluís Anton School (Spain), most likely due to the limited time of interaction. This probably reflected on the very low

number and diversity of emotionally tagged words she used in the first project, which the Examples 58, 59 and 60 below illustrate.

Extract 58:

Carla: What's your favourite subject?

Maria Jana: I like maths. I also *love* drawing classes.

Carla: What's your favourite teacher?

Maria Jana: I like my maths teacher a lot. My science teacher is really *cool*, I *love* her.

Extract 59:

Maria Jana: (talking with Carla) I have to go to class now so I should hang up. It was *great* talking to you! I had a lot of fun.

Extract 60:

Manuel: I like football.

Maria Jana: Oh ok...that's *cool*!

Manuel: What is your favourite music?

Maria Jana: I like different kind of music but I *love* Korean music most.

As the above extracts demonstrate (Extracts 58, 59 and 60), Maria Jana did not key her messages strongly with interest and emotion in her participation with students from Lluís Anton School (Spain). Not only did she use this interactional feature scarcely, but also her emotive lexical choices did not display alignment and interest towards her partners, they were less open and elaborate.

Quite the reverse, during her collaboration with Patricia from Anglia School (Spain) in the second telecollaborative project Maria Jana used significantly higher number of emotionally tagged words (See Table 4.3.1 above) which revealed elevated level of involvement and dedication.

Extract 61:

Patricia: My family also play tennis so we play tennis together.

Maria Jana: Ohhhhh.....*so cool!* Is it fun?

Patricia: Yeah, well sometimes not because I don't like to lose.

Maria Jana: (laughs) Same, same! (*coded for alignment*)

Extract 62:

(Patricia explains about a friend of hers that has anorexia)

Maria Jana: Ohhhhh...*That's terrible!*

Extract 63:

(Maria Jana explains that she would like to visit Japan, Thailand, Taiwan and so on and that she is enthralled by the Asian culture)

Patricia: My friend is from Taiwan. She goes to Taiwan every year.

Maria Jana: *So coooool!* I want toooo....(both laugh).

In Extract 61, after Patricia's statement that she plays tennis with her family, Maria Jana instantly responds with emotionally tagged words saying "*Ohhhhh...so cool!*" and right away invites her partner to elaborate on the topic and provide her perspective by asking "*Is it fun?*". When Patricia explains that sometimes she does not like it because she does not like to lose, Maria Jana joins in, framing the excerpt with alignment "*Same, same!*". After that they both laugh, which reveals their mutual enjoyment and comfort in the conversation.

In Extract 62 we can see that they are discussing an unpleasant and tough topic, such as anorexia, and yet again, Maria Jana demonstrates her emotions and caring by adding "*Ohhhh...That's terrible!*", also revealing her compassion and sadness with her face expression.

In more than one occasion has Maria Jana displayed her fascination by the Asian culture, her desire to travel to Asian countries and in one of the video recordings she even stated: "*I wish I was born in Japan! I love Japan!*". Therefore, when in Extract 63 Patricia mentions that her friend is from Taiwan and she goes there every year, Maria Jana is especially excited and

thrilled and expresses her emotions by reacting with “*So coooool! I want tooooo...*”. By extending the vowels in the emotionally tagged words (“*coooool*”; “*toooo*”) she might aim at emphasizing her feeling of excitement as well as marking the conversation as more informal, friendly and approachable, once more signaling her want to establish a close personal connection with her partner Patricia.

Extract 64:

Patricia: Which is your favourite K pop band?

Maria Jana: I like MONSTA X.

Patricia: My friend has been to a concert of them.

Maria Jana: *Ohhhhhh*....I want too! I *love* them! I also like Seventeen.

Patricia: She has been to BTS, Super Junior, Black Pea, Seventeen...

Maria Jana: *Ohh* Seventeen....I *love* Seventeen.

Patricia: Well, she has gone to a lot of concerts.

Maria Jana: I am jealous, I am jeeeeeealous! I have not because in Bulgaria there are no concerts.

When talking about music and her favourite bands Maria Jana gets very emotional as can be seen in Extract 64 above. The frequent use of “*Ohhhhh*”, “*love*”, and the extending of the vowels again “*jeeeeeealous*” supports this claim and illustrates her willingness to express her emotional involvement, commitment and dedication.

Extract 65:

Maria Jana: (Talking about the tradition of fighting with eggs on Easter in her country)

You have an egg and the other person have an egg and you...like, crush it (provides visual clue - see photo below) (both laugh).....yeah, it's really strange!

Patricia: It seems to be fun.

Maria Jana: Yes, it's *great* fun, especially for the kids.



Extract 66:

Maria Jana: I like how Spanish people talk. I don't know, the little accent....it's *cute*!

Patricia: (smiles) Yeah!

In this very short Extract 66 we witness Maria Jana's ability to identify a dissimilar phenomenon, namely the special accent that, according to her, Spanish people have when they speak English. In line with Byram's framework of Intercultural Competence she can be considered an intercultural speaker as she not only recognizes dissimilarity between the two cultures, but she also successfully carries out appropriate intervention, without disrupting the interaction which leads to the mutual satisfaction of the interlocutors (Byram, 1997).

To sum up, Maria Jana utilized more emotionally tagged words in her second telecollaborative project, in which she had a stable partner, and much less in the first one where she changed partners in each session. We can only speculate that as a result of this, in the second telecollaborative project she demonstrated much higher level of involvement and scored better at her intercultural discourse skills by keying her messages with emotion and interest.

4.3.2. Alignment

In this section we will describe the alignment moves that Maria Jana used in her collaboration with participants from both the telecollaborative projects as well as explore the degree of alignment she expressed to respond to her partners' message.

Table 4.3.2 below shows the number of times that Maria Jana (Mundi School, Bulgaria) used alignment with each partner within her total time of communication and the relative frequencies per hour. The table also displays the number of times that she used alignment moves tagged with high and low degree and the respective relative frequencies per hour. The results demonstrate that the relative frequency per hour of Maria Jana's use of alignment with Manuel (Lluís Anton School, Spain) was 12.72. Only 1.81 was alignment tagged with high degree and 10.91 was tagged with low degree of alignment. The RFH of her use of this interactional feature with Carla, from the same school, was 11.42, half of which was tagged with high alignment – 5.71, and the other half with low alignment – 5.71. The RFH of Maria Jana's use of alignment was 18 with Malek, from the same school, 6 of the moves were tagged with high degree and 12 with low degree. However, her results are different with Patricia, her partner from Anglia School (Spain). The relative frequency of Maria Jana's use of this feature with Patricia was 16.17; 10.43 out of them were tagged with high alignment and 5.73 with low alignment. In sum, Maria Jana used more alignment moves with Patricia from Anglia School than with each of the participants from Lluís Anton School. Moreover, she used significantly more alignment moves tagged with high degree with Patricia (Anglia School) compared to those she used with her collaborative partners from Lluís Anton School.

Table 4.3.2: Number of times that Maria Jana (Mundi School, Bulgaria) used alignment with each partner within her total time of communication and relative frequencies per hour; number of times that she used alignment tagged with high and low degree and respective relative frequencies per hour

Maria Jana's collaborative partners in both projects	Fem./Male	Total time of commun. in min.	Alignment					
			Nº of uses	Rel. freq. per hour	Nº of uses of high alignment	Rel. freq. per hour of high alignment	Nº of uses of low alignment	Rel. freq. per hour of low alignment
Manuel (Lluís Anton)	<i>M</i>	33´	7	12.72	1	1.81	6	10.91
Carla (Lluís Anton)	<i>F</i>	21´	4	11.42	2	5.71	2	5.71
Malek (Lluís Anton)	<i>M</i>	10´	3	18	1	6	2	12
Patricia (Anglia)	<i>F</i>	115´	31	16.17	20	10.43	11	5.73
TOTAL Nº of uses:		179´	45	15.08	24	8.04	21	7.03

During her first telecollaborative project Maria Jana used this interactional feature mainly to express agreement, align with her partner or show interest in the topic using predominantly “agreement markers” (Cabrero, 2013), such as “*oh*”, “*too*”, “*ok*”. These were normally used as a closing turn or to demonstrate her readiness to continue the conversation, as Extracts 67 to 71 below illustrate.

Extract 67:

Carla: My favourite subject is P.E.
Maria Jana: *Oh*, physical education. I like it *too*.

Extract 68:

Manuel: I like football and basketball.
Maria Jana: I like football and basketball *too*.

Extract 69:

Maria Jana: I go to bed pretty early, at around 10:30-11 o'clock. What time do you go to bed?
Carla: At 11 o'clock.

Maria Jana: Oh, ok! Like me.

Extract 70:

Maria Jana: And who is your favourite teacher?

Manuel: My teacher of class.

Maria Jana: Yeah, of course.

Extract 71:

Malek: I don't like to study.

Maria Jana: Oh, ok!

A common phenomenon detected in the data was the combination of more than one kind of alignment in a single turn (“*Oh, ok*”; “*Yeah, of course!*”; “*Oh, ok !Like me.*” probably as a way to express intensity (Cabrero, 2013). Interestingly, in Maria Jana’s response “*Oh, ok! Like me.*” she not only expressed acknowledgement to her partner’s previous turn (“*Oh, ok!*”) she also made an affiliative comment by saying that she goes to bed at around the same time (“*Like me.*”). Given the fact that these turns have different functions this line was coded twice for alignment.

Only in four occasions throughout the video recordings with participants from Lluís Anton School did Maria Jana employ alignment moves coded with high level of alignment. Extracts 72 to 75 below illustrate these instances.

Extract 72:

Carla: My favourite game is Mario Bross.

Maria Jana: I don't know this game, sorry (smiles). What's your favourite sport?

Carla: Run, football...

Maria Jana: Football! Oh, I like football as well.

The above Extract 72 is rather interesting as it exemplifies the use of a “disaffiliative comment” (Cabrero, 2013) which expresses disagreement, that is, finding points students do not have in common or interests they do not share. These comments are not only dispreferred

but also face-threatening because they “break social solidarity” (Liddicoat, 2007). In this conversation they have been talking about their favourite games and things they do in their free time and when Carla says that her favourite game is Mario Bross, Maria Jana makes a short pause and takes notice of the problematic issue, making a rather undesired disaffiliative comment (“*I don’t know this game, sorry.*”). After this comment she smiles, which could be considered as a sign of embarrassment, but at the same time attempts to restore the rapport and asks what her favourite sport is, in this way trying to establish a new point of alignment. When Carla answers “*Run, football..*” Maria Jana happily responds “*Football! Oh, I like football as well.*” thus, aligning immediately with her partner. According to Cabrero (2013) the repetition of part of the previous turn is a way of showing that the speaker had processed the message or it could also be interpreted as an instance of private speech used as a way of self-regulation.

Extract 73:

- Malek:* I like football.
Maria Jana: I like football *as well. I played football today.*
Malek: You?
Maria Jana: Yes, I played at my school with the other boys.
Malek: Oh.

Extract 74:

- Manuel:* I like to eat chicken and fruit.
Maria Jana: *I like to eat meat too. My favourite fruits are strawberries and bananas.*
What about you?
Manuel: Apples, green apples.
Maria Jana: *Oh, good.*

Both Extract 73 and 74 above are coded with high level of alignment. In the first one Malek says that he likes football to which Maria Jana responds with an affiliative comment (“*I like football as well*”) indicating that they have a common interest thus wanting to establish a positive link between them. And right away she adds (“*I played football today.*”) which aims

to provide more contextualization and involvement in the conversation. Indeed, this triggers Malek's surprise who looks puzzled by the fact that she played football. Maria Jana then responds to his astonishment by adding even more contextualizing information ("*Yes, I played at my school with the other boys*") to which Malek only says "*Oh*" in this way closing the sequence. The second extract is similar to the first in that Maria Jana replies to Manuel's statement that he likes chicken and fruit with an affiliative comment ("*I like to eat meat too.*") and then goes on to provide more contextualizing information by explaining that her favourite fruit are strawberries and banana. In this extract, though, she makes another turn and asks him about his favourite fruit, in this way trying to trigger a participatory response from her partner and follow-up on the conversation rather than close it. It is followed by Manuel's short response "Apples, green apples" which results in Maria Jana's closing assessment turn "*Oh, good.*"

Extract 75:

Carla: "Castellers" is a typical tradition of Catalonia. It's a human tower and people go very high (shows a picture).

Maria Jana: *Oh, it sounds interesting! Is it dangerous?*

Carla: Well, yes, sometimes.

In Extract 75 Carla shows a picture and explains about "Castellers", which is a typical Catalanian tradition. This triggers Maria Jana's assessment comment "*Oh, it sounds interesting!*" followed immediately by her question "*Is it dangerous?*" which indicates her desire to follow-up on the topic, express interest and curiosity in a phenomenon that is not familiar to her, but typical of her partner's culture. Carla, however, just responds with a short "*Well, yes, sometimes*" and does not provide any further information as to reason why "castellers" can sometimes be dangerous. During the first telecollaborative project it was mainly Maria Jana who provided more details, in-depth information and expressed alignment with her partners. Actually, in both her interview and post-project questionnaire, she mentioned that she would have liked it more if the children were "*more serious in front of the camera*" because she "*wanted to learn more about their interests and their culture*". She also added "*yes, there were some serious children I don't know maybe it was just adrenalin*".

The following Example 76 shows Malek's lack of alignment with Maria Jana and her unhappiness and dissatisfaction with the flow of the communication.

Extract 76:

Maria Jana: Can you repeat, please? I couldn't hear you.

(Malek is distracted, does not look at the camera and talks to his friends next to him. Maria Jana is starting to feel upset. She also turns to her friend and says in Bulgarian: "They are talking to each other. He laughs with other people, he is not even here...oh, here he is!")

Malek: Bye!

Maria Jana: Bye?!?!....Ok....bye! (she looks surprised by the unexpected ending of the conversation).

In Extract 76 Maria Jana asks Malek, in a very polite and friendly way, to repeat what he had said because she could not hear him. Despite her amicable and good-natured attitude towards her partner and the experience in general, Malek does not respond in the same way. During their video recorded session which lasted 10 minutes, Malek looked uninterested in the interaction, provided very short answers and did not express alignment with Maria Jana. She perceived his attitude and commented it in Bulgarian with the girl sitting next to her, saying that her partner is talking to somebody else and laughing with his friends and he is not even in front of the camera. At that moment, Malek appears and quickly says "Bye" which leaves Maria Jana really confused and puzzled as she did not expect such a sudden end of the interaction. In fact, she was the one that always finished a session with an appropriate farewell sentence such as "*It was really nice talking to you and hope to see you again*" or "*Thank you! I had a great time talking to you and see you soon!*".

Maria Jana and her partner Patricia from Anglia School established a very friendly relationship and as we demonstrated previously the dyad was very supportive to each other's problems, provided advice and encouragement when they shared their difficulties, worries and concerns. Undeniably, this is also reflected on their use of alignment moves. Maria Jana made use of significantly higher number of alignment moves tagged with high degree of

alignment in comparison to those she used in her first telecollaborative project (See Table 4.3.2 above).

Extract 77:

Maria Jana: You have holiday now?

Patricia: No, I have holiday next week.

Maria Jana: *Oh, nice.*

Extract 78:

Patricia: I don't have exams this week.

Maria Jana: *Ohh cool!*

Extracts 77 and 78 above demonstrate Maria Jana's ability to express assessment. When in the first extract Patricia says that she has holiday next week, Maria Jana reacts with "*Oh, nice*" and in the second one with "*Ohh cool!*", regarding her interlocutor's previous turn where she states that she does not have exams this week. Despite the fact that the assessment moves express the speaker's opinion or feelings they are not very participatory and do not trigger a response reaction from the interlocutor, thus these are coded with low level of alignment.

Extract 79:

Patricia: I studied German for one year but I gave up.

Maria Jana: Yeah, I have the option to study German as well but...I don't think..

Patricia: It's very hard.

Maria Jana: *Yeah, it is!*

Extract 80:

Maria Jana: I like computer games but not so much.

Patricia: Yeah, I prefer meeting with my friends.

Maria Jana: Yes, me *too.*

Extract 81:

Patricia: I don't go to the beach of Barcelona because it's always crowded with people.

Maria Jana: Yes, I don't like busy places, *too*.

Extracts 79, 80 and 81 show only three of the numerous affiliative comments (“*too*”, “*as well*”) that Maria Jana used throughout her video recorded telecollaborative sessions with Patricia. In the first extract Patricia says that she gave up studying German because it is very hard and in her turn Maria Jana reaffirms her partner's opinion by adding “*Yeah, it is*”. In the second extract, after Maria Jana's turn “*I like computer games but not so much*” Patricia aligns with her partner stating that she prefers meeting her friends rather than play computer games. In her next turn Maria Jana responds with “*Yes, me too*”. Likewise, when in the third extract Patricia reveals that she does not go to the beach of Barcelona because it's too crowded, Maria Jana replies “*Yes, I don't like busy places, too*”. As can be seen, these turns do not make any assessment of the previous one; instead, they express a point of commonality between the two participants and establish a positive emotional link between the two. For this reason, it has been categorized as an affiliative comment, coded with low level of alignment.

Extract 82:

(Maria Jana explains that Macedonia is next to Bulgaria and the languages are very similar)

Patricia: It's nice having another country next to you with good communication.

Maria Jana: Yes, they are really similar languages. Really, really similar.

Patricia: Maybe like Catalan which is very similar to French.

In Extract 82 after Maria Jana's explanation that Bulgaria and Macedonia are neighboring countries and their languages are very similar Patricia makes an assessment move and aligns with her partner stating that it is very nice to have a country, next to yours, with good communication between them. In her following turn, rather than closing the sequence, Maria Jana chooses to assess her partner's previous turn and emphasize yet again on the similarity

by repeating “*Yes, they are really similar languages. Really, really similar*”. This response triggers Patricia’s reaction “*Maybe like Catalan which is very similar to French*” in which she extends the sequence suggesting an analogous similarity between her native language, Catalanian, and French.

Extract 83:

(Patricia says that she hates travelling by ship)

Maria Jana: I don’t know. I haven’t travelled by ship but *I also think it’s going to be bad....horrible!*

(Patricia tells Maria Jana about her first experience with a ship)

Extract 84:

Patricia: In Christmas we have Santa Clause and then on January 6th we have the Three Magic Kings.

Maria Jana: *Yeah, I have heard it but I don’t know what it is.*

(Patricia explains about the tradition of the Three Wise Men in Spain)

Maria Jana: Ohh, very nice!

In Extract 83 Patricia reveals that she hates travelling by boat. Maria Jana’s affiliative comment “*I also think it’s going to be bad....horrible!*” is noteworthy considering the fact that it is preceded by a disaffiliative comment “*I don’t know. I haven’t travelled by ship*”. This clearly demonstrates her desire not to focus on differences but rather state similar opinions and views and therefore coded with high level of alignment. At the end, Maria Jana relates to her partner in that she would probably not like this experience either, a move which establishes a point of alignment, disregarding the dissimilarity. In the other example, Extract 84, Patricia explains that at Christmas they have Santa Claus and the “*Three Magic Kings*” in Spain, which is something that Maria Jana responds to have heard and then she clearly stated “*but I don’t know what it is*”. Patricia, consequently, interprets her response as a sigh of curiosity and provides a detailed explanation about this typical Spanish tradition, which at the end Maria Jana finds nice and closes the sequence with an evaluative positive comment.

Extract 85:

Maria Jana: What is the most difficult subject for you?

Patricia: History and Literature.

Maria Jana: *I don't like History at all.*

Patricia: I hate it.

Maria Jana: *It's sooo difficult, yes!*

Extract 86:

(Patricia explains what is regeton music and says she does not like it)

Maria Jana: *Ohhh we have something like that in Bulgaria, too but I don't really like it. I am OK with it because in the clubs they play this music only...*

Patricia: Yeah, here too.

Maria Jana: I am OK with it though (smiles).

Extract 87:

Patricia: I used to do some sport but I didn't lose any weight so then they recommended me to increase the level of sport and now the effect is very visible.

Maria Jana: *Yes, I agree with you.* The sport is more important, not diets. Actually, I *also* started doing more sport by myself and I notice it *too*.

The above Extracts 85, 86 and 87 provide illustrative examples of alignment moves tagged with high level of alignment as rather than simply expressing their feelings or opinions regarding their interlocutors' previous turn, participants made their "evaluative comments more lengthy by adding details or reasons to justify their statements" (Cabrero, 2013).

4.3.3. Boulomaic Modality

As we have already mentioned, the use of boulomaic modality is a marker of emotional involvement through which the speaker tends to make personal connections with his partner, express viewpoint or give more depth to the conversation. In her first telecollaborative project with participants from Lluís Anton School Maria Jana did not use any boulomaic modality

(See Table 4.3.3 below) whereas in her interaction with Patricia, from Anglia School, she utilized it in 11 instances. Table 4.3.3 below shows the number of times that Maria Jana used boulomaic modality with each partner within her total time of communication and the relative frequencies per hour. As we stated above, she did not use any boulomaic modality in the first telecollaborative project, whereas in the second one the relative frequency of her use of this interactional feature was 5.73.

Table 4.3.3: Number of times that Maria Jana (Mundi School, Bulgaria) used boulomaic modality with each partner within her total time of communication and relative frequencies per hour

Maria Jana's collaborative partners in both projects	Fem./ Male	Total time of commun. in min.	Boulomaic modality	
			Nº of uses	Rel. freq. per hour
Manuel (Lluís Anton)	<i>M</i>	33´	0	0
Carla (Lluís Anton)	<i>F</i>	21´	0	0
Malek (Lluís Anton)	<i>M</i>	10´	0	0
Patricia (Anglia)	<i>F</i>	115´	11	5.73
TOTAL Nº of uses:		179´	11	3.69

In the examples below, Extracts 88 to 92, Maria Jana's use of boulomaic modality indicates her wishes and desires ("*I would like to travel everywhere*"; "*I would really love to try Chinese food or Japanese food*", "*I would love to go to Finland*"; "*I would want to be more social*", "*I would like to do it (volunteering)*").

Extract 88:

Maria Jana: I would like to travel everywhere. I was very sad when we returned from a trip with my school.

(Patricia explains that she doesn't like travelling with her schoolmates a lot)

Extract 89:

Maria Jana: I would really love to try Chinese food or Japanese food but fast food in the States is not for me.

(Patricia explains that she has a problem with the food when she travels to other countries)

In the following extract, Maria Jana uses boulomaic modality multiple times and for different purposes. In her first turn she explains that her parents have not travelled a lot and that she would like to travel more than them, adding that she “*would love to go to Finland*” thus, revealing her longings, hopes and desires. When Patricia responds that she would also like to visit Finland, as she wants to become a teacher and Finland is the country known to have one of the best educational systems, Maria Jana replies “*Yeeees, that would be good*”, attempting to align with her partner’s interests as well as indicate their similar opinions and points of view “*I have always envied their system*”. Likewise, in the second extract after Patricia’s statement that if she had to be what other people expected her to be, that would be terrible and she wouldn’t like it, Maria Jana instantly tunes in to her partner’s belief (“*Yeah, you wouldn’t be yourself anymore*”) Yet again she aims at highlighting her similar standpoint on the matter, as well as demonstrating openness, involvement and interest in furthering and elaborating on the topic.

Extract 90:

Maria Jana: My parents haven’t travelled a lot, I *would like* to travel more than them.

Patricia: Yes, I love travelling a lot.

Maria Jana: I *would love* to go to Finland.

Patricia: I want to go too. (She explains that she wants to become a teacher and Finland is known to have the best educational system)

Maria Jana: Yeeees, that *would* be good. I have always envied their system.

Extract 91:

Patricia: If I had to be what other people want me to be it would be horrible and I wouldn’t like it.

Maria Jana: Yeah, you *wouldn’t* be yourself anymore so....

Patricia: Exactly!

Extract 92:

Maria Jana: I *would like* to travel very much but I am still young.

(Patricia explains that she wanted to go abroad and do volunteer work as an au pair but she is still young)

Maria Jana: Ohh, that's cool! Here nobody really volunteers. It's kind of sad.

(Patricia explains about volunteering activities at her school)

Maria Jana: I *would like* to do it (volunteering) but I don't have time.

Patricia: If you had to do a volunteering what would you like to do?

Maria Jana: Maybe I *would* do something with kids because I am not very good with kids...I am not good with people in general but kind of I *would want* to be more social, especially with kids.

Extract 93 below is rather interesting and noteworthy not only because of Maria Jana's use of boulomaic modality ("*I wish it wasn't like that*") but also because it illustrates one of the occasions in which the dyad discusses stereotypes and openly expresses their opinion about it. In order to provide illustration of the instances in which the girls discuss stereotypical issues we offer more contextualization of their conversation. First, Patricia starts describing and comparing people from Catalonia and from the South of Spain. She, obviously, finds them quite different as she affirms "*In Catalunya, I think we are more open-minded, we can help people that is on the street but in the South they are more closed*" and goes on to explain that people from the South love sleeping because it is hotter in that part of the country. This claim is met with Maria Jana's reacting to it with a smile, most likely because she recognizes that this is a stereotypical statement ("*That's interesting, I guess. That's a stereotype, right?*"). After that, it is Maria Jana who describes the stereotypical beliefs regarding gypsies in her country, closing her turn with "*And most gypsies are like this, that's why it's a stereotype but of course there are people who are perfectly normal, not being rude, being respectful. I know there are, I haven't met but I am sure there are people like that.*" demonstrating her openness and nonconformity with the generally accepted views, beliefs and practices. And yet again, later in their conversation Maria Jana provides information about the stereotypical attitude of people from her country who "*hate different things... like*

they don't like the people for their sexuality or what they like, music and stuff..." and then reveals her honest dislike and disapproval of this phenomenon by stating "I wish it wasn't like that....I don't know....This is something I don't like because I am very open to people of different gender, sexuality, what they like, what they are into".

Extract 93:

Patricia: In Catalunya, I think we are more open-minded, we can help people that is on the street but in the South they are more closed. (.....) And there is a tradition, that I don't know if it's true, that people that live in the South they love sleeping (Maria Jana smiles) because there is lots of hours of sun, it's very hot so they sleep and then they get up and have free time while it's not hot.

Maria Jana: That's interesting, I guess. That's a stereotype, right?

Patricia: Yeah.

Maria Jana: Well, here the most popular stereotype is that of gypsies, (.....) the stereotype is that they are super loud, they don't like studying, they like doing sports and physical activity, they are rude and impolite as a whole. And most gypsies are like this, that's why it's a stereotype but of course there are people who are perfectly normal, not being rude, being respectful. I know there are, I haven't met but I am sure there are people like that.
(.....)

Maria Jana: I don't know for what reason but people in Bulgaria just hate different things... like they don't like the people for their sexuality or what they like, music and stuff... I wish it wasn't like that....I don't know....This is something I don't like because I am very open to people of different gender, sexuality, what they like, what they are into.

To summarize, the analysis of Maria Jana's use of boulomaic modality reveals that she made use of this interactional feature only in the second telecollaborative project, in this way marking her speech with involvement, openness, emotion and interest to her partner, as well

as to the topics under discussion and the collaboration as a whole. No use of boulomaic modality was detected in the data from the first telecollaborative project, with participants from Lluís Anton School.

4.3.4. Audio-Visual Resources

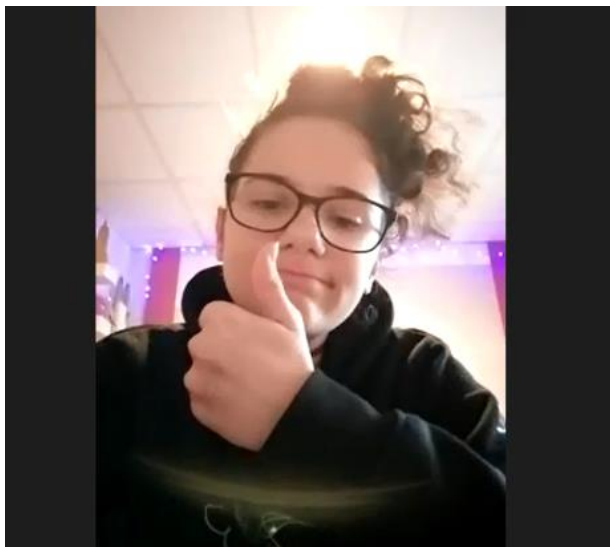
Maria Jana's use of audio-visual resources in both telecollaborative projects was neither plentiful nor diverse. In the first telecollaborative project, with participants from Lluís Anton School, she only used this tool twice (See Table 4.3.4 below) and in the second project, with Patricia from Anglia School, she used it in 8 occasions. Table 4.3.4 below shows the number of times that Maria Jana used audio-visual resources with each partner within her total time of communication and the relative frequencies per hour. The relative frequency of her use of this feature per hour was 1.81 with Manuel; 2.85 with Carla; none with Malek (all from Lluís Anton School) and 4.16 with Patricia (Anglia School). Maria Jana mainly used this interactional feature to express emotions (surprise, worry) or to provide visual support and reinforcement of her speech.

Table 4.3.4: Number of times that Maria Jana (Mundi School, Bulgaria) used audio-visual resources with each partner within her total time of communication and relative frequencies per hour

Maria Jana's collaborative partners in both projects	Fem./ Male	Total time of commun. in min.	Audio-visual resources	
			Nº of uses	Rel. freq. per hour
Manuel (Lluís Anton)	<i>M</i>	33´	1	1.81
Carla (Lluís Anton)	<i>F</i>	21´	1	2.85
Malek (Lluís Anton)	<i>M</i>	10´	0	0
Patricia (Anglia)	<i>F</i>	115´	8	4.17
TOTAL Nº of uses:		179´	10	3.35

In her first telecollaborative project Maria Jana used this resource once to express surprise when Manuel told her that he does not have a lot of homework. She, then, reacted by expressing big surprise by this statement through her facial expression. In this occasion, she solely resorted to the visual resource, as she did not say anything. Manuel, in response to her

reaction, added “Yes, not a lot”. The second occasion in which she used the audio-visual tool is at the beginning of her conversation with Carla, when she asked Maria Jana to wait for a minute as she could not hear her and needed to have the sound fixed. To her request, Maria Jana responded with thumbs up (See screenshot bellow), showing that she understood and in this occasion used the video feature in order to compensate for the lack of audio resource.



It is worth reminding that, unlike the Spanish participants, Maria Jana was using her personal mobile phone to connect with her partners. And, whereas the Spanish participants used the laptop or computer application for the project and could use their phones to provide additional audio-video support, Maria Jana could not do that as she was using the ZOOM application at the time of the interaction. In the second telecollaborative project Patricia frequently used her mobile phone to show images to Maria Jana that she found difficult to explain in English, such as “tortilla”, bull ring, mermaid, “moussaka”, and “churros”. Nonetheless, only the audio-video resources used by Maria Jana are included for analysis in this research.

4.3.5. Question Types

a) General Inquiry Questions about Personal Background

General inquiry questions about personal background, as we have already mentioned, are primarily used in the introductory phase when participants get to know each other. Table 4.3.5 below shows the number of times that Maria Jana used this interactional feature with each partner within her total time of communication and the relative frequencies per hour. Maria Jana used more general inquiry questions about personal background with participants from Lluís Anton School compared to those she used in her second telecollaborative project with Patricia from Anglia School. The relative frequency of her use of general inquiry questions per hour was 34.54 with Manuel; 31.42 with Carla and 30 with Malek, all three of them are participants from Lluís Anton School (Spain). On the other hand, the results reveal that, with her partner Patricia, from Anglia School (Spain), Maria Jana used noticeably a lower frequency per hour of general inquiry questions, only 3.13.

Table 4.3.5: Number of times that Maria Jana (Mundi School, Bulgaria) used general inquiry questions about personal background with each partner within her total time of communication and relative frequencies per hour

Maria Jana's collaborative partners in both projects	Fem./ Male	Total time of commun. in min.	General inquiry questions	
			Nº of uses	Rel. freq. per hour
Manuel (Lluís Anton)	<i>M</i>	33´	19	34.54
Carla (Lluís Anton)	<i>F</i>	21´	11	31.42
Malek (Lluís Anton)	<i>M</i>	10´	5	30
Patricia (Anglia)	<i>F</i>	115´	6	3.13
TOTAL Nº of uses:		179´	41	13.74

Maria Jana's case is identical to Tania's in that she also had three different partners in the first project and in the second one she only collaborated with Patricia. This inevitably leads to an increased number of general inquiry questions about personal background in the first project, as she had to go through the introductory phase with each of the three participants and did not have the chance to form such a strong bond, as she did with Patricia. As we have mentioned, this type of questions are mainly used when participants get to know each other

and, as Ware and Kessler (2014) state, later shift to “more personal, contextualized inquiries that reflected students’ attentiveness to topics that their partners had introduced”.

With participants from Lluís Anton School, Maria Jana posed an average of 31.98 general inquiry questions per hour. The questions that follow were found in the video recorded data from the first telecollaborative project and illustrate just some of the examples of general inquiry questions that she asked: “*How old are you?*”; “*Do you have a pet?*”; “*What time does your school start?*”; “*Whar’s your favourite subject?*”; “*What’s your favourite color?*”; “*What grade are you in?*”; “*What music do you listen to?*”; “*Where do you live?*”; “*Is your school big?*”

In the second telecollaborative project, with her partner Patricia from Anglia School, Maria Jana asked a very limited number of general inquiry questions about personal background, only 3.13 per hour. This mainly happened during their first session, in which they started to get to know each other. A very peculiar thing about this dyad is the fact they did not feel the need to ask too many general inquiry questions but would rather follow-up on each other’s comments, thus co-constructing their interaction by providing detailed, in-depth information about on the following: “*What do you like doing in your free time?*”; “*What time do you get up?*”; “*What time does your school start?*”; “*Do you have a hobby?*”; “*What grade are you in?*”; “*Tell me about your family.*”

These questions were primarily used in their first telecollaborative session and, even in the first meeting, Maria Jana and Patricia did not ask many general inquiry questions about personal background. For instance, when Maria Jana asked Patricia what she likes doing in her free time, Patricia started explaining that she did not have a lot of free time due to her busy schedule at school, she provided details about her school routine and timetable and then she started talking about tennis. Patricia went on giving plenty of details, such as the fact that she plays tennis with her family and she is very competitive and that this sport helps her maintain a good physical shape. All these details triggered Maria Jana’s response about practicing sports and how important this is for her. This, spontaneously, led them to another topic - health and eating habits, when both of them explained about the importance of a

healthy lifestyle. That is, they discussed many topics about their personal background, only without the need to pose the questions but rather by commenting on each other's contributions and extending their interaction in a natural and unprompted way.

In sum, Maria Jana used more numerous general inquiry questions about personal background with participants from the first telecollaborative project and significantly less with Patricia, her partner in the second project. However, the general questions she posed in the second project triggered more responsiveness, openness and approachability, that is, the partners exchanged more detailed and exhaustive information about their personal background, compared to those in the first project.

b) Follow-Up Questions

This section presents the numerical overview and the analysis of the follow-up questions that Maria Jana's used in both telecollaborative projects. Table 4.3.6 below shows the number of times that she used follow-up questions with each partner within her total time of communication and the relative frequencies per hour. The relative frequency of her use of this interactional feature per hour was 37.14 with Carla; 29.09 with Manuel and 18 with Malek (participants from Lluís Anton School, Spain) and with Patricia Anglia School, Spain) Maria Jana used 13.04 follow-up questions.

Table 4.3.6: Number of times that Maria Jana (Mundi School, Bulgaria) used follow-up question with each partner within her total time of communication and relative frequencies per hour

Maria Jana's collaborative partners in both projects	Fem./ Male	Total time of commun. in min.	Follow-up questions	
			Nº of uses	Rel. freq. per hour
Manuel (Lluís Anton)	<i>M</i>	33'	16	29.09
Carla (Lluís Anton)	<i>F</i>	21'	13	37.14
Malek (Lluís Anton)	<i>M</i>	10'	3	18
Patricia (Anglia)	<i>F</i>	115'	25	13.04
TOTAL Nº of uses:		179'	57	19.11

The above quantitative results together with the illustrative examples provided below, demonstrate Maria Jana's interest in her partners, as well as her involvement in the telecollaborative projects in general. As the extracts below reveal, in her first telecollaborative project she made a real effort and tried hard to request more specific and rich information from her partners, to follow-up and extend the topic under discussion. Regrettably, though, her efforts were not always met with great success, most likely due to the much lower English proficiency level of her partners.

Extract 94:

Carla: Do you play any musical instrument?

Maria Jana: No, I don't play any musical instrument nor do I study. *Do you like listening to music?*

Carla: Yes.

Maria Jana: *What's your favourite genre?*

Carla: Please, repeat!

Maria Jana: *What kind of music do you like listening to? Like rock, pop...*

Carla: Yes, yes.

Maria Jana: *And what's your favourite singer?*

Carla: Justine Bieber.

Maria Jana: Oh, Justine Bieber, ok. *And your favourite band?*

Carla: Rolling Stones.

In Extract 94 Carla asks if Maria Jana plays any musical instrument to which she responds “*No, I don't play any musical instrument nor do I study*” in this case failing to find a point in common or a similarity. These disaffiliative comments, which represent disalignment, are normally problematic for participants as they might be face-threatening and break the harmony of the interaction. In her next turn, however, Maria Jana applies a successful technique by asking a follow-up question “*Do you like listening to music?*” and thus, stays on the topic but avoids the loss of face in this supposedly dispreferred position for her. Carla's response is simply “*Yes*”, but yet Maria Jana decides to extend on the topic and poses another follow-up question “*What's your favourite genre?*”, which Carla seems not to understand.

So, after Maria Jana's support "What kind of music do you like listening to? Like rock, pop..." Carla replies "Yes, yes" signaling yet again her lack of understanding. In her next turn, Maria Jana opts for another follow-up questions but this time much simpler and easier to understand "And what's your favourite singer?", which Carla does manage to comprehend and responds with a brief "Justine Bieber". Maria Jana, then, expresses interest in Carla's response by saying "Oh, Justine Bieber, ok." and once more poses a follow-up question "And your favourite band?", followed by Carla's quick reply "Rolling Stones".

Extract 95:

- Maria Jana:* What's your favourite food?
Manuel: Spaghetti.
Maria Jana: Do you like pizza, burgers...fast food?
Manuel: Pizza.
Maria Jana: And what do you usually eat for breakfast?
Manuel: Milk.
Maria Jana: Ohh, ok! Do you like cereals?
Manuel: Yes.

Extract 96:

- Maria Jana:* Do you like your school?
Manuel: Mmm...no!
Maria Jana: Why? You don't like studying?
Manuel: Yes.
Maria Jana: Is there something you want to change in your school?
Manuel: Yes....What's your favourite subject?
Maria Jana: I like P.E. and drawing classes. Do you like Maths?
Manuel: Nooo.
Maria Jana: Is it difficult?
Manuel: Yes.

Extract 97:

Maria Jana: What's your hobby?

Manuel: Football.

Maria Jana: (smiles) Oook. *You play with your friends?*

Manuel: Yes.

Maria Jana: *And do you go to football classes outside school?*

Manuel: Yeah.

Maria Jana: Ok! *Are you good at it?*

Manuel: Do you have many boyfriends?

Maria Jana: Friends who are boys?...Yes!

All the above examples illustrate Maria Jana's desire and persistence to broaden the conversation, gather more information about her partners and demonstrate attentiveness and interest to them. Despite the short, usually one-word answers provided by the participants from Lluís Anton School, we notice that she maintains her intention to carry on with the interaction by posing at least three more follow-up questions in her next turns. In Extract 95, for example, Maria Jana asks Manuel what is his favourite food. His brief answer "spaghetti" triggers her first follow-up question "*Do you like pizza, burgers...fast food?*", followed again by Manuel's short response "Pizza", and then comes her second follow-up question "*And what do you usually eat for breakfast?*". Manuel replies in a similar fashion, only saying "Milk", which does not discourage Maria Jana to first, express alignment ("Ohh, ok!") and then pose her third follow-up question "*Do you like cereals?*", which yet again results in Manuel's brief response "Yes". The other two Extracts 96 and 97 follow a similar pattern, that is, Maria Jana poses follow-up questions aimed at receiving more in-depth information about her partners but she, lamentably, receives brief, poor, unconvincing answers. Extract 98 below is a clear example of Carla's absence of follow-up questions after Maria Jana's rather detailed and engaging responses. After Carla's question about the time Maria Jana has lunch, she provides as detailed explanation about her routine "...*I finish school at 1 o'clock and I eat lunch around 2 o'clock or when I have English classes I eat lunch at 4 o'clock. It's not really healthy*", and even adds a personal opinion and a viewpoint at the end. Carla does not follow

on the topic and simply asks a different question “*What time do you watch TV?*” and again Maria Jana gives a comprehensive response, explaining that she does not watch TV very often but she watches movies and series on her laptop or her phone and she mentions she does not have much free time, once more finishing a personal remark “*I study a lot*”. For a second time Carla does not intend to align to her partner or show involvement in the topic, but rather goes straight for the next question “*What time do you have breakfast?*”.

Extract 98:

Carla: What time do you have lunch?

Maria Jana: I have lunch at...I finish school at 1 o'clock and I eat lunch around 2 o'clock or when I have English classes I eat lunch at 4 o'clock. It's not really healthy.

Carla: What time do you watch TV?

Maria Jana: I don't really watch TV that often. I mean, I watch on my laptop or on my phone, like movies and TV series but I don't watch TV. But when I do this I do it at 7 o'clock because I don't really have that much free time. I study a lot (*smiles*).

Carla: What time do you have breakfast?

We can only hypothesize that it is the rather low level of English proficiency of some of the participants from Lluís Anton School that caused this hindrance and limitation in the interaction. In their interviews and questionnaires, on the other hand, these participants demonstrated motivation and interest in the project and their partners. In the post-project interview, to my question if he liked the project, Manuel answered “*Yes, because I spoke with different people*” and when I asked him if he learned something about their culture, he stated “*No, nothing. Because I didn't understand them. They had higher level of English*”. In the same way, to my question if he liked the project, Malek responded “*Yes, because we could talk about football with other children and ask them about other topics*”, but when I asked him if he learned something about their culture, he replied “*Mmm...about culture, nothing! Because they didn't ask anything and I...but what I know is they also celebrate many traditions that are celebrated in other European countries, like Christmas and Easter....I*

don't know why I didn't ask". All participants stated that they liked the project very much, enjoyed the experience and would like to participate again in a similar activity in the future. Carla's words in the interview were "Yes, I liked it (the project) a lot! I liked everything! I think I have learned new words and also how to pronounce and to speak better."

In her second telecollaborative project, Maria Jana used less follow-up questions compared to the first one (See Table 4.3.6 above). Maria Jana and Patricia's dyad, nevertheless, was very successful as it provided a lot of detailed information about the topics they discussed. They also meticulously followed the discussion topics they were supposed to talk about unlike in the first telecollaborative project, where the structure was more flexible and the students often deviated from the topics and discussed any issues of their interest. Maria Jana and Patricia were prepared for the theme they were going to discuss. In her post-project interview Maria Jana revealed "Before each session I always thought about what I was gonna tell her, especially the topic of Diversity was quite difficult and I even talked with my friends to give me ideas about this". They would normally start their sessions with a greeting "Hello, how are you?" followed by "So today we have to talk about..." and then they would begin their conversation including a lot of description, factual information, personal viewpoints, feelings and beliefs.

Extract 99:

(Patricia is talking about traditions and celebrations. She has explained about Christmas and Carnival)

Patricia: I don't think we have any rare traditions.

Maria Jana: And how do you celebrate Easter?

(Patricia explains in details about the chocolate eggs and how her family celebrates it)

Maria Jana: Ohh... interesting!

Patricia: And you?

(Maria Jana explains in details about the tradition and the custom of "fighting with eggs" in her country)

Extract 99 is very representative of this dyad's interaction. Patricia was talking about the traditions and celebrations in Spain, in particular Christmas and the Carnival. She describes what kind of food they eat at Christmas, how her family gets together, the presents they have received and how much she likes this holiday. She then keeps on giving details about the Carnival that is celebrated in February in Spain, how people dress up and prepare their own costumes and if you want to participate you can go to the town hall and ask for permission, how happy the children are during the carnival and so on. Afterward, she states that she does not think that there are any rare traditions, which triggers Maria Jana's follow-up question "*And how do you celebrate Easter?*". Patricia, once again, provides a lot of detailed information describing the tradition of hiding chocolate eggs for the little children to discover, the typical Easter dessert called "*La Mona*", the fact that they eat too much chocolate during this holiday and her family has decided that one of her parents buy them chocolate and the others give them money because "*if not we have tooo much chocolate at home and this is not healthy*". Maria Jana demonstrates involvement and curiosity by using emotive words "*Ohh... interesting!*" and then responding to Patricia's question about the way they celebrate it, Maria Jana gives plenty of details about Easter in her country. Apart from the religious background, the typical food, the practice of coloring and decorating boiled eggs, she describes the tradition of "*fighting with eggs*", which consists of two people "*crashing*" their colored eggs to see which one would not break, so it would be the winner. This ritual has, evidently, made a great impression on Patricia, as she mentioned it both in her post-project interview and questionnaire, saying that she was astonished by the way they celebrate Easter in Bulgaria and that the tradition of "*fighting with eggs is something really weird but I like it, I like this tradition*".

Extract 100:

Patricia: In my free time I play tennis.

Maria Jana: You like tennis?

Patricia: Yeah, I love it.

Maria Jana: It's your favourite sport?

Patricia: Yeah.

Extract 101:

Patricia: I have a friend that in her school she is obligated to do a voluntary task.

Maria Jana: *And what does she do in her school?*

(Patricia explains that she helps younger students with homework)

In Extracts 100 and 101 above, they are talking about volunteering when Patricia mentions that a friend of hers is obligated to do voluntary work in her school. Maria Jana poses a follow-up question straightaway because she is, actually, truly interested and curious about this matter. During the pre-project interview, while talking about potential topics for discussion of their interest, she brought the topic of volunteering herself, saying “*I would like to talk with them about their hobbies, interests, traditions. I have heard that they do voluntary work and it’s something very nice. Here (in Bulgaria) this is not very common and it’s sad, actually. I want to do voluntary work, I just don’t have time now*”.

Extract 102:

Patricia: I also want to go to bed early but I can’t.

Maria Jana: *Why? Is your schedule really busy?*

Patricia: Yeah, because I finish school at 5.30 ...(explains her routine after school)

Maria Jana: *Ok, but why?... How many classes do you have a day?*

(Patricia explains in details about her school routine)

(Maria Jana also explains her routine and how the Bulgarian school system works- only morning and only afternoons)

Extract 102 begins with Patricia’s words expressing her wish to be able to go to bed earlier but unfortunately she could not do it. This provokes Maria Jana’s wish to elicit more information as to the reason for this impediment followed by Patricia’s detailed account on her daily routine, demonstrating her busy lifestyle of school classes, after school activities, commuting home, doing homework and so on. But still, what causes Maria Jana’s astonishment is Patricia’s statement “*I finish school at 5.30*” and therefore she asks “*Ok, but why?...How many classes do you have a day?*”. The reason for Maria Jana’s puzzlement is

her own cultural knowledge based on her personal background and experience. Namely, as she later explains to Patricia, the Bulgarian school system works differently. Each school has two shifts - a morning shift, in which students come to class at 7:30, and after having 6 or 7 classes, finish school at around 13:00 o'clock, and afterward, immediately after this starts the afternoon shift - from 13:30 until 19:00 o'clock. The reason for the existence of two shifts in Bulgaria is the fact that in the past, currently maybe less, there were not enough schools to receive all children and it was necessary to implement this scheme so that one school could receive greater number of students. Consequently, it is this personal background knowledge that causes confusion for Maria Jana; she does not seem to understand why Patricia stays at school for such long hours. Ultimately, they provide exhaustive explanation of the school systems of both Spain and Bulgaria, thus finding commonalities and differences, comparing and giving personal opinion and standpoint.

In summary, the quantitative results show that Maria Jana used more follow-up questions with the participants from Lluís Anton School than with Patricia from Anglia School. Even so, despite her persistence to widen and develop the conversation, gather more information and demonstrate interest, this did not trigger the same reaction from her partners in the first telecollaborative project. As we explained, this is most likely due to the lower English proficiency level of these participants. On the contrary, in the second telecollaborative project, Maria Jana posed less follow-up questions. The interaction between this dyad was, however, a lot more collaborative and prolific. Maria Jana and Patricia aimed at partnership working and co-constructing of meaning, which deepened the relationship and the understanding between the participants. They collaborated in the intercultural exchange process and delivered comprehensive, multi-dimensional cultural information about their native countries, Bulgaria and Spain.

c) Personal Opinion Questions

This section offers an insight into Maria Jana's use of personal opinion questions in both telecollaborative projects. Personal opinion questions are always posed in context and with attention to the topic under discussion. They indicate that the participants are interested in

positioning their partners not only as information givers but also as opinion providers. This is, in addition, evidence of the partners' respect and appreciation of each other's beliefs and personal values.

Personal opinion questions are the least frequently posed questions by the participants in both telecollaborative projects. In the same way, Maria Jana asked only one personal opinion question in her first project with participants from Lluís Anton School and four personal opinion questions in her second project with Patricia from Anglia School (See Table 4.3.7 below). Table 4.3.7 below shows the number of times that she used this interactional feature with each partner within her total time of communication and the relative frequencies per hour. The relative frequency of Maria Jana's use of personal opinion questions per hour was 1.81 with Manuel; none with Carla and Malek (participants from Lluís Anton School) and 2.08 with Patricia (Anglia School).

Table 4.3.7: Number of times that Maria Jana (Mundi School, Bulgaria) used personal opinion questions with each partner within her total time of communication and relative frequencies per hour

Maria Jana's collaborative partners in both projects	Fem./ Male	Total time of commun. in min.	Personal opinion questions	
			Nº of uses	Rel. freq. per hour
Manuel (Lluís Anton)	<i>M</i>	33´	1	1.81
Carla (Lluís Anton)	<i>F</i>	21´	0	0
Malek (Lluís Anton)	<i>M</i>	10´	0	0
Patricia (Anglia)	<i>F</i>	115´	4	2.08
TOTAL Nº of uses:		179´	5	1.68

Extract 103 below is the only instance in which Maria Jana poses a personal opinion question in her first project. In her conversation with Manuel, when they were talking about football and the World Cup, Manuel states that Argentina were playing a match the following day. Maria Jana, then intends to obtain more information about his personal opinion and his expectations as to which team he believes would win the World Cup, but Manuel only briefly replies “*I don't know*” failing to provide a personal opinion response to her inquiry.

Extract 103:

Manuel: Argentina is playing tomorrow. (He refers to the Club World Cup)

Maria Jana: *Who do you think will win the cup?*

Manuel: (smiles) I don't know.

During her second telecollaborative project, Maria Jana asked four personal opinion questions and Extracts 104 to 107 below illustrate these instances.

Extract 104:

Patricia: (talks about the Spanish educational system) Here in Spain we sit in groups of three or four.

Maria Jana: *Wow.... And do you like it like this?*

Patricia: Yes, it's fun because you know different people and work together.

Extract 105:

(Patricia explains that it is a "battle" at the moment because there are different regions in Spain and that she lives in Catalonia. She says that some people think that Catalonia needs to be independent)

Maria Jana: *And do you want it to be independent country?*

Patricia: I don't mind. I know that there are some points that I am in favor but there are some points that I am against. Well, it's difficult because now in Spain if you say your opinion it's like "oh, you are Catalan" or you are Spanish so it's like Spanish people and Catalan people we are fighting but.....yeah, it's difficult!

Extract 106:

(Patricia explains that many girls from her school are very interested in fashion)

Maria Jana: *And do you like following fashion?*

(Patricia explains that she likes fashion but does not follow it)

Extract 107:

Patricia: My friends like travelling with the school.

Maria Jana: *And what do you think?*

(Patricia explains she does not like travelling with her classmates because they behave “like children” and the teachers are constantly telling them off)

In Extract 104 the girls are talking about the educational system in their country, in this precise occasion Patricia is revealing that at school they sit in groups of three or four students. Maria Jana is obviously surprised by the statement as she reacts with “*Wow.... And do you like it like this?*” requesting Patricia’s view about this fact. Patricia says she finds it fun as you get to know different people and learn to work in a team. In Extract 105 Patricia tackles the sensitive topic of the independence of Catalonia, a region of Spain claiming and fighting for its independence. Maria Jana’s next question aims at finding out her partner’s personal opinion on this subject “*And do you want it to be independent country?*”. Judging by Patricia’s response we can clearly comprehend that for her it is also a complex and delicate subject which she feels awkward to discuss openly. Therefore, she does not provide a straightforward answer but says that she doesn’t mind it, that she finds some points in favour and others against and she ends with “*yeah, it’s difficult!*”. In Extracts 106 and 107 Maria Jana requests for her partner’s opinion on the topic of fashion and school trips.

In sum, Maria Jana asked more opinion questions in the second telecollaborative project, with Patricia (Anglia School), than in the first one, with participants from Lluís Anton School. This, once again, demonstrates Maria Jana’s interest and attention to Patricia, the desire to build a more deeply personal relationship with her partner, not only on a superficial level but rather through engaging in more profound and thought-provoking conversations.

4.4. Case Study: Daniel

4.4.1. Emotive Lexical Choices

In both telecollaborative projects Daniel's use of emotive lexical choices was limited both in number and variety. Table 4.4.1 below shows the number of times that he used this interactional feature with each partner within his total time of communication and the relative frequencies per hour. The results from the table reveal that the relative frequency of Daniel's use of emotive lexical choices per hour was 9.56 with Eric; 5 with Noah; none with Hana (participants from Lluís Anton School, Spain) and 11.81 with Pablo (Anglia School, Spain).

Interestingly, in no occasion did he use extreme adjectives, such as “amazing”, “great” or “wonderful” to express emotions or opinions but rather opted for regular adjectives or adverbs using “very” in order to intensify their meaning (“*very strange*”, “*very yummy*”, “*very nice*”, “*very good*”).

Table 4.4.1: Number of times that Daniel (Mundi School, Bulgaria) used emotive lexical choices with each partner within his total time of communication and relative frequencies per hour

Daniel's collaborative partners in both projects	Fem./ Male	Total time of commun. in min.	Emotive lexical choices	
			Nº of uses	Rel. freq. per hour
Eric (Lluís Anton)	<i>M</i>	69´	11	9.56
Hana (Lluís Anton)	<i>F</i>	27´	0	0
Noah (Lluís Anton)	<i>M</i>	12´	1	5
Pablo (Anglia)	<i>M</i>	66´	13	11.81
TOTAL Nº of uses:		174´	25	8.62

In the first telecollaborative project, Daniel interacted with Noah (1 session), Hana (1 session) and Eric (3 sessions). All of the emotive lexical words Daniel used in his collaboration with Eric, except one with Noah (“*Wow!*”).

Extract 108:

Daniel: Can you speak another language?

Noah: I can speak Spanish, English, French, Portuguese and Catalán.

Daniel: Wow! Talk me Catalán!

Extract 109:

Daniel: Do you play football?

Eric: Yes.... and I play hockey and play the piano.

Daniel: Ohhh...hockey is *very strange* for Bulgaria. We don't have hockey team.

Eric: Yes!

In Extract 109 above Eric says that he plays football and hockey and he also plays the piano. The statement that obviously caught Daniel's attention is hockey, as he is genuinely surprised and reveals his astonishment right away "*Ohhh...hockey is very strange for Bulgaria. We don't have hockey team*". In his post-project questionnaire Daniel mentioned that he was very surprised to discover that "*Spanish children play hockey*" because it was Eric, as well as his other partner, Hana, who also practiced hockey. Another participant from Mundi School (Raya) mentioned in her post-project questionnaire that Daniel "*was very surprised that Spanish children play hockey. He told us after the session, in class and we were also surprised. Hockey!!! Football yes, but hockey!!!*".

Extract 110:

Daniel: Hello, it's *very nice* to see you again!

Eric: Yes! (smiles)

Daniel: You have new hair!

Eric: Yes! (smiles)

Extract 111:

Daniel: (talks about a typical cold soup called "tarator") It's *perfect* for the hot weather. "Banitsa" and "boza" are another typical foods for Bulgaria. They are *very yummy*!

Extract 112:

- Eric:* Do you like your school?
Daniel: No, it's *very boring* and we have a lot of homework.
Eric: (smiles)

Extract 113:

- Eric:* Do you like this game? (refers to a videogame)
Daniel: Yes, it's *very funny!*

Extract 114:

- Daniel:* Do you have a lot of homework?
Eric: No.
Daniel: It's *very good!* We have big homework today....and every day.

As we have mentioned, and as all the above Examples 110 to 114 illustrate, Daniel's use of emotive words is limited to regular adjectives or adverbs, intensified by the use of "very" ("it's *very nice* to see you again!", "They are *very yummy!*", "it's *very boring*", "it's *very funny*") and only in one occasion he used the absolute adjective "*perfect*" referring to the typical cold soup of his country.

In the second telecollaborative project Daniel collaborated only with Pablo, from Anglia School. As far as Daniel's use of emotive lexical words is concerned, Extracts 115 to 117 below demonstrate that in a very similar way, he primarily used regular adjectives or adverbs, intensified by "very", "so" or "too" ("it's *very yummy*", "it's *so good*", "the future is *too far*", "that's *very special*") and did not make use of any extreme emotive words.

Extract 115:

- Daniel:* We have a typical food "Banitsa", it's *very yummy*.

Extract 116:

- Daniel:* Our school starts at 7 o'clock.
Pablo: At 7 o'clock you start school?! I go at 9 o'clock.

Daniel: At 9???? Ohhh...it's *so good!*

Extract 117:

Pablo: What do you want to do in the future?

Daniel: I want to play volleyball. (very low voice)

Pablo: Volleyball! Oh, I love volleyball, it's a very good sport.

Daniel: Yeah...I don't know, the future is *tooo far*.

Pablo: In the future I want to work as ship engineer.

Daniel: Ohh...that's *very special!*

Pablo: Yeah, my dad works as that so...

Overall, Daniel did not utilize numerous emotive lexical words with his partners in both telecollaborative projects, only an average 8.62 per hour. In addition, these were quite limited in diversity and did not express a very high level of emotiveness. He did not use emotive lexical choices to convey more subtle or nuanced meaning or to evoke emotional response but used rather neutral rhetoric, not strongly marked with expressiveness or feelings. Although not abundant, Daniel used more emotive lexical words per hour with Pablo from Anglia School, compared to those he used in the first telecollaborative project with participants from Lluís Anton School.

4.4.2. Alignment

Daniel's use of alignment moves in both telecollaborative projects was rather scarce. Table 4.4.2 below shows the number of times that he used this interactional feature with each partner within his total time of communication and the relative frequencies per hour. The results demonstrate that the relative frequency of Daniel's use of alignment per hour was 13.30 with Eric; 10 with Noah and 8.88 with Hana with his three telecollaborative partners from Lluís Anton School. In the second project, with his partner Pablo from Anglia School, he made use of only 6.36 alignment moves per hour, which is the least frequent use of this interactional feature in both projects. Additionally, a striking fact is his total lack of interactional moves tagged with high level of alignment. Daniel utilized exclusively and

entirely low level alignment moves, such as “*Ohh, ok!*” and “*Me too*” in both telecollaborative projects. According to Cabrero (2013) the “expression of alignment is subject to great individual variation” and, therefore, not necessarily attributed to language proficiency, motivation or interest in the partners and the collaboration in general.

Table 4.4.2: Number of times that Daniel (Mundi School, Bulgaria) used alignment with each partner within his total time of communication and relative frequencies per hour; number of times that she used alignment tagged with high and low degree and respective relative frequencies per hour

Daniel’s collaborative partners in both projects	Fem./Male	Total time of commun. in min.	Alignment	
			Nº of uses	Rel. freq. per hour
Eric (Lluís Anton)	<i>M</i>	69´	13	11.30
Hana (Lluís Anton)	<i>F</i>	27´	4	8.88
Noah (Lluís Anton)	<i>M</i>	12´	2	10
Pablo (Anglia)	<i>M</i>	66´	7	6.36
TOTAL Nº of uses:		174´	26	8.97

Extracts 118, 119 and 120 below are representative of all of Daniel’s use of alignment moves. The conversational devices that he used in his interaction express two types of alignment moves, namely acknowledgments (“*oh*”, “*ok*”) and affiliative comment (“*me too*”, “*and we have white*”). These types of comments consist of a remark that conveys the speaker’s position with regard to the prior turn, but do not aim at developing the conversation, expressing empathy or triggering a participatory response. In his second telecollaborative project, Daniel used even less interactional features to express alignment. As we demonstrate in the *General inquiry questions about personal background* section below, Daniel seemed less enthusiastic and stimulated in his collaboration with Pablo, he used lower voice while speaking and posed a smaller number of questions.

Extract 118:

- Daniel:* Have you got brother or sister?
Eric: I have a one brother.
Daniel: *Me too.*

Extract 119:

Eric: Another typical food is “tortilla”.

Daniel: *Ohhhh...ok!*

Extract 120:

Daniel: What’s your favourite animal?

Hana: Dog...or...cat.

Daniel: *And me too.*

Extract 121 below illustrates Pablo’s wish to provide in-depth information about the typical drinks of his country. He describes the “sangria” which, as he says, is made of red wine with pieces of cut fruit in it, usually apples and oranges, and that people normally have it in summer as it is a very refreshing drink. Then, he goes on to explain about Vermouth, which is also a typical aperitif in Spain and people drink it after they finish work. Daniel’s response to Pablo’s detailed description is a brief “*Ohhhok*” with no further follow-up on the topic, which might have left Pablo somewhat perplexed.

Extract 121:

(Pablo explains about typical drinks - “Sangría” and Vermouth. He explains that “Sangría” is made with pieces of fruit in the wine and is consumed usually in summer and Vermouth is a drink that people have after work)

Daniel: *Ohhhok.*

Extract 122:

(Pablo explains with a lot of details and shows photos of the tradition of San Jordi, explains about the origins of the legend, when it is celebrated and that women give men a book and men give women a rose. Then he explains about the typical dance “Sardana” and typical Catalan food “calçots”)

Daniel: *Ok.* (Daniel explains about typical Bulgarian celebrations called “Yordanovden”, “Baba Patricia” and Christmas Eve called “Budni vecher” in Bulgarian) On Christmas we have a Christmas tree and on

“Budni vecher” we eat vegetarian food and we don’t lie the table (*he means that they don’t clean the table after dinner*) because Bogo..... the history says that “Bogoroditsa” (*the mother of God*) , it’s a God of Bulgaria, aaahhhhh....and I don’t know the word but she eat from our food.

Similarly, in Extract 122 Pablo gives details about three typical Catalanian customs, accompanying his descriptions with photographs he had previously prepared. First he talks about “San Jordi” which is only celebrated in Catalonia but not in the rest of Spain, he tells about the legend and the origins of the tradition and that on that day women give a book to the men, and men give a rose to the women as a present. Then, he talks about the typical Catalanian dance, called “Sardana”, describing the way people hold their hands (showing it with his hands on the camera) and that it is usually performed in the squares of Barcelona. Finally, he shows an image of “calçots”, which is, as we have already explained, a kind of scallion or milder green onion, grilled over a hot fire and wrapped in newspaper. Daniel replies with “Ok” but in this instance, however, he develops the conversation and follows up on the topic, providing information about some traditions that are typical in his country, Bulgaria. Firstly, he portrays a custom called “Yordanovden” in Bulgarian (St. Jordan’s day). This is an Orthodox celebration and this day is devoted to the baptism of Jesus Christ in the Jordan River. For this reason, on this day, young men take a dip in the freezing waters to wash their sins away. According to the tradition, the priest throws a cross in the nearest river and the one who manages to take out the cross from the water will be happy and rich all year round. After that, men dance a typical dance, called “horó” in the cold water for a short time, accompanied by Bulgarian folklore music. The second tradition that Daniel explains is called “Baba Marta”, celebrating the coming of spring on the 1st March. Every year Bulgarians put a white and red souvenir on their wrist or clothes, symbolizing health and prosperity. The last custom that he reveals is called “Budni vecher” (Holy night). As the extract demonstrates, Daniel does not intend to translate or describe the name but rather uses it directly in Bulgarian. Likewise, he uses the Bulgarian word “Bogoroditsa”, which literally means “the one who gave birth to Jesus”, but this time he provides an approximate explanation of the

word, saying “*it’s a God of Bulgaria*”. This extract is rather representative of Daniel’s difficulty to find the right word in English sometimes, which is present in more than one instance in his interactions. We can see how he used the phrase “lie [lai] the table” incorrectly, both the pronunciation and meaning, when what he meant was that after dinner they do not clean the table and leave the food there for God and his Mother to come and eat from it at night, according to the Orthodox tradition. At the end Daniel states “*aaahhhhh....and I don’t know the word but she eat from our food*”, revealing yet again his struggle to express himself in the way he would like to.

Extract 123:

Pablo: And that’s it! Nothing more. I don’t have any more things. (means that he doesn’t have any more things to talk about)

Daniel: *And I.*

Extract 124:

Pablo: If I could change something in the educational system, it will be that don’t do exams. Do a lot of work but don’t do exams because if you are a very good student but you get nervous at an exam and you fail the exam, you are a good student but you fail the exam so they shouldn’t do exams.

Daniel: Aaaa.....Do you watch news on the TV?

Pablo: Sometimes.

Daniel: Does your TV have something news for Bulgaria sometimes?

Pablo: Ahhhh no! I’ve never seen the news of Bulgaria.

The above Extract 124 displays Daniel’s lack of alignment after Pablo’s exposition of his idea of a better educational system. Pablo explains that in his opinion exam are not a fair way of assessment as some students might get nervous and this could affect their performance at exams, so he thinks they should do a lot of projects but not exams. In his next turn, Daniel does not react or align with his partner in any way but goes on to ask a question that does not follow on the topic “*Do you watch news on the TV?*”. As we have already mentioned in the

Portraits of the three case study oarticipants section, Daniel very frequently expresses his curiosity as for the knowledge his partners have regarding his country. More such examples are provided in the *Follow-up questions* section below.

The analysis indicates that, during both telecollaborative exchanges, Daniel used alignment moves at the lower end of the continuum (acknowledgments and affiliative comments) and with limited frequency. His use was reduced to short agreement markers such as “*ok*”, “*ah*”, “*me too*” and he was never observed producing interactional devices tagged with high level of alignment.

4.4.3. Boulomaic Modality

Daniel did not make any use of boulomaic modality in both telecollaborative projects. No instances were found in the video recorded data from his interaction with participants from either Lluís Anton or Anglia School.

4.4.4. Audio-Visual Resources

In this section we present and analyze Daniel’s use of audio-visual resources in both telecollaborative projects. Table 4.4.3 below shows the number of times that he used this interactional feature with each partner within his total time of communication and the relative frequencies per hour. The results reveal that the relative frequency of Daniel’s use of audio-visual resources per hour was 5 with Noah; 5.21 with Eric and none with Hana, in the first telecollaborative project with participants from Lluís Anton School. In the second telecollaborative project he used this resource 5.45 times per hour with his partner Pablo from Anglia School.

Table 4.4.3: Number of times that Daniel (Mundi School, Bulgaria) used audio-visual resources with each partner within his total time of communication and relative frequencies per hour

Daniel's collaborative partners in both projects	Fem./ Male	Total time of commun. in min.	Audio-visual resources	
			Nº of uses	Rel. freq. per hour
Eric (Lluís Anton)	<i>M</i>	69'	6	5.21
Hana (Lluís Anton)	<i>F</i>	27'	0	0
Noah (Lluís Anton)	<i>M</i>	12'	1	5
Pablo (Anglia)	<i>M</i>	66'	6	5.45
TOTAL Nº of uses:		174'	13	4.48

In the first telecollaborative project, during his collaboration with Noah, Daniel used the audio-visual feature so as to support his verbal expression. In the first case, after Noah asked him “*What grade are you in*” Daniel responded with “*Five*”, showing his hand to the camera in order to aid his partner’s understanding, and then he autocorrected himself, saying “*Fifth*”. In the second instance, just as with Eric (See screenshot below), Daniel revealed that he is a “*Barça fan*” and showed his Barcelona T-shirt to the camera with great joy and pride and a big smile on his face.





In the screenshot above, Daniel was trying to explain to Eric what the typical drinks of his country are, but as the connection was not very stable and was often cutting, Daniel chose to resort to the video feature so as to guarantee Eric's comprehension. Due to the poor internet connection during this session the dyad resorted to the visual tool quite often. In the first screenshot below, Daniel could not hear Eric so he told him "Put your earphones on your head" and showed him on the camera by taking off and putting his own earphones back on his head. Eric was hearing Daniel well, however, so he said "I can hear you. Do you hear me", pointing to his ears (second screenshot below), so as to make certain that his partner had understood and heard him. The third screenshot below, reveals Daniel indicating with thumb up that he heard him and at the same time saying "Yes, I hear you now, yes".





The screenshots that follow demonstrate Daniel and Eric engaged in a game that was rather popular among children at that time. The *Circle Game* is an activity where one person makes a “circle” with their fingers and holds it below their waist, convincing a second person to look at it. If the second person looks, they receive a punch to the shoulder <https://www.dictionary.com/e/slang/circle-game/>.





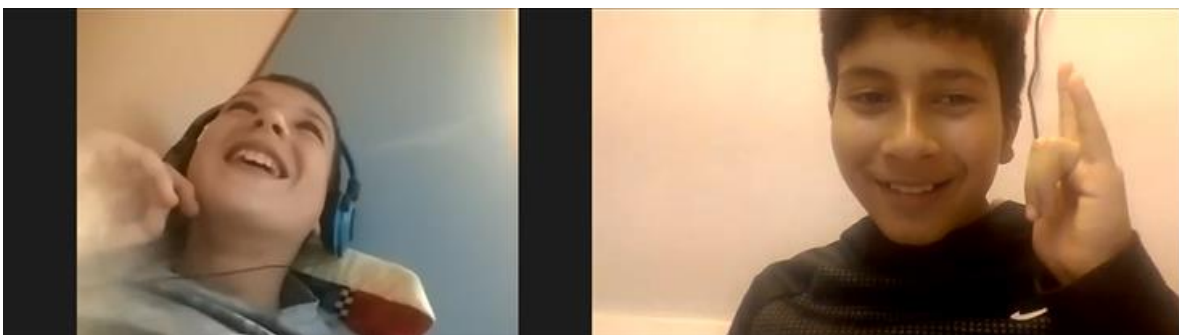
As we demonstrate later, in the *General inquiry questions about personal background* section, in his second telecollaborative exchange Daniel seemed less open and communicative and sometimes looked a bit sad and aloof.

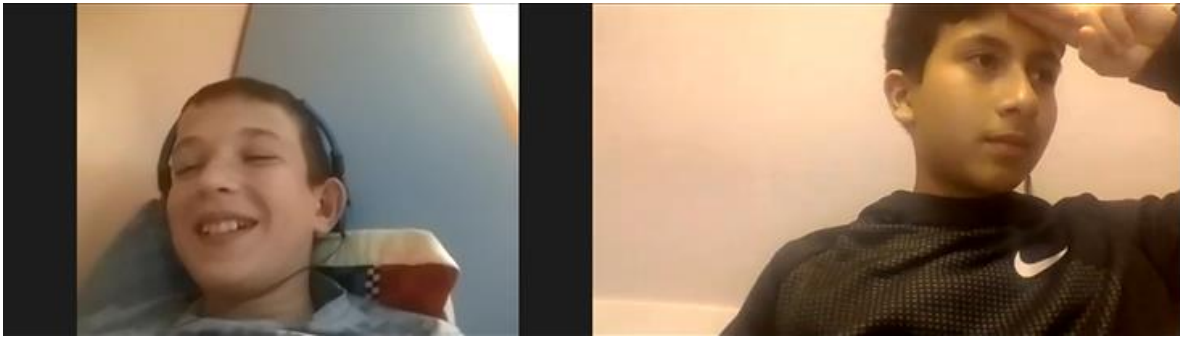


The screenshots above illustrate Daniel's use of the audio-visual resource as a means of mainly supporting or complementing his verbal discourse or even making up for problematic vocabulary. In the same way as Tania and Maria Jana, he used his personal mobile phone to conduct the videoconferencing intercultural sessions, which made it impossible for him to

use his device as a supporting tool, which is something that Pablo made use of. In the first screenshot above, Daniel was explaining about the tradition of “Baba Marta” in which Bulgarians tie red and white souvenirs, similar to bracelets, on their wrists. Allegedly, he was troubled to find the exact word for “wrist” and therefore turned to the video feature in order to resolve the hindrance. In the second screenshot above, Daniel was telling Pablo about his town when he reversed the camera of his phone and showed the view from his home, saying “*This is my town*”. In other occasions, he used the chat option to send Pablo links of music videos of his most and least favourite songs, and a song that he considers representative of his country. Pablo had previously prepared visual materials and used his mobile phone to illustrate typical food, objects and traditions and he made use of this tool with more frequency than Daniel did. Pablo’s use of audio-visual resources is not part of the analysis, though.

The two screenshots below are part of their second session in which they had to exchange links of music that they like or don’t like or a song they think represents their country. Interestingly, in this meeting Pablo seemed to have noticed Daniel’s low spirits and apparently was trying to cheer him up. In these screenshots, Pablo was playing the Spanish national anthem and in the meantime making funny gestures and faces hoping to brighten up his partner Daniel.





In sum, Daniel used almost the same amount of audio-visual resources with participants in both telecollaborative projects, except Hana, with whom he used none (See Table 4.4.3 above). He predominantly used this interactional feature in order to aid his partner's understanding, compensate for problematic vocabulary or poor internet connection, or simply express his motivation and involvement in the collaboration, such as when he showed his Barça T-shirt, played the *Circle game* or when he showed a view of his town to his partners.

4.4.5. Question Types

a) General Inquiry Questions about Personal Background

General inquiry questions about personal background are the most numerous and most frequent type of questions that Daniel posed in both telecollaborative projects. Table 4.4.3 below shows the number of times that he used this interactional feature with each partner within his total time of communication and the relative frequencies per hour. The results demonstrate that the relative frequency of Daniel's use of general inquiry questions per hour was 37.77 with Hana; 33.04 with Eric and 25 with Noah, which are participants from Lluís Anton School, Spain and with Pablo from Anglia School, Spain Daniel asked 16.36 question of this type.

Table 4.4.4: Number of times that Daniel (Mundi School, Bulgaria) used general inquiry questions about personal background with each partner within his total time of communication and relative frequencies per hour

Daniel's collaborative partners in both projects	Fem./ Male	Total time of commun. in min.	General inquiry questions	
			Nº of uses	Rel. freq. per hour
Eric (Lluís Anton)	<i>M</i>	69'	38	33.04
Hana (Lluís Anton)	<i>F</i>	27'	17	37.77
Noah (Lluís Anton)	<i>M</i>	12'	5	25
Pablo (Anglia)	<i>M</i>	66'	18	16.36
TOTAL Nº of uses:		174'	78	26.90

In the first telecollaborative project, Daniel met Noah for only one session. As a matter of fact, Noah was not supposed to participate in the telecollaborative project but as Eric, Daniel's partner, unexpectedly informed us that he could not attend the meeting that day shortly before the meeting, we had to act swiftly and find a partner for Daniel among the other available students. Noah gladly accepted the invitation and collaborated with Daniel in a 12-minute interaction. As we have already mentioned in the *Participant classrooms* section, Noah is a native speaker of English since he was born and lived in the UK for six years. He has plurilingual background as his father is Brazilian, his mother is French, the family has lived in the UK and was currently living in Barcelona. As a result, he spoke fluently five languages - Spanish, English, French, Portuguese and Catalanian. In his interaction with Noah, Daniel asked five general inquiry questions - "What's your name?", "Do you like movies?", "Do you have a hobby?", "How old are you?" and "Do you play videogames?". For the most part of the conversation they talked about football, video games, languages and routine, as Extract 129 in the *follow-up questions* section below illustrates. The example, provided in the section below (Extract 129) also demonstrates that the communication between this dyad went smoothly and effortlessly, they posed each other questions, responded giving personal opinion and followed on the topic.

The partnership between Daniel and Hana, his second partner in the first telecollaborative project, was completely different. As Extract 125 below reveals, the communication between

the dyad was hindered by Hana's very low English proficiency level, as she seems not to comprehend even the basic questions that Daniel was posing to her "*Who is your favourite singer?*", "*Have you got a hobby?*", "*What's your favourite food?*". Actually, we cannot be sure whether she did not understand the questions or she lacked sufficient vocabulary to provide a response. Whenever she did provide an answer, however, it was brief and without any details or explanations "*I don't know.*", "*Repeat, please!*", "*Hockey*", "*No*". Daniel appeared to be somewhat confused by her replies at times and in one occasion he turned to the boy sitting next to him and commented in Bulgarian "*I ask her what's her favourite food and she says she doesn't know...she says "I don't know" to everything*". Despite his puzzlement, he turned out to be very persistent in this collaboration and carried on asking general inquiry questions, repeating various times the question if necessary or paraphrasing it in order to make it easier for Hana to understand.

Extract 125:

- Hana:* Ok...when do you finish (school)?
- Daniel:* Aaaa... when I have six lessons I finish at half past twelve ...when I have seven lessons I finish at one o'clock.
- Hana:* Ok....
- Daniel:* *What about you?*
- Hana:* I don't know... (she looks away) (silence)
- Daniel:* *Who is your favourite singer?*
- Hana:* Repeat, please!
- Daniel:* Who is your favourite singer?
- Hana:* I don't know...(looks away).....and you?
- Daniel:* *Have you got a hobby?*
- Hana:* Why?
- Daniel:* Have you got a hobby?
- Hana:* Repeat, please!.....Repeat!
- Daniel:* Have you got a hobby?....What's your hobby?
- Hana:* Hockey

Daniel: *What's your favourite food?*
Hana: I don't know.
Daniel: What????
Hana: I don't know
Daniel: *Have you got lots of homework?*
Hana: Repeat, please.
Daniel: Have you got lots of homework?
Hana: No...(silence)
Daniel: *What's your name?*
Hana: Hana.

Daniel and Eric participated in three telecollaborative sessions for a total of 69 minutes. In their interaction, Daniel asked a lot of general inquiry questions about personal background, such as “*What's your name?*”, “*What do you like to doing in your free time?*”, “*What is the name of your school?*”, “*Have you got a Snapchat?*”, “*Do you like football?*”, “*Do you like bullfight?*” among others. Quite repeatedly, though, Daniel simply posed random questions about his partner's personal background without taking into consideration the discussion topic they were expected to debate. In Extract 126 below, Eric asks Daniel if they celebrate Christmas in his country, Daniel responds with “Yes” and without any other details or information, inquires “*What's your hobby?*”, clearly, without any connection to the previous topic. Similarly, in Extract 127, Eric asks him what they do on Easter and Daniel replies “*We color eggs*” followed by “*Do you play Fortnite?*”.

Extract 126:

Eric: Do you celebrate Christmas?
Daniel: Yes..... *What's your hobby?*

Extract 127:

Eric: What do you do on Easter?
Daniel: We color eggs..... (connection cutting) *Do you play Fortnite?*

Due to the fact that this dyad had conducted two sessions already, in their last one Daniel was facing some difficulty finding topics to discuss. By the end of their third meeting Daniel turned to his teacher, who is present in the classroom, and to his classmates with the request “*Tell me some questions, please! I have talked about hobbies, sport, music....everything!*” (my translation from Bulgarian). Furthermore, as we demonstrate in the *follow-up questions* section below, Eric’s language proficiency level is quite low and he fails to comprehend Daniel’s questions or to provide more detailed information about the subject they were discussing, thus sometimes breaking the flow of their communication. One such example is also provided below in Extract 128.

Extract 128:

Daniel: *What grade are you at school?*

Eric: *What?*

Daniel: *What grade are you....at school?*

Eric: *Ok. (he covers the camera with his hand)*

On the whole, in spite of some problematic issues that Daniel encountered in his first telecollaborative project, such as the low language proficiency of two of his partners or the struggle to find topics to discuss, he proved to be very enthusiastic and committed to the collaboration, striving to maintain the conversation by asking numerous general inquiry questions. Interestingly, he did not appear to be too concerned with the low English level of his partners because in his post-project interview he stated that he did not notice a considerable difference between his language proficiency and that of the students from Lluís Anton School.

Daniel’s collaboration with Pablo from Anglia School, however, was rather different in the way that Daniel seemed less cheerful and engaged with the telecollaborative meetings. Very often he had a serious face and spoke with low voice, generally not showing much emotion or excitement. As we have already mentioned, Pablo had a high level of English proficiency and almost native pronunciation due to the fact that he had lived in the United States for a year. We cannot state with certainty but we can only assume that this fact might have

disturbed or troubled Daniel as he appeared less confident and self-assured that in the first telecollaborative project.

Apart from the typical introductory questions regarding name, age, hobby, football and so on, Daniel also asked Pablo *“How are you”, “Do you watch news on TV?”, “What time do you finish school?”, “What is your favourite subject?”*. In their collaboration, it was Pablo who almost always initiated the discourse - introducing the discussion topic at the beginning of the session (*“I think that today we need to discuss music, right? Who will start first?”*), or requesting further information about the subject they were discussing (*“What are your traditions?”, “Do you have any other traditions in Bulgaria?”, “Do you want to talk about something else?”*) or seeking Daniel’s personal opinion or future plans (*“What do you think of the educational system of Bulgaria?”, “What do you want to do in your future?”*).

To conclude, Daniel used considerably higher number of general inquiry questions about personal background with his partners from Lluís Anton School than with Pablo from Anglia School. In the first telecollaborative project, Daniel sought to sustain the conversation by asking numerous general inquiry questions. On the contrary, in the second project, he showed less motivation and interest in the collaboration, and so posed fewer questions and did not make such a big effort to maintain successful communication.

b) Follow-Up Questions

This section presents and analyses Daniel’s use of follow-up questions in both telecollaborative projects. This type of questions can be seen as expressing willingness to engage in a more personal relationship and also indicating interest in the partner’s experience or perspective. This is important, because, as Abrams argues, some learners are “able to develop cross-cultural awareness only when they (make) personal connections to the cultural information” (2002: 141). Table 4.4.5 below shows the number of times that he used this interactional feature with each partner within his total time of communication and the relative frequencies per hour. The results reveal that the relative frequency of Daniel’s use of follow-up questions per hour was 25 with Noah; 11.30 with Eric and 6.66 with Hana, who are all participants from Lluís Anton School. With Pablo from Anglia School, Daniel used only 4.54

follow-up questions per hour. Daniel's total use of this interactional feature per hour in both telecollaborative projects was 8.96. This is a rather surprisingly low rate but as the extracts in the section above demonstrated, Daniel either posed general questions which were not intended to extend on the topic discussed in the previous turns or did not know what to ask and so he waited on his partner to request for information.

Table 4.4.5: Number of times that Daniel (Mundi School, Bulgaria) used follow-up questions with each partner within his total time of communication and relative frequencies per hour

Daniel's collaborative partners in both projects	Fem./ Male	Total time of commun. in min.	Follow-up questions	
			Nº of uses	Rel. freq. per hour
Eric (Lluís Anton)	<i>M</i>	69´	13	11.30
Hana (Lluís Anton)	<i>F</i>	27´	3	6.66
Noah (Lluís Anton)	<i>M</i>	12´	5	25
Pablo (Anglia)	<i>M</i>	66´	5	4.54
TOTAL Nº of uses:		174´	26	8.97

Extract 129 below is rather lengthy but yet worthy of note. It is Noah who initiates the interaction by asking "Who do you think is going to win the World Cup?". Daniel, afterwards, expresses his opinion and in addition justifies his view stating "Argentina or Spanish. Spanish have a very good team", "but Argentina don't have a good team for this World Cup", "I think maybe Russia can be a winner". In his next turn Daniel poses the question that he asks almost all of his partners, except Hana, "Do you go on Barcelona stadium?". He might have assumed that since she is a girl, Hana would probably not be that interested in football. On every occasion that he asks this question his next request is always whether they have seen Hristo Stoichkov's Golden Ball at Camp Nou's museum. He poses these questions to Noah, Eric (See extract below) and Pablo. Daniel seems to be very proud of the fact that a Bulgarian player has won the Golden Cup, especially playing for Barcelona Football Club. Actually, as we have mentioned before, he is rather thrilled and curious to find out what the Spanish children know about his small country. After some details that Daniel provides about the Bulgarian team and its participation in the World Cup in the past, Noah, obviously not that interested, changes the topic with the request "Can you say a sentence in Bulgarian?". This

is met with great enthusiasm from Daniel who starts to speak in Bulgarian right away and finishes with “*Can you understand?*”. They both have fun speaking their own languages which their partner does not understand and then Daniel poses his next follow-up question “*Can you speak another language?*”. Ultimately, the extract illustrates Daniel’s willingness and openness to the collaboration and his partner, his aptitude and capacity to follow on a topic, express opinion and request extra information - characteristics attributed to a competent and skilled intercultural speaker, which Daniel proved to be in this interaction with Noah.

Extract 129:

- Noah:* Who do you think is going to win the World Cup?
- Daniel:* Argentina or Spanish. Spanish have a very good team.
- Noah:* I think Spain or Brazil are going to win.
- Daniel:* Yes, but Argentina don’t have a good team for this World Cup.
- Noah:* Yes, Brazil have really good team.
- Daniel:* Yes, I think maybe Russia can be a winner.
- Noah:* Maybe.
- Daniel:* *Do you go on Barcelona stadium?*
- Noah:* Have you went!
- Daniel:* What?
- Noah:* Have you went to the Barcelona stadium!
- Daniel:* Yes.
- Noah:* How many times?
- Daniel:* One.
- Noah:* Me too.
- Daniel:* *Did you see Hristo Stoichkov Golden Ball?*
- Noah:* Mhm (nods).
- Daniel:* He is the best Bulgarian player for every time. In 1994 Bulgaria beat Germany with 2:1 and we go to the semi-final when Italy beat us with 1:0.

Noah: Can you say a sentence in Bulgarian?
Daniel: (speaks in Bulgarian) *Can you understand?*
Noah: (shakes his head and laughs)
Daniel: (laughs too) ...Speak Spanish!
Noah: (speaks in Spanish)
Daniel: (smiles)... I can't understand anything...*Can you speak another language?*
Noah: I can speak Spanish, English, French, Portuguese and Catalán.
Daniel: Wow! Talk me Catalán!
Noah: Catalán!
Daniel: Yes.
Noah: (speaks in Catalán)

Extracts 130 to 132 that follow capture the pattern of the interaction between Daniel and Eric. Since the very first extract we witness Daniel's strong wish and aspiration to communicate with his partner.

Extract 130:

Daniel: Do you like football?
Eric: Yes.
Daniel: *What's your favourite team?*
Eric: Barça.
Daniel: And it's my too. I have a T-shirt (shows it to the camera)
Eric: I love Barça.
Daniel: *What's your favourite football player?*
Eric: Ahh...Messi.
Daniel: Me too. *Have you been to Barça stadium?*
Eric: Ahhh...yes.
Daniel: *Do you see Hristo Stoichkov Golden Ball in Camp Nou?*
Eric: Yes.
Daniel: He is a Bulgarian footballer.

Eric: Yes.

Daniel: He is the best in Bulgaria. *Did you see Barcelona football match?*

Eric: Yes.

Extract 131:

Daniel: Do you like bullfight?

Eric: Yes.

Daniel: *Do you watch?*

Eric: Yes.

Extract 132:

Daniel: How long is one lesson?

Eric: (does not understand the question)

Daniel: How many hours do you have today?

Eric: Aaaa....two (he does not understand)

Daniel: Ok.

In Extract 130 it is Daniel who starts by asking his first question “*Do you like football?*” followed by numerous follow-up questions, clearly intending to receive more information about the opinion, experience or preference of Eric (“*What’s your favourite team?*”, “*What’s your favourite football player?*”, “*Have you been to Barça stadium?*”, “*Do you see Hristo Stoichkov Golden Ball in Camp Nou*”, “*Did you see Barcelona football match?*”). Eric’s English proficiency level, though, appears to be quite low as he fails to comprehend the majority of Daniel’s questions or comments for the most part of their communication. In reality, Eric’s reaction when he didn’t manage to understand Daniel was rather peculiar at times. One such case is illustrated in Extract 132 above when Daniel asks him “*How long is one lesson?*”. Eric looks rather puzzled in the video recording, especially and increasingly after Daniel’s paraphrasing the question “*How many hours do you have today?*”. In order to avoid this embarrassing and awkward situation Eric starts moving his lips, as if talking, but without making any sound, so Daniel is left with the impression that the connection is bad and that is why he does not hear him. Daniel then replies “*Ok*” and decides not to follow-up on the topic. Besides being evident from the video recording that the quality of the sound

was excellent at that moment, I was present at the computer lab during the collaboration and I noticed this odd behavior of Eric's. Naturally, I did not interfere but only recorded it in my observation notebook.

As we made evident in the previous section, the collaboration between Daniel and Hana was disruptive and troublesome due to Hana's low English level proficiency and her struggle to understand and converse in a foreign language. Daniel only posed two follow-up questions in their telecollaborative meeting, one of which is presented in Extract 133 below. Initially, Hana seems to not completely understand Daniel's question "*What's your favourite best friend?*" and responds with "*I don't know*" but after Daniel rephrased it "*Have you got best friend?*" she gives a positive reply. At that point, Daniel makes his follow-up question "*What's his or her name?*" to which Hana answers briefly "Hugo and Ingrid".

Extract 133:

Daniel: What's your favourite best friend?

Hana: I don't know...(they both laugh)

Daniel: Have you got best friend?

Hana: Yes.

Daniel: What's his or her name?

Hana: Hugo and Ingrid.

In his collaboration with Pablo from Anglia School, Daniel only posed five follow-up questions, three of which are represented in Extracts 134 and 135 below. In general, Daniel either waited for his partner to ask a question or simply followed the topic initiated by Pablo. Not surprisingly, Daniel brought up the subject of his partner's knowledge of Bulgaria yet again. After they both run out of further ideas to discuss, Daniel suggests "*Do you want to ask you some questions?*". Once Pablo accepted the proposal, Daniel asked if he knew what the capital of Bulgaria was and, as Pablo evidently did not, he checked secretly on his mobile phone trying to hide it from Daniel. Naturally, Daniel noticed but, nonetheless, they both laughed and had fun, so Daniel eagerly posed his first follow-up question "*Do you know how many people is in Bulgaria?*". This time Pablo answers with "*No*" and remarked that he has

a friend who was born in Bulgaria, thus attempting to diminish the effect of the disaffiliative comment and align with his telecollaborative partner.

Extract 134:

- Daniel:* Do you want to ask you some questions?
- Pablo:* Ok...do you have some question?
- Daniel:* Yeah.. Do you know the capital of Bulgaria?
- Pablo:* (checks Google)
- Daniel:* (smiles) Don't search in internet!
- Pablo:* Sofia?
- Daniel:* (laughs).....ehhhhh you search in internet! (both laugh)
- Pablo:* No!
- Daniel:* *Do you know how many people is in Bulgaria?*
- Pablo:* No, but I have a friend who was born in Bulgaria.
- Daniel:* *Can you say some number?* Like 1 million, 2 million...try to guess how many people live in Bulgaria.
- Pablo:* (checks Google) ...Around 7 million....because it's very big.
- Daniel:* Noooo...we are very small from another Europe country.

Extract 135:

- Pablo:* What's your favourite word?
- Daniel:* Шоколад, chocolate in English.
- Pablo:* (Pablo says his favourite phrase is "Me cago en todo" and explains the meaning)
- Daniel:* (laughs) *Do you want to say some sentence in Bulgarian and maybe then you can tell them to your teacher in Bulgarian?*
- Pablo:* Ok, tell me how to say "I am..."
- Daniel:* (says "My name is Pablo" in Bulgarian)
- Pablo:* (whispers) I don't know what to talk about but I don't want to stop because if I stop talking to you I need to go to class and do English.
- Daniel:* (smiles)...Ohhh, ok! Bye... ciao!

Extract 135 above exemplifies another instance in which Daniel leads the conversation towards his much-preferred topic – discussing and offering information about his country, Bulgaria. In this occasion, he offers to teach Pablo some sentences in Bulgarian, so he can later say them to his teacher (Daniel refers to me as he knows that I am Bulgarian and also Pablo’s teacher at the moment).

Overall, it can be said that Daniel did not use plenty of follow-up questions in both of the telecollaborative projects that he participated in. Nonetheless, he voiced his motivation and eagerness to request additional information about his partners, often revealing curiosity towards the Spanish participants’ culture and habits, through questions such as “*Do you like bullfight*”, “*How long is one lesson?*”, “*What is typical Spanish food*”, “*What languages do you speak?*”. Daniel was capable of valuing the aspects of both cultural identities, mediating between cultures and was “able to negotiate in both, but possessing individual identity that is flexible in its ability to combine aspects of multiple cultures in performance” (Guilherne, 2000). As Byram (2003) argues, the most competent intercultural mediators

are those who have an understanding of the relationship between their own language and language varieties and their own culture and cultures of different social groups in their society, on the one hand, and the language (varieties) and culture(s) of others, between (inter) which they find themselves acting as mediators.

c) Personal Opinion Questions

No personal opinion questions were detected in the data of Daniel’s both telecollaborative projects. He used mainly general inquiry questions about personal background, fewer follow-up questions and none to request personal opinion from his telecollaborative partners.

4.5. Students' and Teachers' Perceptions of the Telecollaborative Interactional Context

This section aims to offer yet another perspective on the above described online interactional contexts that of all the participating students and teachers. In view of that, participants' pre-project and post-project questionnaires and the face-to-face interviews were transcribed and translated to English by the researcher and later analyzed using content analysis. Overall, the analysis of the data showed that learners believe that the telecollaborative projects improved their confidence, encouraged sharing of ideas, views, opinion and experiences and provided real-time situations in which they felt the necessity to use English. The videoconferencing technology helped students interact with international participants which made it particularly enjoyable for everyone.

As we have explained in the Methodology Chapter, Section 3.3.2, this project was not part of the students' school curricular nor of their official assessment, that is, learners' participation was on voluntary bases. For this reason, not all students consented in giving pre- and post-project interviews or submitted their questionnaires. Tables 4.5.1 and 4.5.2 below provide an overview of the participating students and teachers who agreed to be interviewed and/or turned in their questionnaires in both telecollaborative projects. Crosses are used to mark those students and teachers.

Table 4.5.1: Participants from **Mundi School, Lluís Anton School** and **Anglia School** who submitted questionnaires and/or gave interviews

Mundi School Student's name	Pre-project questionnaire	Pre-project interview	Post-project questionnaire	Post-project interview
Maria Jana	✓		✓	✓
Daniel	✓		✓	✓
Tania	✓		✓	✓
Raya	✓		✓	✓
Iana			✓	✓
Nadia				✓
Ivo	✓			✓
Galia	✓		✓	✓
Magda	✓			✓
Manuela				✓

Lluís Anton School Student's name	Pre-project questionnaire	Pre-project interview	Post-project questionnaire	Post-project interview
Angela	✓	✓	✓	✓
Manuel	✓	✓		✓
Eric	✓	✓	✓	✓
Malek	✓	✓	✓	✓
Hugo	✓	✓	✓	✓
Amira	✓	✓	✓	✓
Hana		✓	✓	✓
Jimena		✓		✓
Carla	✓		✓	✓
Noah				
Berta	✓			
Julia	✓	✓	✓	✓
Anglia School Student's name	Pre-project questionnaire	Pre-project interview	Post-project questionnaire	Post-project interview
Andrea	✓	✓	✓	✓
Patricia	✓	✓	✓	✓
Matias	✓	✓	✓	✓
Pablo	✓	✓	✓	✓
Arnau	✓	✓	✓	
Gabriel	✓			

Table 4.5.2: Teachers from **Mundi School** and **Lluís Anton School** who gave a post-project interview

Mundi School Teacher's name	Post-project interview
Boyana	✓
Marina	✓
Lidia	✓
Lluís Anton School Teacher's name	Post-project interview
Aina	✓

Angela, from Lluís Anton School, Spain, was a very dedicated and enthusiastic participant who also gave the most extensive and detailed responses in both the questionnaires and the interviews. In her, post-project interview she expressed her happiness to have participated in the projects at the same time making a reference to various other issues, such as the benefits of real-time communication to improve L2 skills. According to her, the project enhanced her vocabulary, her comprehension skills, as well as her ability to express herself *“speaking with another person helps me in my performance in English, to understand better and how to*

explain things”. Angela also mentioned the advantages of interacting with another non-native speaker, since she considers that having “*more or less the same level*” makes it easier to communicate and reduces her anxiety. And, finally, she adds that the participation in the projects boosted her confidence when speaking in a foreign language “*after a few sessions I was not so nervous* “ (See Extract 136).

Extract 136:

Angela: I liked the project a lot! ...I am more or less good at English, even though I don't know a lot of vocabulary... and because in class they don't teach us a lot of English I feel like I don't know the vocabulary... so speaking with another person helps me in my performance in English, to understand better and how to explain things. I have failed in some things because I am not English but I have seen that I have improved my English and how to interact with others in English. It is better like this because the other person is also starting to speak English, she is not English either, even though she speaks well but yet we are at more or less the same level and so I could communicate with her, despite the fact that her level was a bit higher. But well, we were quite similar because we understood each other. I sometimes got nervous...I don't know why, especially during the first sessions because I didn't know how I will manage to speak but after a few sessions I was not so nervous.

Similarly, Iana from Mundi School, Bulgaria (Extract 137) and Patricia from Anglia School, Spain (Extract 138), shared their satisfaction with the project and emphasized on the importance of learning about other people’s perspectives and opinions.

Extract 137:

Iana: It was very interesting for me to know about my partner's opinion on certain topics. I learned more about the point of view of the Spanish children and their lifestyle.

Extract 138:

Patricia: *It has helped me see other points of view, socialize and personally, to explain about the current situation of Spain, even though it might not be very nice to describe it.*

All the participants expressed their initial anxiety about having to interact with people from a different cultural and linguistic background. However, in their responses they pointed out that one of the biggest advantages of the project was the fact that it helped them break this barrier and overcome the fear, in this way turning them into more confident and self-reliant communicators. Malek, for instance, admitted that this was an “*unforgettable*” experience for him (Extract 139) adding that at the beginning he felt nervous because he felt that he “*couldn't say a word*” in English but a few sessions later he started feeling relaxed. Similarly, Maria Jana (Extract 140) considered the projects were “*an amazing experience*”, also mentioning that she is “*not very sociable*” which made her feel a bit nervous, especially at the beginning, but, eventually, it turned out to be a “*very pleasant*” experience and, at the end, she “*felt a lot more relaxed*”. In Extract 141 Daniel shared very similar perceptions, stating that he was preparing some vocabulary and ideas at home so that he could feel more comfortable while interacting with his peers. Likewise, Patricia (Extract 142) commented that she felt nervous at the beginning and also revealed that the fact that the conversation was video recorded actually added to her anxiety. Despite these inconveniences, Patricia displayed her satisfaction with the project stating that it helped her overcome her shyness when speaking English with students from different linguistic background.

Extract 139:

Malek: *It is an experience that I liked very much and that will be unforgettable. I felt good and nervous because, initially, I couldn't say a word but after a while I felt relaxed.*

Extract 140:

Maria Jana: *I am not very sociable so the fact that I could meet a girl from abroad and talk in a language that is not our own was an amazing experience. Actually, I was very nervous, even though it was the second project that I participated in. I feel like because I was so nervous I forgot many words and also I didn't want to make my*

partner wait for me to think about the right word. But at the end, it was very pleasant. After a few meetings I felt a lot more relaxed.

Extract 141:

Daniel: Yes, I felt nervous at the beginning but I would say after the first one I was more relaxed... I was preparing myself at home... About the topic, like, what I will say, some words, things like this. I had noticed that they had some notes in their notebooks so I wanted to be prepared too.

Extract 142:

Patricia: The thing that I liked most is the fact that I had the opportunity to meet a girl from Bulgaria with whom I would like to stay in touch in the future. Apart from being able to talk to her half an hour it helped me to overcome my shyness to speak in English.

Honestly, I felt differently during the project. The fact that everything was being recorded made me feel nervous and I sometimes could not find the right words. When I managed to forget that I was recording I felt very comfortable and my partner also made me feel at ease. There were moments in which she shared her problems in life with me and I tried to give her advice as if we had known each other forever.

In Extract 142 Patricia mentions another prerequisite for the successful outcome of the telecollaborative interaction, which had already been mentioned in the existing literature, namely, the emotional level and the pairing process. Müller-Hartmann (2000a and 2000b) recommends that students first need to develop rapport with their virtual partners in order to create an atmosphere in which different cultural meanings can be explored and a 'change-in-perspective' can be achieved. To facilitate the development of such a favorable environment, Müller-Hartmann (2000a and 2000b) suggests that exchanges should have adequate initial stages which would include activities, such as the exchange of photos or videos, e-mails describing students hobbies and interests prior to the beginning of the project. This was a significant drawback for Andrea, a student from Anglia School, Spain, who considered the project not to be very beneficial due to the lack of good relationship between her and her partner Iana (See Extract 143). Curiously, Iana never implied to have noticed anything of this kind; on the contrary, as we showed above, she felt content to learn about her partner's point of view and lifestyle (See Extract 137).

Extract 143:

Andrea: I did not like the fact that with my partner we did not have a lot in common and sometimes it was uncomfortable as we ran out of topics to discuss or she did not contribute to the conversation a lot. I would have change the way the pairing is done. The entire project would have resulted better if you got on well with your partner, therefore, I think it would have been better if we had introduced each other through a letter or a video beforehand and depending on the things we have in common, select the partner.

Honestly, the project was not very beneficial, I suppose because my partner did not like me very much.

Additionally, we were interested in uncovering the participants' perceptions regarding the intercultural knowledge they have attained during the telecollaborative projects. Therefore, we inquired into their opinion, whether they considered they had learnt something about their partners' culture and the responses that we received were rather unanimous. The majority of the students claimed that they had learned new things about the culture, mentioning mainly the traditions and celebrations, food, music or sports.

Extract 144:

Patricia: Sincerely, I knew nothing at all about Bulgaria, only its location in the map. I was really surprised by some cultural aspects, like; according to my partner the people there are not very open-minded.

Extract 145:

Amira: Yes, I have learnt about their culture - their traditions and food ...but at the end we are the same. We are humans. Yes, in my opinion the project was very interesting.

Extract 146:

Hugo: Yes, I have learned about their typical food and traditions....we both have our typical food and traditions ... but after all, it is all the same.

In Extract 144, for instance, we witness a case in which the online interaction can lead to the reinforcement of cultural stereotypes, which is one of the concerns regarding the value and effectiveness of telecollaboration found in literature (See Section 2.4.). In Extracts 145 and

146, both Amira and Hugo confirm the favourable aspect of the project regarding acquiring knowledge about their partners' culture and go on focusing on the similarities between the cultures rather than the differences. It is worth reminding of Amira's multicultural background, her family is from Pakistan, where she frequently travels, and she has relatives living in UK and USA. As she shared in her interview, she communicates in English with her cousins and uncles living abroad. It is my belief that the extensive traveling and richer cultural knowledge and background are factors that influence students' perceptions and understanding of intercultural issues. Such is the case with Andrea (Anglia School, Spain), whose father is from Taiwan, therefore, on many occasions she has visited various Asian countries; she has also travelled extensively throughout Europe; and stayed in USA for an exchange program for three months. As a result of this, it came as no surprise when Andrea stated in her post-project questionnaire that she did not discover big differences in the culture of the two countries, namely, Spain and Bulgaria (Extract 147).

Extract 147:

Andrea: Yes, I have learned some things but nothing had surprised me because as we live on the same continent the cultural differences are not that strong.

Malek is another participant from Lluís Anton School, Spain, whose parents are from Pakistan, and therefore, he is considered to have multicultural background as well. This fact makes his response (Extract 148), that he has not learned anything about the culture but the traditions and celebrations, quite alarming and perplexing. If he does not consider traditions and celebrations as an integral part of the cultural heritage of a country, it makes us contemplate the necessity of raising more intercultural awareness and knowledge among students. As we have already mentioned, the sheer participation in telecollaborative projects does not automatically lead to linguistic and intercultural knowledge but these projects need to be set up carefully and involve previous preparation and active teacher support.

Extract 148:

Malek: *I haven't learned anything about their culture but I have learned about their traditions and that they celebrate many holidays which are celebrated in other European countries.*

Actually, Malek's teacher, Aina, raised this issue in her post-project interview (Extract 149). She stressed the necessity of prior preparation as one of the fundamental requirements for the successful outcome of the project. She claimed that more attention and in-class work is needed in order to prepare the students for more in-depth conversations. Apart from this, she mentioned other challenges, which we have previously mentioned, such as lack of time and difficulty to fit a project of this kind within the busy school curricular, logistic and timetable issues among others.

Extract 149:

Aina (teacher at Lluís Anton School, Spain): *I have to say that the continuity and consistency of the project are fundamental. The fact that they had the topic previously set and having to arrange with the other person to talk about the same topic was great... But we lack time for preparation and, well the kids did what they could and it was fine. I like it very much because it was not only "come on let's chat!", no, it was "we must talk about this topic".*

I wish more children could have had the opportunity to participate in the project, even though they would be different children every, everything else was great. It was very well organized, thanks to you and the other teacher, as you arranged the time of the meetings and the topics...it was only possible thanks to your help, if not, with our day-to-day duties it would have been extremely difficult. Firstly, finding the school was a challenge and then also managing to fit their and our timetables....as you remember, we had to ask for the parents' permission to let their children stay after classes were over.

But well, it was very useful because until now they had never felt the necessity to communicate with someone in English...if only we had worked it better in the classroom!...How to make longer sentences...this is something we need to focus on in class, not only projects, projects...but also dedicate in-class time to this experience, to the oral communication. I could see that the kids just hung up without saying goodbye, just like that, they hung. These are the basic norms that I would like to work on next year and hopefully we have opportunity to organize a project like this again.

4.6. Chapter Summary

The accounts of the video recorded sessions provided detailed pictures of Tania, Maria Jana and Daniel's use of interactional patterns as they build relationship with their intercultural partners when introducing telecollaboration into the secondary learning environment. As demonstrated above, Tania used more numerous interactional features in the second telecollaborative projects. This means that she displayed the skills of information discovery and interaction more successfully when collaborating with Matias from Anglia School. However, we need to take into consideration the fact that the first telecollaborative project was less structured and more flexible and as a result of this Tania communicated with three different participants whereas in the second project she had one stable partner with whom she participated in four videoconferencing intercultural sessions. Her response to the telecollaboration after her second project improved notably.

Similarly, Maria Jana used more interactional features in her second telecollaborative project, in which she had a stable partner, and much less in the first one where she changed partners in each session. In the second telecollaborative project she demonstrated much higher level of involvement and scored better at her intercultural discourse skills by keying her messages with emotion and interest and marking her speech with involvement and openness to her partner. Maria Jana and her partner in the second project, Patricia, established a very friendly relationship; they were supportive to each other's problems, provided advice and encouragement when they shared their difficulties, worries and concerns. Interestingly, this dyad continuously co-constructed their interaction by providing detailed, in-depth information about their life, hobbies, school routine, family and others.

The third case study participant, Daniel, did not utilize numerous nor diverse interactional features with his partners in both telecollaborative projects. He used rather neutral rhetoric, not strongly marked with expressiveness or feelings. Overall, in spite of some problematic issues that Daniel encountered in his first telecollaborative project, such as the low language proficiency of two of his partners or the struggle to find topics to discuss, he proved to be very enthusiastic and committed to the collaboration and striving to maintain the

conversation. Daniel's collaboration with Pablo in the second project, however, was rather different in the way that Daniel seemed less cheerful and engaged with the telecollaborative meetings. Very often he had a serious face and spoke with low voice, generally not showing much emotion or excitement. As we have explained, this might be due to Pablo's high level of English proficiency, which might have disturbed or troubled Daniel as he appeared less confident and self-assured than in the first telecollaborative project.

The result of the analysis of both students and teachers' responses indicates that a substantial majority of the respondents regard online intercultural communication as favourable for educational purposes. However, there are cautions to be observed before using it freely in the classroom. Telecollaboration, therefore, cannot only be used because it is convenient or modern but rather it should be approached with the responsibility and attention it demands. We will discuss this more extensively in Chapter 6, Section 6.4.

CHAPTER 5: RESULTS (II): PATTERNS OF NEGOTIATED INTERACTIONS AND COMMUNICATION STRATEGIES WHEN COMMUNICATION BREAKDOWNS OCCUR

This chapter examines negotiation of meaning during telecollaboration between non-native speakers of English in a task-based language classroom environment (Van der Zwaard & Bannink, 2014a) and offers an overview of the patterns of negotiated interactions when communication breakdowns occur and the communication strategies used by all participants from Mundi School (Bulgaria), Lluís Anton School (Spain) and Anglia School (Spain) in two telecollaborative projects. Discourse analysis was applied in order to analyze the data collected in the telecollaborative sessions, following Varonis and Gass' model of non-understandings (1985). In Section 5.1 descriptive statistical analyses are presented in order to provide an outline of the patterns of negotiated interactions when communication breakdowns occur; examples are provided from all participants involved in both projects to demonstrate that these phenomena do not only occur in the three case studies. Section 5.2 provides descriptive statistical analysis of the communication strategies used by all students to indicate or to resolve communication problems; examples are provided from all participants involved in both projects. In Sections 5.3, 5.4 and 5.5 we offer an in-depth analysis of both the patterns of negotiated interactions and the communication strategies used by the three case study participants: Tania, Maria Jana and Daniel. These case studies are explanatory and illustrative as they offer insights about the type and frequency of patterns and strategies that learners made use of during their interactions. In Chapter 5.6 we offer the perceptions of students and teachers regarding learners' communication skills, and finally, Section 5.7 provides a summary of the results.

5.1. Overview of the Patterns of Negotiated Interactions When Communication Breakdowns Occur

This section presents descriptive statistical analysis of all participants' online communications in both telecollaborative projects in order to provide a numerical overview of the patterns of negotiated interactions that learners followed when they faced a problem of understanding or expressing themselves. When a communication breakdown occurs, it can be initiated by the speaker or by the listener; also, it can be resolved either by the speaker or by the listener, or the negotiation episode might remain unsolved. The combination of these factors results in six possible patterns of negotiated interactions depending on by whom the communication problem was indicated and resolved. Table 5.1 below presents the resulting six categories yielded from the data collected in this investigation together with the total number of times that each category was detected in both projects.

Table 5. 1: Patterns of negotiated interactions and the total number of times that each category was detected in both projects

	Patterns of negotiated interactions	Total number of uses
1.	Speaker Indicated-Speaker Resolved	143
2.	Speaker Indicated-Listener Resolved	31
3.	Listener Indicated-Speaker Resolved	208
4.	Listener Indicated-Listener Resolved	25
5.	Speaker Indicated-Negotiation Not Resolved	20
6.	Listener Indicated-Negotiation Not Resolved	128

With the purpose of exemplifying each of the abovementioned negotiation patterns we provide illustrative examples selected from the data. Additionally, the extracts include the communication strategies that the participants used during the negotiation episodes. Definition and examples of the communication strategies used in this study are provided in Section 5.2.

Pattern 1: Speaker Indicated-Speaker Resolved

This pattern was the second most frequently used one by the participants, detected 143 times in the data from both projects. Table 5.2 below exemplifies it, showing Raya talking to Jimena about her school. While Raya was attempting to pose a question about the amount of homework that they were given in Jimena's school, we could see that Raya encountered a problem when formulating the request as she self-corrected multiple times "...and did you they give us a lot of homework?...mmm do you...do they....give us....give YOU...". Eventually, the negotiation episode was resolved successfully and her partner responded "*Sometimes*".

As explained in the Literature Review, Section 2.6, the trigger is "that utterance or portion of an utterance on the part of the speaker which results in some indication of non-understanding on the part of the hearer" and the indicator is the "utterance on the part of the hearer that essentially halts the horizontal progression of the conversation" (Varonis & Gass, 1985). In the current example, however, Raya's words in Turn 1 were coded as a trigger and at the same time as an indicator. What triggered the problematic situation was her difficulty in conveying the idea and formulating a grammatically correct request which she, herself, indicated by using a Self-Correction strategy, as well as a Filler (*mmm..*) and Non-Verbal Indicators. It is important to clarify that in the current study we took into consideration not only instances of indication of non-understanding (Can you repeat?) but also cases of indicators of trouble of expressing oneself, such as in the current extract. Besides, we included in our analysis instances of Non-Verbal Indicators, which were normally used to express linguistic trouble, such as, looking away from the camera, frowning as if to indicate difficulty and concentration, fidgeting and others. These indicators were not mentioned in Varonis and Gass' model of non-understanding but are, without any doubt, an essential part of the online videoconferencing mode which determines the context of this study.

Table 5.2: Raya - Jimena (Mundi School-Lluís Anton School)

Turn	Transcript	Coding	Comm. strategy used
1	<i>Raya:</i> I like it (my school) but sometimes the teachers give us a lot of homework....and did you they give us a lot of homework?...mmm do you...do they.... give us....give YOU...(smiles)	Trigger/Indicator	Self-Correction/ Non-Verbal Indicator/Filler
2	<i>Jimena:</i> Sometimes.	Response	

Table 5.3: Galia - Angela (Mundi School-Lluís Anton School)

Turn	Transcript	Coding	Comm. strategy used
1	<i>Galia:</i> Do you (looks away from camera).....are you having holiday next week?	Trigger/Indicator	Non-Verbal Indicator /Self- Correction
2	<i>Angela:</i> Repeat, please!	Indicator	Direct Appeal for Assistance
3	<i>Galia:</i> Yes, do you have a holiday.... will you have a holiday next week?	Response	Self-Correction
4	<i>Angela:</i> Nooo. (smiles)	Reaction to Response	Non-Verbal Indicator

Pattern 2: Speaker Indicated-Listener Resolved

Speaker Indicated-Listener Resolved pattern was detected 31 times in total in the data, that is, this pattern was not very commonly used by the learners in these two telecollaborative projects. In Table 5.4, for instance, we witness Gabriel, in the role of the speaker, indicating a lexical problem that he faced while posing a question to Ivo. Gabriel initiated the request “*Which is the...*” and then suddenly made a pause, looking away from the camera, as if trying to remember a word, but, as can be observed, he did not manage to and so resorted to Transfer as a communication strategy. He transferred the meaning of the Spanish word “*asignatura*” which means “*subject*” in English, which apparently triggered Ivo’s non-understanding as he could not recognize this lexical item. After Ivo’s Direct Appeal for Assistance Gabriel yet again indicated his trouble using Fillers and Non-Verbal Indicators and next applied Circumlocution by trying to explain and exemplify the troublesome lexical item “*... thing to do in school? English, Bulgarian, Maths, Socials...*”. His use of this strategy eventually brought the negotiation episode to a successful end with his partner not only understanding the request but also providing the correct lexical form in his response “*my favourite subject is IT*”.

Table 5.4: Ivo - Gabriel (Mundi School-Anglia School)

Turn	Transcript	Coding	Comm. strategy used
1	<i>Gabriel: Which is the...the assigniture you like most? Also from languages or Maths...mmm...</i>	Trigger	Non-Verbal Indicator/Transfer/Circumlocution/Filler
2	<i>Ivo: (looks confused) Mmm...repeat, please!</i>	Indicator	Non-Verbal Indicator /Filler/Direct Appeal for Assistance

3	<i>Gabriel:</i> Aaa...what is your favourite...mmmm thing to do in school? English, Bulgarian, Maths, Socials...	Response	Non-Verbal Indicator /Filler/ Circumlocution
4	<i>Ivo:</i> I love...my favourite subject is IT.	Response	Recast

Table 5.5: Manuela - Manuel (Mundi School-Lluís Anton School School)

Turn	Transcript	Coding	Comm. strategy used
1	<i>Manuel:</i> Eee...what many friends do you.....do you have?	Trigger/Indicator	Filler/Self-correction
2	<i>Manuela:</i> What? (<i>gets closer to camera</i>) How many friends do I have?Yes?	Indicator	Direct Appeal for Assistance/ Non-Verbal Indicator/ Confirmation check/ Clarification Request
3	<i>Manuel:</i> (<i>nods</i>)	Response	Non-Verbal Indicator
4	<i>Manuela:</i> Ok, I have lots of friends from school, from my dancing classes, ..but I don't know exactly how much I haveI wasn't counting them...what about you?	Reaction to Response	

In Table 5.5 above, we can see Manuel, attempting to pose a question to Manuela but as he faced difficulty forming the request, Manuel indicated his trouble using a Filler and Self-correction strategy. Manuela perceived her partner's struggle and as she encountered an understanding problem she resorted to various communication strategies in order to resolve it. More specifically, Manuela used Direct Appeal for Assistance initially "What?", followed by a Non-Verbal Indicator to signal her trouble, as well as a Confirmation check and a

Clarification request. Manuel’s nod confirmed her speculation and at the end the conversation popped back, with Manuela providing a detailed response to her partner.

Pattern 3: Listener Indicated-Speaker Resolved

This is the meaning negotiation pattern that was most frequently used by the participants in this study, precisely; we detected it in 208 instances in the data. The following example (Table 5.6), showing a Listener Indicated-Speaker Resolved pattern, is a rather lengthy but very rich illustration of participants’ use of diverse communication strategies resulting in successful negotiation of meaning. We could see Andrea opening the discourse, asking Iana about the unit that they were doing in Maths at that moment, which triggered Iana’s non-understanding that she indicated using Direct Appeal for Assistance. In her response, Andrea used various communication strategies. She first repeated her request “*What unit are you doing now in Maths?*” but in order to assure the correct understanding of her partner she also applied Circumlocution strategy, that is, gave an example of what she wanted to express “*Like, equations or trigometry?*”. Iana clearly understood Andrea’s request but this time encountered a lexical problem, which she indicated not only using Fillers and Non-Verbal Indicators but also signaled it explicitly “*I don’t really know how they are called in English*”. After employing communication strategies, such as, Use of L1 and Audio-Visual Support in several occasions, the participants managed to resolve the problematic linguistic situation and closed the meaning negotiation episode successfully in Turn 11.

Table 5.6: Iana - Andrea (Mundi School-Anglia School)

Turn	Transcript	Coding	Comm. strategy used
1	<i>Andrea:</i> What are you doing now in Maths? Like.. unit?	Trigger	
2	<i>Iana:</i> What?	Indicator	Direct Appeal for Assistance

3	<i>Andrea:</i> What unit are you doing now in Maths? Like, equations or trigometry?	Response	Repetition/ Circumlocution/ Transfer
4	<i>Iana:</i> Well...it's like those...I don't really know how they are called in English.. (appears to be thinking, looks confused)	Indicator	Explicit Verbal Indicator/Non- Verbal Indicator
5	<i>Andrea:</i> In Bulgarian how is it called?	Response	
6	<i>Iana:</i> Аааммм...квдратни уравнения.. (looks confused)	Indicator	Filler/Non- Verbal Indicator/Use of L1
7	<i>Andrea:</i> Ohhhh...you doing this..? (writes on the board behind her so Iana can see on the camera)	Response	Audio-Visual Support
8	<i>Iana:</i> Yes! (smiles; thumbs up)	Response	Audio-Visual Support/ Non- Verbal Indicator
9	<i>Andrea:</i> Oh, ok. I get it.	Reaction to Response	
10	<i>Iana:</i> I actually have my Maths student's book here so I can show you. (shows on the camera)	Response	Audio-Visual Support
11	<i>Andrea:</i> Oooohh...yes! (nods head) I know what are they, yeah!	Reaction to Response	Non-Verbal Indicator

Table 5.7: Galia - Angela (Mundi School-Lluís Anton School)

Turn	Transcript	Coding	Comm. strategy used
1	<i>Angela:</i> Do you like the books of murmudies?	Trigger	Approximation
2	<i>Galia:</i> Of..? Of the..? (<i>gets closer to camera</i>)	Indicator	Clarification request/ Non-Verbal Indicator
3	<i>Angela:</i> Of murmadies. Mur-ma-dies (<i>slowly</i>).	Response	Repetition
4	<i>Galia:</i> Mmm...yes (<i>looks confused</i>). I like Burger King and McDonald's but I don't eat them because they are not good for our body.	Indicator	Non-Verbal Indicator
5	<i>Angela:</i> Ok (<i>smiles</i>). My question is do you like the books of the murmadies.	Response	Repetition/ Non- Verbal Indicator /Transfer
6	<i>Galia:</i> Ahh..yes! Sorry, I (<i>smiles</i>)	Response	Non-Verbal Indicator
7	<i>Angela:</i> Don't worry. I love murmadies.	Reaction to Response	
8	<i>Galia:</i> Ariel? Maybe Ariel?	Indicator	Confirmation Check
9	<i>Angela:</i> Yes! I like fantasy.	Response	

The above Table 5.7 is a very interesting example of Listener Indicated-Speaker Resolved pattern, in which we witness Galia and Angela's determination to solve the communication breakdown. This is yet another lengthy demonstration of the partners' mutual effort to come to a successful solution of this linguistic hindrance. What triggered it was Angela's lexical

deficiency and, therefore, the use of approximation of the word “mermaids” which she pronounced as “murmedies”. Galia failed to understand and, therefore resorted to the use of a Clarification Request together with a Non-Verbal Indicator, getting closer to the camera and seeming confused at the same time. As Table 5.7 illustrates, after numerous turns and various communication strategies used to indicate as well as to resolve the breakdown, finally in Turn 9 the comprehension was restored and the flow of interaction was resumed.

Pattern 4: Listener Indicated-Listener Resolved

This pattern was only identified in 25 occasions in the data which makes it one of the least often used one by the participating students. In Table 5.8 Manuela offered a very clear example of Listener Indicated-Listener Resolved pattern of meaning negotiation. When Manuel posed a question, visibly demonstrating his trouble in formulating it and expressing himself “*Ah yes, the music....youwhat tipus de music listen?*”, Manuela, in Turn 2, rather evidently indicated his mistake first and then used a Recast strategy “*what type of music, you wanted to say!*”. Likewise, Recast was the strategy that Magda used in her conversation with Jimena (See Table 5.9) in order to indicate a linguistic inaccuracy and correct it. After Magda’s inquiry on her partner’s favourite sport, Jimena responded with “*Swim*”, which was immediately detected and modified by Magda, thus very quickly restoring the mutual understanding and assuring the return to the conversation.

Table 5.8: Manuela - Manuel (Mundi School-Lluís Anton School)

Turn	Transcript	Coding	Comm. strategy used
1	<i>Manuel:</i> Ah yes, the music....youwhat tipus de music listen? (looks hesitant)	Trigger/Indicator	Filler/Non-verbal Indicator
2	<i>Manuela:</i> Ahh... what type of music, you wanted to say! I like pop music bit I like some strange, weird songs that make strange sounds.	Response	Recast

Table 5.9: Magda - Jimena (Mundi School-Lluís Anton School)

Turn	Transcript	Coding	Comm. strategy used
1	<i>Magda:</i> What is your favourite sport?		
2	<i>Jimena:</i> Swim.	Trigger	
3	<i>Magda:</i> Swimming, ok.	Response	Recast

Pattern 5: Speaker Indicated-Negotiation Not Resolved

The most scarcely used pattern in this study is Speaker Indicated-Negotiation Not Resolved, which was only found in 20 occasions in the data. The extract that follows (Table 5.10) shows an instance in which the negotiation remained unsolved. It was Arnau who opened the episode with a question about the geographical regions in Bulgaria. His trouble of expression was made obvious by the use of pauses, Fillers and Non-Verbal Indicators detected in the video recording. Arnau tried to solve the problem by using Transfer, more specifically; he utilized the Spanish word “provincias” meaning “regions” in English. His partner, however, was not able of comprehending Arnau’s request and merely responded “Ok”. In Turn 3 Arnau insisted on receiving an answer by directly requesting “What?” but, apparently, Ivo’s non-understanding remained as he responded with “Nothing, I said ok”. In Turn 5, we can see that Arnau did not intend to proceed with the meaning negotiation anymore and he simply renounced, saying “Ok” and thus closed the negotiation process.

Table 5.10: Ivo - Arnau (Mundi School-Anglia School)

Turn	Transcript	Coding	Comm. strategy used
1	<i>Arnau:</i> In which...what is Bulgaria divided in mmm...like, provincias or something like that?	Trigger/Indicator	Self-Correction/ Filler/ Non-Verbal Indicator / Use of L1

2	<i>Ivo: Ok.</i>	Response	
3	<i>Arnau: What?</i>	Indicator	Direct Appeal for Assistance
4	<i>Ivo: Nothing, I said ok.</i>	Response	
5	<i>Arnau: Ok.</i>	Reaction to Response	

Table 5.11: Magda - Jimena (Mundi School-Lluís Anton School)

Turn	Transcript	Coding	Comm. strategy used
1	<i>Magda: What kind of music do you like?</i>		
2	<i>Jimena: Regeton.</i>	Trigger	
3	<i>Magda: What's that? I haven't heard about it.</i>	Indicator	Clarification Request
4	<i>Jimena: Okkk (looks away and smiles) sometimes I listen.</i>	Response	Filler/ Non-Verbal Indicator
5	<i>Magda: Ok.</i>	Reaction to Response	

In Table 5.11 it was Jimena's response that Regeton is her favourite kind of music that triggered Magda's non-understanding. Magda indicated it by using a Clarification Request "What's that? I haven't heard about it", asking her partner to provide additional information on the meaning of this lexical term. Jimena, however, did not provide any but merely responded "Okkk sometimes I listen" at the same time looking away from the camera, seeming a bit uneasy. It was exactly this Non-Verbal Indicator that made us assume that Jimena might not have had sufficient linguistic knowledge so as to provide a clear explanation in English which could have made her reluctant to intend. Magda might have

perceived her partner’s discomfort as she did not request any more information but rather reacted with “Ok” and the conversation went on.

Pattern 6: Listener Indicated-Negotiation Not Resolved

We uncovered 128 instances of Listener Indicated-Negotiation Not Resolved pattern in the data which means that this was one of the most favored and regularly used patterns by the participants. This final pattern is very similar to the previous one, the only difference being that it is the listener who indicates the trouble, rather than the speaker. In Table 5.12 Manuela asked Manuel about the sights in his town. As Manuel demonstrated very low level of English proficiency throughout the whole project, it came as no surprise that he did not grasp Manuela’s request. He indicated his understanding trouble by using a pause and a Filler (*Mmmmm...*), however, in order to save his face he did provide an answer “no”, which puzzled Manuela. It seems that she perceived his linguistic problem and, therefore, used a Confirmation Check “*Sights? You don’t have?*” followed directly by Circumlocution. She provided a thorough definition of the term “sights” but despite her effort Manuel failed to understand her and in Turn 4 he abandoned the negotiation process, closing abruptly with “*...bye...bye, bye!*”. In the final Turn Manuela reacted to his response with “*Ok, bye*”, appearing rather disillusioned and puzzled by her partner’s reaction in the video recording.

Table 5.12: Manuela - Manuel (Mundi School-Lluís Anton School)

Turn	Transcript	Coding	Comm. strategy used
1	<i>Manuela:</i> Do you have any sights in your town?	Trigger	
2	<i>Manuel:</i> Mmmmm... no! (looks confused)	Indicator	Filler/ Non-Verbal Indicator
3	<i>Manuela:</i> Sights? You don’t have? Oh.... something that is popular and everybody visit is a site. You visit it and you learn	Response	Confirmation Check/ Circumlocution

	the history about it. It has a history. That's the meaning of a sites.		
4	<i>Manuel:</i> Mmmm mmmm ...bye...bye, bye! (fidgets, looks around)	Indicator	Filler/ Non-Verbal Indicator
5	<i>Manuela:</i> Ok, bye.	Reaction to Response	

Table 5.13: Galia - Amira (Mundi School-Lluís Anton School)

Turn	Transcript	Coding	Comm. strategy used
1	<i>Galia:</i> How celebrate Christmas in Spain?		
2	<i>Amira:</i> In Spain, like Christmas tree and presents...and after Christmas there is a festival, they throw candies and...	Trigger	
3	<i>Galia:</i> Can you repeat?	Indicator	Direct Appeal for Assistance
4	<i>Amira:</i> Wait...do you have a special dish?	Response	Topic Abandonment
5	<i>Galia:</i> Yes, my birthday, mom and dad's birthday... do you have a facebook profile?	Response	Topic Abandonment

In Table 5.13 we see Amira explaining about Christmas celebration in Spain when suddenly Galia interrupted her, requesting assistance as something triggered her non-understanding. Amira, however, instead of attempting to solve the communication breakdown opted for abandoning the topic and asking a completely different question “*do you have a special dish?*”. Seemingly confused by her partner’s request, Galia provided an incoherent answer which was followed by another Topic Abandonment strategy, most likely in an attempt to save the communication flow. Topic Abandonment was a common strategy used by the learners when they feared communication breakdown or loss of face.

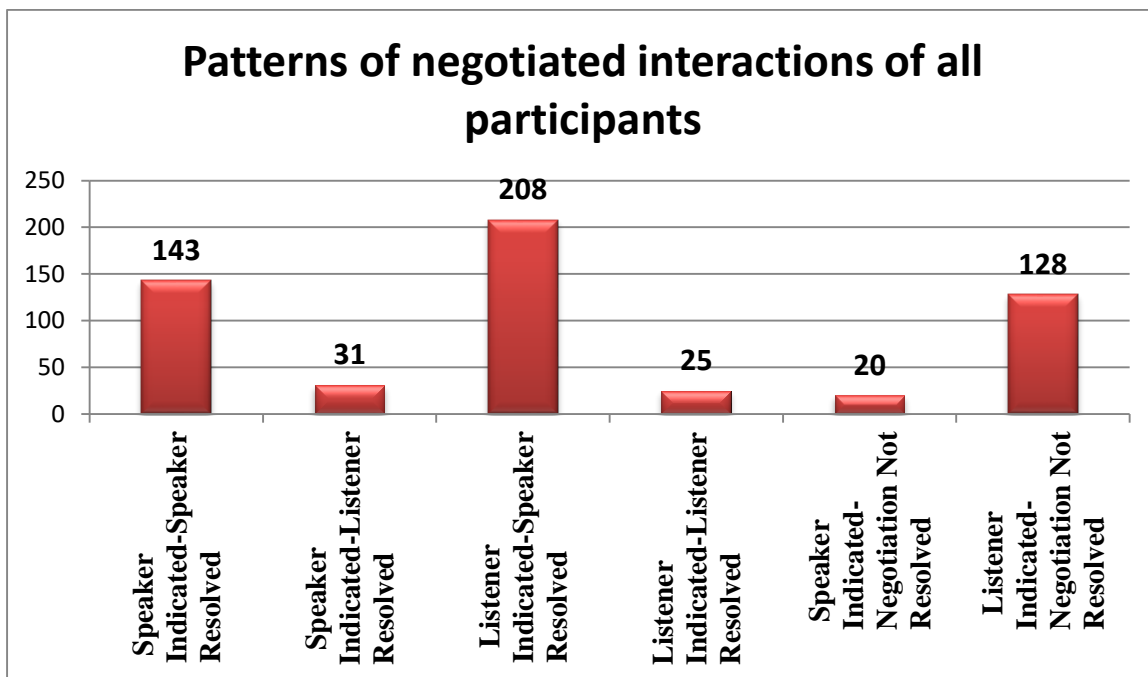


Figure 5.1: Patterns and total number of occurrences of negotiated interactions of all participants in data collected from both projects

Figure 5.1 shows how many times (i.e. total number of occurrences) the students followed each of the above six patterns of negotiated interactions within all participants' total time of communication in both telecollaborative projects. It offers a comprehensive insight into the patterns of negotiated interactions that the students in the current telecollaborative projects followed when they encountered a problem of expressing themselves or understanding their partner.

In most cases, when faced with a problem, it was the listener that indicated and the speaker that resolved the problem, a total of 208 occurrences in both telecollaborative projects. The second most frequently followed pattern detected in the data was Speaker Indicated-Speaker Resolved, coded 143 times in total. Interestingly, in 128 occasions the listener indicated a problem but it remained unsolved. In some episodes there was not any attempt to solve the trouble and in others, in spite of the effort, the negotiation did not end successfully. Much less common patterns were Speaker Indicated-Listener Resolved, detected only 31 times in the data, Listener Indicated-Listener Resolved, identified in 25 instances, and Speaker

Indicated-Negotiation Not Resolved, which occurred 20 times. Illustrative examples of all patterns together with the communication strategies used are provided in Section 5.2 below.

5.2. Overview of the Communication Strategies Indicating and Resolving a Communication Problem

Telecollaborative exchanges offer learners opportunities to use the target language to negotiate both meaning and form in a social context, which is essential for second language acquisition. In Chapter 5.2 we analyze the interactions between non-native speakers of English and the types of communication strategies employed during the online communication. In Section 5.2.1 we present a typology of the communication strategies used by all participants in both telecollaborative projects to indicate a communication problem and Section 5.2.2 offers a typology of the communication strategies that all the participants used to resolve a communication problem. Next, illustrative examples selected from the data from both projects are presented and analyzed so as to provide scaffolding for the closer, more detailed analysis of the meaning negotiation patterns and the communication strategies used by the three case studies: Tania, Maria Jana and Daniel.

5.2.1. Communication Strategies Used to Indicate a Communication Problem

One of the aims of this study was to examine the types of negotiation strategies used by learners who take part in telecollaborative projects. In this section we present descriptive statistical analysis of the kinds of strategies that the participants employed in order to indicate a linguistic problem in both telecollaborative projects. As we pointed out in Section 3.7, the initial list of categories used in the analysis of the video recordings was derived from studies researching similar topics (Long, 1985; Pica and Doughty, 1985; Tarone, 1980; Smith, 2003b; Lee, 2001; Zhao, 2010; Bates, 2017; Sánchez Sola, 2014). Merriam (2009) stresses that “Applying someone else’s scheme requires that the categories be compatible with the purpose and the theoretical framework of the study” (p. 185). In our case, we adapted the list of categories so that they are in line with the research questions and are applicable to the context of the current study, that is, telecollaboration in language learning environment (See Section 2.7 in the Literature Review Chapter).

As an overview, Table 5.14 below provides the following information for all participants from Mundi (language school, Bulgaria), Lluís Anton (high school, Spain) and Anglia (language school, Spain):

- (a) the communication strategies used to indicate a communication problem
- (b) how many times (i.e. total number of occurrences) students used each communication strategy
- (c) the percentage of all occurrences of a communication strategy used

Table 5.14: Communication strategies used to indicate a communication problem, the number of occurrences and the percentage of all occurrences of a communication strategy used by all participants

Communication strategies used to indicate a communication problem	Number of times used	Percentage of all occurrences
Direct Appeal for Assistance	263	31.0%
Clarification Request	123	14.5%
Non-Verbal Indicators	121	14.3%
Fillers	105	12.4%
Confirmation Check	88	10.4%
Comprehension Check	52	6.1%
Explicit Verbal Indicator	33	3.9%
Circumlocution	19	2.2%
Use of L1	19	2.2%
Self-Correction	15	1.8%
Topic Abandonment	6	0.7%
Audio-Visual Support	4	0.5%
Total number of strategies:	848	100%

As the results from the above table demonstrate, the most frequently used communication strategies that the participants resorted to when they encountered a problem in their communication were Direct Appeal for Assistance (263 times), Clarification Request (123 times), Non-Verbal Indicators (121 times) and Fillers (105). The least frequently used

strategies in both telecollaborative projects were Circumlocution and Use of L1 (19 times each), Self-Correction (15 times) Topic Abandonment (6 times) and Audio-Visual Support (4 times) as a means to indicate a linguistic problem. Figure 5.2 below visualizes the distribution of all communication strategies used by the participants in both telecollaborative projects.

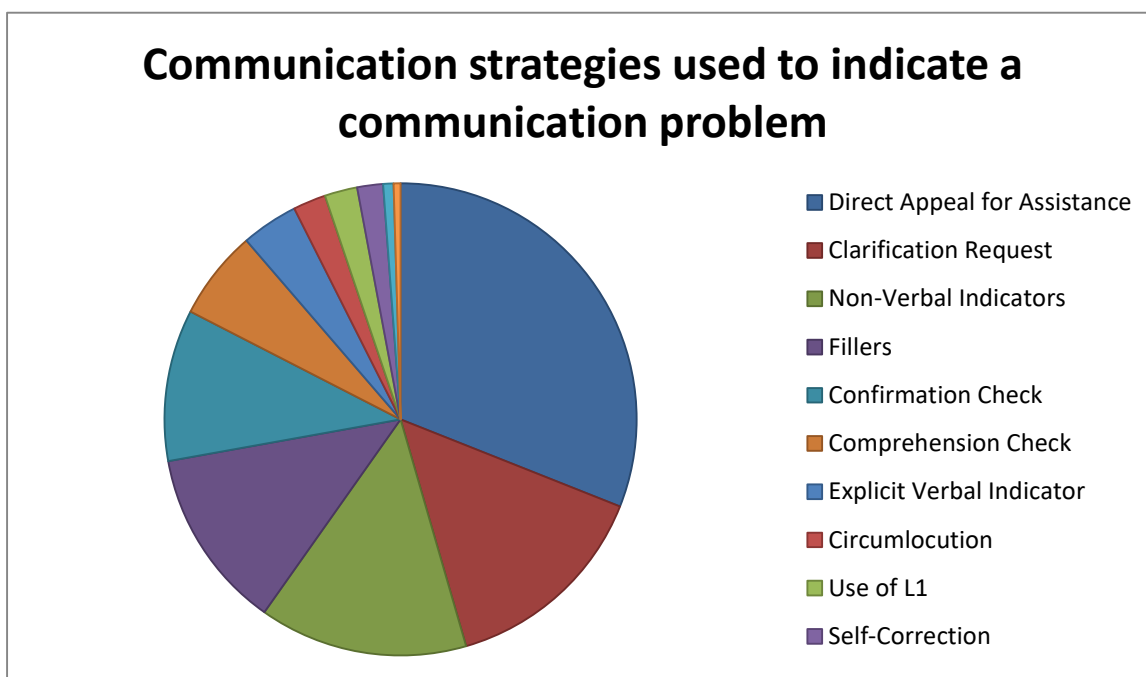


Figure 5.2: Distribution of the communication strategies used to indicate a communication problem by all participants

In the investigated telecollaborative projects, the learners used Direct Appeal for Assistance the most often. Out of 848 communication strategy uses, the participants used Direct Appeal for Assistance 263 times, which represent 31.0% of all the negotiation strategies employed. They used this strategy to maintain the flow of communication or when there was a problem in understanding or conveying an idea. The results from the descriptive statistical analysis were consistent with the responses that the participants provided in their post-project interviews. When asked what they did when they had trouble understanding each other, the majority of the students replied that they asked their partner to repeat or to explain once again. Tania (Mundi School), for instance, revealed *“If I didn’t understand, I would ask them to*

repeat the question". Similarly, Maria Jana (Mundi School) responded "*I asked more questions or explained with gestures and sometimes they understood me*". Hana (Lluís Anton School) stated "*When I didn't understand them, I asked them to repeat or explain it in other way*" and Carla "*I asked them again...to repeat it*". Mostly, students used "what?" and "can you repeat?" among others when they faced a problem of understanding.

The second most commonly used strategy to signal a linguistic trouble was Clarification Request. In 123 occasions, 14.5% of all strategy use, did the participants ask for clarification or responded with "*I don't understand*" or "*I don't know what is this*". Learners also used Non-Verbal Indicators and Fillers frequently to imply a problem in communication. In 14.3% and 12.4% respectively, the participants used gestures, facial expression or gambits to fill pauses or demonstrate a difficulty, such as "*Aaaammmm...*". "*Eeee...*", or "*Weeeell...*" among others. Sometimes students wanted to make sure that what they had heard was correct by repeating part or the whole statement or question that their partner had produced. These were instances in which the participants resorted to Confirmation Checks, which represented 10.4% out of all communication strategies used by the learners to indicate a problem. In one occasion, for instance, Manuel was struggling to make a question "*What many friends do you... have you?..*" when his partner Manuela drew on this strategy, at the same time offering the correct form "*How many friends do I have? Yes?*". In other occasions learners stopped and checked for comprehension when they encountered a difficult word or idea and wanted to make sure that their partner understands it before they continue with the conversation. Comprehension Checks represented 6.1% of all strategy use in the projects. Like, when Tania was describing a typical Bulgarian dessert to Berta "*It's called "lokum", the word in English is Turkish delight. Do you know it?*", to which Berta answered "*No*". Tania, then, provided additional information and described the item to her partner until mutual understanding was achieved.

It was not very often but yet in 3.9% of cases when faced with a linguistic problem the participants resorted to Explicit Verbal Indicators. Most commonly they used "*I don't know this word*" or "*What does it mean?*". In their study, Bower, Bunkyo, and Kawaguchi (2011) state that the indication of an understanding problem is generally divided into explicit and

implicit types. Explicit indication is when there is an overt signal that the learner's output is wrong or that there is a lexical problem which impedes the communication. Implicit indication, on the other hand, encourages learners to modify their output, through the use of communication strategies, without explicitly signaling that a mistake has been made.

The least frequently employed strategies in the current projects were Circumlocution, Use of L1, each in only 2.2% of all communication strategy uses, and Self-Correction in 1.8%. The results from the descriptive statistical analysis demonstrate that learners hardly ever applied Circumlocution, that is, describing the lexical term, paraphrasing or providing an example, like in Magda's request "*Do you have any bigger friends than you..mmm...like maybe eighteen or sixteen*". The students rarely used their native language ("*a typical meal is a soap of the gallets...eeeh...sopa de gallets*" - Angela) or self-corrected themselves ("*Last time when I spoke...when I talked to you....can you understand me?*" - Galia) to indicate a communication problem. Topic Abandonment and Audio-Visual Support were only utilized in 0.7% and 0.5% of all strategy use. In one such instance, Gabriel suggested "*I don't understand what are you saying. Can we change the topic?*" and in another interaction Patricia indicated that she was facing a lexical problem and used her mobile phone "*...it's a ...mmm...I don't know the word...it's this, look...*", showing an image of a bullring. These communication strategies were employed to indicate that there was a hindrance in conveying either meaning or form when using a foreign language to interact through videoconferencing with learners from a different cultural and linguistic background.

5.2.2. Communication Strategies Used to Resolve a Communication Problem

In this section we present descriptive statistical analysis of the kinds of strategies that the participants used in order to facilitate the negotiation and sort out a problem in communication in both telecollaborative projects. As mentioned in the previous section, the primary list of categories used in the analysis of the data was derived from studies researching similar topics. However, one new category emerged from the video recordings of the telecollaborative sessions, namely, *Appeal for External Assistance*. To date, I have not come across this strategy in similar studies and, to my knowledge, it has not been mentioned when describing communication strategies used in telecollaboration, although it has been mentioned in other types of instructional settings or activities such as in cases of e-mail writing (Trenchs Parera, 1997; Trenchs-Parera, 1996). While assigning a code to each communication strategy, I noticed that learners frequently sought help from their classmate or their teacher, rather than use another communication strategy in order to solve the problematic situation. I can only assume that for students this might have appeared as the fastest and most effective tool to avoid an obstacle in the conversation and continue the flow of the interaction.

As an overview, Table 5.15 below provides the following information for all participants from Mundi (language school, Bulgaria), Lluís Anton (high school, Spain) and Anglia (language school, Spain) in both telecollaborative projects:

- (a) the communication strategies used to resolve a communication problem
- (b) how many times (i.e. total number of occurrences) students used each communication strategy
- (c) the percentage of all occurrences of a communication strategy used

Table 5.15: Communication strategies used to resolve a communication problem, the number of times used and the percentage of all occurrences of a communication strategy used by all participants

Communication strategies used to resolve a communication problem	Number of times used	Percentage of all occurrences
Repetition	239	28.8%
Circumlocution	148	17.8%
Topic Abandonment	95	11.4%
Self-Corrections	95	11.4%
Appeal for External Assistance	59	7.1%
Transfer	59	7.1%
Recast	39	4.7%
Use of L1	37	4.5%
Audio-Visual Support	32	3.9%
Non-Verbal Indicators	16	1.9%
Approximation	12	1.4%
Total number of strategies:	831	100%

The results from the above table reveal that the most frequently used communication strategies that the learners applied in order to solve a problem in their communication were Repetition (239 times), Circumlocution (148 times), Topic Abandonment and Self-Correction (95 times each). The least frequently used strategies in both telecollaborative projects were Non-Verbal Indicators (16 times) and Approximation (12 times) as a means to sort out a linguistic hindrance. Figure 5.3 below visualizes the distribution of all communication strategies used by the participants in both telecollaborative projects.

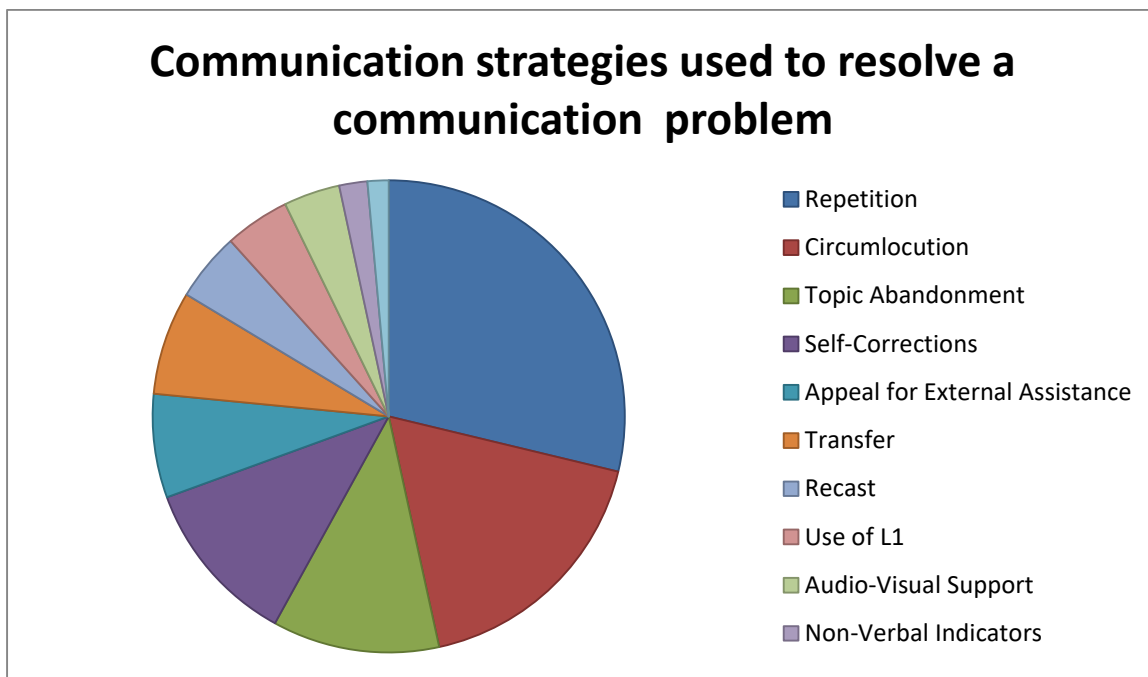


Figure 5.3: Distribution of the communication strategies used to resolve a communication problem by all participants

The results from the descriptive statistical analysis showed in Table 5.15, as well as in Figure 5.3, revealed that the participants in these two telecollaborative projects used various types of communication strategies to facilitate the negotiation of meaning and applied diverse strategies in order to solve a communication trouble that occurred during the collaborative partnership. The most frequently used communication strategy in both projects was Repetition. Out of 831 communication strategy uses, the participants used Repetition 239 times, which represent 28.8% of all the negotiation strategies employed. The learners used this strategy when their partner indicated that there was a problem in understanding. In the post-project interviews, when asked what they did when their partner had trouble understanding them, the majority of the students responded that they repeated or “explained once again”. Tania (Mundi School), for instance, revealed *“I am not sure who I was talking to, but I remember that I would ask him a question and he would sit and wait for five, six seconds and then he asked me a question (smiles). Maybe he did not understand me so I repeated a few times but....he would not always understand.”*

Students used Circumlocution 148 times in the projects, that is, 17.8% of all negotiation strategies. As Andrea (Mundi School) stated in the post-project interview “*Sometimes there was a word that I did not know how to say in English so I tried to explain it in other words and we always understood each other. I remember I didn’t know how to say “slum” and I had to explain “this is a neighborhood that is problematic and maybe poor, bla bla. Then, I checked it in my phone, after the session (laughs)*”. This strategy emphasizes the determination of the speakers to be understood and to convey their ideas in a clear way, without disrupting the conversation. Interestingly, what I identified in the data from the video recorded interactions was that very often the participants used this strategy that consisted of simplifying their speech, describing, rewording or giving an example of the term or idea that hindered the understanding. All such instances were coded as Circumlocution in the current study.

Topic Abandonment is another communication strategy that participants in these telecollaborative interactions used. In total, 95 cases were identified in the data, which is 11.4% of all strategy types. Usually, the students gave up a topic when it was too difficult for them to express or understand. When in the post-project interview I asked Manuel (Lluís Anton School) what he did when he did not understand his partner, he shortly answered “*I asked a different question (laughs)*” and his classmate Malek, shared “*I answered “yes, yes, yes” and continued talking about something*”. In videoconferencing, the conversation flows rapidly, which sometimes forces the participants to leave difficult topics quickly, often without even signaling that there is a comprehension problem (Zhao, 2010b). The participants in the current projects used Self-Correction when they noticed an error in their own speech and corrected it. In this study 95 cases of Self-Correction were detected in the video recordings, which is 11.4% of all communication strategies in the projects. Matias, for instance, while explaining about Castellars to Tania started with “*It is a tower human...*” then he paused for a few seconds and corrected himself “*it is a human tower*”. Apparently, learners were conscious of the language they produced and focused on form as well as on meaning. Despite the very limited time that the face-to-face synchronous mode provides to

reflect and to respond, the participants did make structural and lexical adjustments to their utterances (Lee, 2001).

Appeal for External Assistance is a new code that emerged from the data of the video recorded telecollaborative sessions. Students used it altogether 59 times, that is, 7.1% of all negotiation strategies. As mentioned, students turned to their teacher or classmates for assistance when they faced a lexical trouble of expressing themselves. In only two occasions they encountered a problem of understanding the lexical item and requested help by copying the pronunciation of the word that they had heard to their classmate or teacher. Like, for instance, when Angela asked Raya what her favourite fairytale was, Raya could not comprehend the word and so turned to her teacher with the question “*Miss, what is /feritel/?*” (translated from Bulgarian). Her teacher recognized the lexical item and repeated it with the correct pronunciation and at that moment Raya grasped it and exclaimed “*Ohh fairytale, yes!*” and their conversation went on. Transfer, which appeared 59 times, 7.1% of the total use of negotiation strategies, is a typical strategy for non-native speakers to negotiate meaning. Students used transfer because they translated literally a lexical item, an idiom, a compound word or structure from L1/L3 to L2. For instance, they used “history” when they meant “story”, “a party” when they meant “a holiday” and others.

Recasts are modifications of a learner’s erroneous output into its correct form. This strategy was detected 39 times in the data, 4.7% of all strategy use. As can be observed, this was a dispreferred strategy by the participants in the current projects. In one such occasion Andrea was struggling with a lexical item during her discourse “*The tickets were... like ...ran out, like... they were sold*” when Iana spontaneously added “*Sold out*”. Andrea then modified her output “*Yes, they were sold out so I couldn’t go*” thus restoring the mutual understanding and the flow of the conversation. In their study Bower et al., (2011) suggest that it is possible that this is caused by participants being reluctant “to take on a didactic role”. In the current projects this could be due to the fact that the participants were peers or possibly because they were not self-confident in their knowledge of the L2. Similarly, in his study Kötter (2003) found that one reason learners avoided correcting their partners was that they did not want to seem “more knowledgeable or more proficient than the other participants in a conversation”

(p. 158). Use of L1 appeared 37 times in the video recorded sessions, which is 4.5% of all communication strategies. The participants used their language usually when they mentioned a word that describes food, a tradition, or the name of a song, film or character that they did not know how to use in English. For instance, when Angela was describing to Raya a card game that she likes, she said “...and you have to collect the family of “*espadas*” or other family” when she did not know how to say or explain the word “spades” in English. Angela might have considered it irrelevant to explain this specific lexical item as this would not hinder the comprehension and understanding of the whole conversation.

Students used the support of the audio-visual resources, more specifically the live audio-video option of ZOOM platform as well as their mobile phones, to negotiate for meaning in 32 occasions, that is, 3.9% of all communication strategy use. When they faced a lexical problem which hindered their discourse learners sometimes used gestures or mimicry on camera. Interestingly, they did not use their phones as online dictionaries but rather to show an object, photograph or an image that they found difficult to explain. For example, when talking to Maria Jana, Patricia encountered a lexical trouble “...when children are young they use a sucker”. Patricia applied two communication strategies at the same time, first, Transfer from her L1, in this case transferring the meaning of the Spanish word “chupete” to “sucker” while meaning to say “pacifier”. Secondly, as she was aware of the potential problem she resorted to Audio-Visual Support, mimicking the act of a baby using a pacifier and then Maria Jana responded “*Ahhhh ok, ok*”. Apart from meaning negotiation, the audio-visual resource was often used by students to provide visualization of a concept, tradition or food that is typical of their country and, therefore, difficult for them to explain in words. Students also used it to play songs that they like/dislike or are representative or modern in their country at that moment. Besides, they used it as a tool to form a stronger bond with their partner, such as, showing their friends, their town, their room or their books. Non-Verbal Indicators together with Approximation were scarcely detected in the data, 16 and 12 times respectively, which represent 1.9% and 1.4% of all communication strategies used to solve a linguistic problem. Students sometimes smiled, nodded, laughed or showed thumbs up as a means to facilitate the negotiation process. Learners used Approximation when due to lack of

vocabulary they generalized the meaning of words, such as, “*soldier*” when they meant “*knight*” or “*sun*” when they wanted to say “*summer*”.

In summary, the participants resorted to various types of communication strategies to facilitate the negotiation of meaning in the online interactions. Learners used Repetition, Circumlocution, Topic Abandonment and Self-Correction most often in the current telecollaborative projects, which confirms that students focused on form as well as on meaning. According to Lee (2001) the use of negotiation devices might promote L2 learning or help to improve learners’ language skills. In Chapter 5, Sections 5.3, 5.3 and 5.5 we provide illustrative examples and in-depth analysis of the communication strategies that the three case study participants employed in both telecollaborative projects. By examining the amount and nature of the patterns of negotiated interactions this study attempts to offer comprehensive insight into learners’ negotiation behavior during telecollaboration in educational setting. Moreover, by taking a closer look at the communication strategies that the participants used I was able to draw conclusions about the possible role that computer-mediated negotiation plays in achieving mutual understanding, thus contributing to the innovative field of telecollaboration.

5.3. Case Study: Tania

The first case study participant, Tania, is a very interesting and valuable representative. As explained in Chapter 4, Section 4.1, based on the Hierarchical cluster analysis that we conducted three case study participants were selected, each representative of a group of students who share similar characteristics and features (See Figure 4.1). Tania, for instance, was chosen as a representative of a cluster of students, such as Iana, Amira, Magda, Nadia and Galia. Tania collaborated with three students from Lluís Anton School, namely, Hugo (51'), Malek (12'), and Berta (12') and only with Matias (98') from Anglia School. In this case, it is of great significance to highlight, firstly, the difference in the total time of Tania's interaction with each participant, and secondly the English proficiency level of her partners. More specifically, the three participants from Lluís Anton School had considerably low level of English, they frequently faced problems of understanding and expressing themselves, did not feel self-confident when speaking and could be seen as a bit nervous and anxious in the video recordings. Matias, from Anglia School, on the other hand, was able to express his ideas freely and spontaneously, showed high level of understanding and as a result this dyad managed to maintain fluid, meaningful and harmonious interaction. Therefore, it was interesting to explore whether these factors would influence Tania's choice and frequency of communication strategies and to observe potential similarities and differences in her behavior as a learner and communicator with different interlocutors.

5.3.1. Tania's Patterns of Negotiated Interactions

Pattern 1: Listener Indicated-Speaker Resolved

This section offers a detailed account on the Listener Indicated-Speaker Resolved pattern that Tania followed in both projects. As the name suggests, the listener indicates that there is a problem of understanding or expressing and the speaker sorts this trouble out. This means that Tania can either be the listener who indicates the problem or the speaker who resolves it. Therefore, Table 5.3.1 below shows Tania's collaborative partners in both telecollaborative projects, their gender and the total time of communication with each student. Next (See Table 5.3.1), we present the total number of times that Tania (Mundi

School, Bulgaria) followed this pattern with each partner within her total time of communication; in how many occasions she was the indicator or the one who resolves the linguistic problem and the relative frequencies per hour. Listener Indicated-Speaker Resolved is the negotiation pattern that Tania followed most often in both telecollaborative projects. The relative frequency of her use of this pattern per hour was 10.40. On average, in 6.24 times per hour Tania was the indicator of the problematic situation and in 4.16 times per hour she resolved the trouble. As the results from the analysis demonstrate, Tania's highest RFH is in her interaction with Hugo, in which she indicated a problem an average of 12.94 times per hour. In contrast, during Tania's collaboration with Berta the Listener Indicated-Speaker Resolved pattern was not used at all.

Table 5.3.1: Number of times that Tania followed Listener Indicated-Speaker Resolved pattern with each partner within her total time of communication by either indicating or resolving the problem and the relative frequency per hour

Tania's collaborative partners in both projects	Fem./Male	Tania's total time of commun. in	Listener indicated – Speaker resolved					
			Total number		Tania indicates		Tania resolves	
			Nº of Uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour
Hugo (Lluís Anton)	<i>M</i>	51´	18	21.17	11	12.94	7	8.23
Malek (Lluís Anton)	<i>M</i>	12´	2	10.00	1	5.00	1	5.00
Berta (Lluís Anton)	<i>F</i>	12´	0	0.00	0	0.00	0	0.00
Matias (Anglia)	<i>M</i>	98´	10	6.12	6	3.67	4	2.44
TOTAL Nº of uses:		173´	30	10.40	18	6.24	12	4.16

Next, we offer qualitative analysis of a selection of illustrative examples taken from the telecollaborative sessions, which show instances where Tania was an indicator or the partner who solved the linguistic hindrance. Besides, we look into the communication strategies that the students used during the negotiation process. In the extract below (Table 5.3.2), we can see how Tania indicates a problem.

Table 5.3.2: Tania- Matias (Mundi School-Anglia School) /Tania indicates/

Turn	Transcript	Coding	Comm. strategy used
1	<i>Matias:</i> In the future I will study journalism.	Trigger	
2	<i>Tania:</i> I can't hear you very well. Can you say that again?	Indicator	Direct Appeal for Assistance
3	<i>Matias:</i> In the future I will stu....I am going to study journalism.	Response	Repetition/ Self-Correction
4	<i>Tania:</i> What? What you gonna study?	Indicator	Direct Appeal for Assistance /Clarification Check
5	<i>Matias:</i> Journalism....eee periodism.	Response	Repetition/Filler/Transfer
6	<i>Tania:</i> Oh, cool! My sister is actually a journalist.	Reaction to Response	Recast
7	<i>Matias::</i> (Smiles)	Reaction to Response	Non-Verbal Indicator

In Table 5.3.2 the negotiation routine was initiated by Tania in Turn 2. She signaled verbally that she encountered trouble “*I can't hear you very well*” and requested for repetition “*Can you say that again?*”. Because Tania appeared to be blaming the technology/sound for her non-understanding, Matias responded by repeating the trigger without providing any new input except self-correcting his use of future forms. As Van der Zwaard and Bannink (2014) claim in their study, this is an adequate reply since the respondent is “neither more nor less informative than necessary”. Such instances, in which the speaker claimed to not have heard well and the respondent simply used Repetition as a negotiation strategy, were detected rather frequently throughout the video recorded data from both projects. In Turn 4, however, Tania indicated non-understanding for a second time, this time with an explicit indicator “*What?*” and a Clarification Check “*What you gonna study?*” Matias reacted with another repetition but he appeared uncertain and left a short pause (Turn 5). Additionally, he used a Filler and

then Transfer from Spanish “periodism” (“*periodismo*” in Spanish means “journalism” in English), presumably in order to give a clearer response. In her next turn Tania gave an emotionally tagged response “*Oh, cool!*” and provided the correct form of the troublesome lexical term. When this happened, Matias also responded positively, using a Non-Verbal Indicator, smiling back at her. In the following extract (Table 5.3.3), Hugo indicated and Tania sorted out the understanding problem.

Table 5.3.3: Tania - Hugo (Mundi School- Lluís Anton School) /Tania resolves/

Turn	Transcript	Coding	Comm. strategy used
1	<i>Tania:</i> Do you use tablets at school?	Trigger	
2	<i>Hugo:</i> What? (<i>gets closer to camera</i>)	Indicator	Direct Appeal for Assistance / Non-Verbal Indicator
3	<i>Tania:</i> Do you use tablets or computers at school instead of books?	Response	Repetition/ Circumlocution
4	<i>Hugo:</i> Yes.	Response	
5	<i>Tania:</i> Oh, that’s so cool.	Reaction to Response	
6	<i>Hugo:</i> Yes. (<i>smiles</i>)	Response	Non-Verbal Indicator

In Table 5.3.3 Tania opened by posing a question to Hugo, which triggered his non-understanding. Hugo, then, requested for help, using Direct Appeal for Assistance “*What?*” at the same time getting closer to the camera. This is an ambiguous indicator of non-understanding that could either mean that he has not heard well or that he has not understood. Tania’s response (Turn 3) showed that she interpreted it as lexical trouble: rather than simply repeating the question, she expanded on her request by including additional input, in order to facilitate her partner’s comprehension. Her strategy proved fruitful and after the initial trouble source has been resolved the interaction went on. We can see that both partners kept

the positive flow of the conversation, with Tania tagging her words emotionally “*Oh, that’s so cool*” and Hugo smiling shyly back at her.

Pattern 2: Listener Indicated-Listener Resolved

When the listener detects an error in the output of the speaker he/she may sometimes modify it. This is a voluntary strategy in which the understanding process is not usually threatened. Tania did not use the Listener Indicated-Listener Resolved pattern very frequently in both telecollaborative projects. As Table 5.3.4 below shows, the relative frequency of her use of this pattern per hour was only 2.42. In 1.73 times on average it was Tania that indicated a problem and resolved it. The relative frequency with which Tania’s partner was the indicator and the repairer was 0.69 times per hour. The statistical analysis demonstrates that during her interaction with Hugo (Lluís Anton School) Tania scored highest RFH as an indicator and repairer of a problem – 2.35; while with Malek and Berta (Lluís Anton School) she did not apply this pattern in any way.

Table 5.3.4: Number of times that Tania (Mundi School, Bulgaria) followed Listener Indicated-Listener Resolved pattern with each partner within her total time of communication by either she or her partner indicating and resolving the problem and the relative frequency per hour

Tania’s collaborative partners in both projects	Fem./Male	Total time of commun. in min.	Listener Indicated-Listener Resolved					
			Total number		Tania indicates and resolves		Tania’s partner indicates and resolves	
			Nº of Uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour
Hugo(Lluís Anton)	<i>M</i>	51´	3	3.52	2	2.35	1	1.17
Malek (Lluís Anton)	<i>M</i>	12´	0	0.00	0	0.00	0	0.00
Berta (Lluís Anton)	<i>F</i>	12´	0	0.00	0	0.00	0	0.00
Matias (Anglia)	<i>M</i>	98´	4	2.44	3	1.83	1	0.61
TOTAL Nº of uses:		173´	7	2.42	5	1.73	2	0.69

Table 5.3.5 below shows an instance, in which Tania’s partner, Matias, indicated and resolved a lexical problem, more specifically in the name of the country Italy. Tania initially transferred the pronunciation from her L1 but in Turn 2, Matias opted to respond, following on the topic and in the meantime providing the correct form of the problematic lexical item. Tania, interestingly, chose to point her error and repeat the correct form of the word, rather than avoid or ignore it.

Table 5.3.5: Tania - Matias (Mundi School- Anglia School) /Matias indicates and resolves/

Turn	Transcript	Coding	Comm. strategy used
1	<i>Tania:</i> I am going to visit Italia...	Trigger	Filler
2	<i>Matias:</i> I went to Italy..	Response	Recast
3	<i>Tania:</i> Italy!	Reaction to Response	

Table 5.3.6: Tania-Hugo (Mundi School- Lluís Anton School) /Tania resolves/

Turn	Transcript	Coding	Comm. strategy used
1	<i>Hugo:</i> Do you listen me?	Trigger	
2	<i>Tania:</i> Yes. Do you hear me?	Response	Recast
3	<i>Hugo:</i> Yes.	Response	

Table 5.3.6 is very similar to the previous one but in this extract it was Tania who performed the repair of Hugo’s erroneous request “*Do you listen me?*”. In her response (Turn 2) Tania used a Recast strategy and directly delivered the correct form “*Do you hear me?*”. As noted by Schegloff, Jefferson, and Sacks (1977) in their discussions of NS conversations, this repair trajectory appears to be the least common in the discourse of beginning learners of Spanish. Similarly, the statistical analysis of the data in this study, provided in Section 5.1,

demonstrates that this is one of the least frequently used patterns in both telecollaborative projects.

Pattern 3: Speaker Indicated-Listener Resolved

The instances in which the speaker himself signals a linguistic difficulty and the listener resolves this trouble were categorized as Speaker Indicated-Listener Resolved pattern in the current study. The descriptive statistical analysis of the data demonstrates that this was not a common pattern used by the participants in both telecollaborative projects. Likewise, Tania applied this negotiation pattern scarcely in the interactions with her collaborative partners, only in 2 occasions. As Table 5.3.7 below shows, the relative frequency of her use of this pattern per hour was only 0.69. In her conversation with Malek (Lluís Anton School) Tania's RFH of this pattern was 5.00. Nevertheless, we should take into consideration that she resolved a problem only once but due to the very limited time of their collaboration (12') the RFH resulted high. Tania did not keep to this pattern with Berta (Lluís Anton School) and Matias (Anglia School).

Table 5.3.7: Number of times that Tania (Mundi School, Bulgaria) followed Speaker Indicated-Listener Resolved pattern with each partner within her total time of communication by either indicating or resolving the problem and the relative frequency per hour

Tania's collaborative partners in both projects	Fem./Male	Total time of commun. in min.	Speaker Indicated-Listener Resolved					
			Total number		Tania indicates		Tania resolves	
			Nº of Uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour
Hugo (Lluís Anton)	<i>M</i>	51´	1	1.17	0	0.00	1	1.17
Malek (Lluís Anton)	<i>M</i>	12´	1	5.00	0	0.00	1	5.00
Berta (Lluís Anton)	<i>F</i>	12´	0	0.00	0	0.00	0	0.00
Matias (Anglia)	<i>M</i>	98´	0	0.00	0	0.00	0	0.00
TOTAL Nº of uses:		173´	2	0.69	0	0.00	2	0.69

The extracts below (Table 5.3.8 and 5.3.9) show the only two instances, detected in the data of Tania's interactions, in which she followed the Speaker Indicated-Listener Resolved pattern. In both cases Tania was the participant that resolved the linguistic hindrance and restored the flow of the communication.

Table 5.3.8: Tania-Malek (Mundi School- Lluís Anton School) /Tania resolves/

Turn	Transcript	Coding	Comm. strategy used
1	<i>Tania:</i> My name is Tania. Ta-nia.	Trigger	
2	<i>Malek:</i> (no response, talks to his classmate)	Indicator	Non-Verbal Indicator
3	<i>Tania:</i> Did you understand my name?	Response	Comprehension Check
4	<i>Malek:</i> Yes, Taina.	Response	
5	<i>Tania:</i> (laughs) Yeah, something like this.	Reaction to Response	Non-Verbal Indicator

Table 5.3.9: Tania-Hugo (Mundi School- Lluís Anton School) /Tania resolves/

Turn	Transcript	Coding	Comm. strategy used
1	<i>Tania:</i> What do you do in your free time?		
2	<i>Hugo:</i> Eeeehhm...sorry...eehmmm.. ..gymnast...(looks confused)	Trigger/Indicator	Filler/ Non-Verbal Indicator /Transfer
3	<i>Tania:</i> Ohhh, I go to gymnastics as well.	Response	Recast
4	<i>Hugo:</i> Oh, cool!	Reaction to Response	

In Table 5.3.8 Tania opened the conversation by introducing herself. We could clearly notice that she was conscious that her name might cause difficulty for a foreign person to grasp it and hear it well. Therefore, she directly proceeded to not only repeating it but also dividing it in syllables and pronouncing it slowly. In her conversations with Matias and with Berta, Tania explained the meaning of her name, which in Bulgarian means “flower”⁸. She also added that she knew that it must not be easy for them to “*pronounce it correct because it is difficult*”. Malek’s lack of response in Turn 2 was obviously an indication of some kind of trouble for Tania. In her next Turn she used a Comprehension Check strategy “*Did you understand my name?*” as she anticipated a problematic situation to arise and decided to deal with it directly. Malek’s reply “*Yes, Taina*” provoked Tania’s laughter and then the communication popped back to the next topic of their conversation.

Table 5.3.9 showed Tania asking Hugo what he did in his free time. In the video recording Hugo appeared quite nervous, confused and timid at that moment. He looked away from the camera, fidgeted and seemed as if he was searching for help from a classmate. He, then, apologized but his linguistic trouble continued and he seemed to be struggling to find a word.

⁸ The names of all participants are anonymized.

Finally, Hugo added “*eehmmm...gymnast...*”, actually transferring the meaning of this lexical item from his L1. The Spanish word “gimnasio”, which means “gym” in English, is what he wanted to express. Instead, he used the word “gymnats” which was interpreted as “gymnastics” by Tania and thus she reacted with “*Ohhh, I go to gymnastics as well*”. This negotiation episode was closed by Hugo’s reaction to her response “*Oh, cool!*” and their conversation moved to another subject.

Pattern 4: Speaker Indicated-Speaker Resolved

Speaker Indicated-Speaker Resolved pattern occurs when the current speaker both initiates and completes the repair sequence. The results from the statistical analysis of Tania’s interactions indicate that she used it 8 times altogether, which is an average of 2.77 per hour (See Table 5.3.10). The highest RFH of her use of this pattern was with Malek – 5.00, but yet again, their conversation was quite short, only 12 minutes. Interestingly, as we have also noticed in the above sections, Tania does not follow the negotiation patterns during her collaboration with Berta.

Table 5.3.10: Number of times that Tania (Mundi School, Bulgaria) followed Speaker Indicated-Speaker Resolved pattern with each partner within her total time of communication and the relative frequency per hour

Tania’s collaborative partners in both projects	Fem./ Male	Total time of commun. in min.	Speaker Indicated-Speaker Resolved	
			# of uses	Rel. freq. per hour
Hugo (Lluís Anton)	<i>M</i>	51’	1	1.17
Malek (Lluís Anton)	<i>M</i>	12’	1	5.00
Berta (Lluís Anton)	<i>F</i>	12’	0	0.00
Matias (Anglia)	<i>M</i>	98’	6	3.67
TOTAL number of uses:		173’	8	2.77

The extract below (Table 5.3.11) shows Tania, during her conversation with Matias, wondering about what the next discussion topic would be. Tania began the episode with “*I don’t actually know what’s our last theme...*” and then she paused, looked away from the camera, appearing to be thinking. She, then, resumed repeating the problematic lexical item and added “*yeah?*”, most likely not aiming to request confirmation but rather to signal the hitch.

Table 5.3.11: Tania - Matias (Mundi School- Anglia School) /Tania indicates and resolves/

Turn	Transcript	Coding	Comm. strategy used
1	<i>Tania:</i> I don’t actually know what’s our last theme...(looks away, seems confused).. theme, yeah? ..I don’t remember.	Trigger/Indicator	Non-Verbal Indicator / Self-Correction
2	<i>Matias:</i> I am not sure. I think it is fashion and travelling.	Response	

Table 5.3.12: Tania-Hugo (Mundi School-Lluís Anton School) /Tania indicates and resolves/

Turn	Transcript	Coding	Comm. strategy used
1	<i>Tania:</i> What music do you hear?...What music do you listen to?	Trigger/Indicator	Filler/Self-Correction
2	<i>Hugo:</i> I listening to pop.	Response	

In the example above (Table 5.3.12) Tania posed Hugo the question “*What music do you hear?*” but she realized that she had made a mistake so she repeated the request this time self-correcting it right away “*What music do you listen to?*”, which led to Hugo’s response “*I listening to pop*”. The rapid flow of oral conversation in videoconferencing does not

provide the participants with enough time to check on their speech and correct errors. Curiously, Tania noticed her errors and tried to correct them even when the errors did not initiate non-understanding or misunderstanding.

Pattern 5: Listener Indicated-Negotiation Not Resolved

In her study Cabrero (2013) found out that beginner students in the role of listeners are capable of signaling a problem. They, however, do not always have the skills to perform the repair and very often either apply other strategies or simply disregard the problem. In this section and the next one, we address these two negotiation patterns which are characterized by the absence of successful negotiation: Listener Indicated-Negotiation Not Resolved and Speaker Indicated-Negotiation Not Resolved.

Table 5.3.13 below offers descriptive statistical analysis of all instances in which Tania was involved in a meaning negotiation routine but the process did not end up successfully, that is, the negotiation was not resolved. We have coded both the occurrences in which either Tania or her partner was the indicator of a problematic situation. As the results demonstrate the relative frequency with which Tania signaled linguistic trouble but it was not sorted out was 2.77 times per hour. The RFH of instances in which Tania's partner indicated the problem without it being solved was 3.46, predominantly in her collaboration with Hugo – 9.41 on average per hour.

Table 5.3.13: Number of times that Tania (Mundi School, Bulgaria) followed Listener Indicated-Negotiation Not Resolved pattern with each partner within her total time of communication by either she or her partner indicating the problem and the relative frequency per hour

Tania's collaborative partners in both projects	Fem./Male	Total time of commun. in min.	Listener Indicated-Negotiation Not Resolved					
			Total number		Tania indicates		Tania's partner indicates	
			Nº of Uses	Rel. freq. per hour	Nº of Uses	Rel. freq. per hour	Nº of Uses	Rel. freq. per hour
Hugo (Lluís Anton)	<i>M</i>	51'	13	15.29	5	5.88	8	9.41
Malek (Lluís Anton)	<i>M</i>	12'	1	5.00	0	0.00	1	5.00
Berta (Lluís Anton)	<i>F</i>	12'	0	0.00	0	0.00	0	0.00
Matias (Anglia)	<i>M</i>	98'	4	2.45	3	1.83	1	0.61
TOTAL Nº of uses:		173'	18	6.24	8	2.77	10	3.46

In Table 5.3.14 we see Matias opening up with the question “*Did you know Barcelona, no?*”, which triggered Tania’s confusion and she indicated it applying the Direct Appeal for Assistance strategy in Turn 2. Interestingly, Matias responded with minimal input, even less than the original request, only saying “*Barcelona?*”. For a second time Tania indicated her understanding problem, this time using a Clarification Request strategy “*What about it?*”, demonstrating clearly that she did not grasp Matias’s question. Her partner’s response in Turn 5 was yet again unclear and confusing as Matias did not specifically pose a clear request but he merely stated “*The old town...bueno, I think that you know a little bit, no?*”. Undoubtedly, Tania continued not working out what exactly Matias’s request was so she eventually decided to abandon the topic in Turn 6 blaming her earphones for the troublesome situation and thus leaving the negotiation episode unsolved. Her reaction can be interpreted as a strategy to save her own face, or alternatively, as a strategy to save the face of her collaborative partner. However, they both smile, which seems to be an expression of negotiation of face – “socially desirable or appropriate behaviour in order to avoid loss of

face – rather than negotiation of meaning, or task-appropriate response” (Van der Zwaard, 2017).

Table 5.3.14: Tania - Matias (Mundi School- Anglia School) /Tania indicates/

Turn	Transcript	Coding	Comm. strategy used
1	<i>Matias:</i> Did you know Barcelona, no?	Trigger	
2	<i>Tania:</i> Could you repeat, please. I wasn't listening.	Indicator	Direct Appeal for Assistance
3	<i>Matias:</i> Barcelona?	Response	Circumlocution
4	<i>Tania:</i> What about it?	Indicator	Clarification Request
5	<i>Matias:</i> The old town...bueno, I think that you know a little bit, no?	Response	
6	<i>Tania:</i> (looks confused) I think that my earphones are not working. Wait a minute, please! (both smile)	Reaction to Response	Topic Abandonment/ Non-Verbal Indicator

Table 5.3.15: Tania-Hugo (Mundi School- Lluís Anton School) /Tania's partner indicates/

Turn	Transcript	Coding	Comm. strategy used
1	<i>Tania:</i> Do you celebrate Easter?	Trigger	
2	<i>Hugo:</i> Aaaaa.....no! (<i>looks confused</i>)	Response/Indicator	Filler/ Non-Verbal Indicator
3	<i>Tania:</i> You don't celebrate Easter? (<i>looks surprised</i>)	Reaction to Response	Comprehension Check/ Non-Verbal Indicator
4	<i>Hugo:</i> I don't know...aaaaaa... I don't know! (<i>looks confused</i>)	Indicator	Clarification Request/Filler/Non-Verbal Indicator

5	<i>Tania:</i> Do you celebrate Easter? Like the tradition that you eat eggs.	Response	Repetition/Circumlocution
6	<i>Hugo:</i> Ohhh..yes, yes.	Reaction to Response	
7	<i>Tania:</i> Yes, that's called Easter. (<i>pronounces it slowly and clearly</i>)	Response	Repetition
8	<i>Hugo:</i> Oh, yes!...In Christmas do you presents?	Reaction to Response	Topic Abandonment

In the example above, Table 5.3.15, when Tania asked Hugo how they celebrate Easter, he did not understand her and so responded with a filler (*aaaaa...*) and then said “*no*”, clearly triggering non-understanding. Surprised by his response, Tania inquired “*You don’t celebrate Easter?*”. After her reaction, Hugo found himself in the need to reveal his non-understanding and openly signaled it, saying “*I don’t know.... aaaaa...I don’t know*”. At that moment, Tania realized that Hugo had trouble understanding and she not only repeated the question again but also applied Circumlocution strategy, added “*like the tradition that you eat eggs*”. In order to make sure that he interpreted her message, Tania used yet another communication strategy, namely, Comprehension Check, and inquired “*Do you know it?*”. Initially, her strategies appeared to be effective as Hugo replied “*Ohhh, yes, yes*” and then it seemed like Tania closed the negotiation episode with a reaction to response (Varonis and Gass, 1985), adding “*Yes, that’s called Easter*”. However, Hugo’s response in Turn 8, “*Oh, yes!...In Christmas do you presents?*”, can be ambiguous and tricky to interpret, as it can mean that he understood his partner’s idea or that he pretended to have grasped it in order to save his face. One of the reasons for the latter assumption is his swift change of topic in the end and the lack of any uptake or details on Tania’s request. Hugo’s decision to give up this subject and move to another topic reveals his non-understanding as well as his desire to assure the successful flow of the conversation. Furthermore, it is the Non-Verbal Indicators, such as facial expressions, intonation and body language (i.e. looking away from the camera;

fidgiting; looking confused) that provide evidence to the fact that he did not comprehend Tania's talk.

Pattern 6: Speaker Indicated-Negotiation Not Resolved

The Speaker Indicated-Negotiation Not Resolved pattern is very similar to the previous one only that it is the speaker himself that indicates the problem rather than the listener. As the results, shown in Table 5.3.16 below demonstrate, this was not a common negotiation pattern for Tania. She barely used it once in her collaboration with Hugo, where she was the indicator of the lexical difficulty. The RFH of Tania's use of this pattern was 0.34, which is the lowest of all meaning negotiation patterns detected in the data of her interactions in both telecollaborative projects.

Table 5.3.16: Number of times that Tania (Mundi School, Bulgaria) followed Speaker Indicated-Negotiation Not Resolved pattern with each partner within her total time of communication by either she or her partner indicating the problem and the relative frequency per hour

Tania's collaborative partners in both projects	Fem./ Male	Total time of commun. in min.	Speaker Indicated-Negotiation Not Resolved					
			Total number		Tania indicates		Tania's partner indicates	
			Nº of Uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour	Nº of Uses	Rel. freq. per hour
Hugo (Lluís Anton)	<i>M</i>	51´	1	1.17	1	1.17	0	0.00
Malek (Lluís Anton)	<i>M</i>	12´	0	0.00	0	0.00	0	0.00
Berta (Lluís Anton)	<i>F</i>	12´	0	0.00	0	0.00	0	0.00
Matias (Anglia)	<i>M</i>	98´	0	0.00	0	0.00	0	0.00
TOTAL Nº of uses:		173´	1	0.34	1	0.34	0	0.00

Table 5.3.17: Tania-Hugo (Mundi School- Lluís Anton School) /Tania indicates/

Turn	Transcript	Coding	Comm. strategy used
1	<p><i>Tania:</i> Do you know that in Bulgaria, in our school, our gra...aaaa (thinking)...we are not like.. in the exams in your school are like A, B, C and like that, in Bulgaria we are with numbers. It's like A is six, B is five....and like this.</p>	Trigger/Indicator	Non-Verbal Indicator /Filler/ Circumlocution
2	<p><i>Hugo:</i> Oh!....(looks at his handout; seems confused; long pause) What's the name of your school?</p>	Response	Filler/ Non-Verbal Indicator Topic Abandonment

The above Table 5.3.17 illustrates the only example of this kind of pattern detected in the video recorded data of Tania's interactions. While she and Hugo were talking about their schools, we see Tania initiating a description of the grading system in Bulgarian schools. In Turn 1 she started with "*Do you know that in Bulgaria, in our school, our gra...*" and she suddenly paused at the word "grades" as she seemed uncertain of this lexical item. Her confusion was also visible in the video recording, as she looked away and seemed pensive. Therefore, Tania decided to continue using Circumlocution strategy and provide more details of how the grading system in Bulgarian schools worked. Curiously, probably based on her cultural knowledge, Tania assumed that the grading system in Spain was similar to the one in the United States, that is, with letters. Despite, Tania's effort and detailed explanation and probably due to the fact that Hugo did not recognize this kind of grading system, he did not manage to comprehend what Tania was trying to express. His non-understanding was visible in the video recording, indicated by clear non-verbal features, such as looking at his handout and seeming nervous; he also used a filler and made a long pause before abandoning the topic and posing the question "*What's the name of your school?*". Once again, Topic

Abandonment was used as a communication strategy to negotiate for meaning in telecollaboration, which proved to be a very common way of keeping the successful flow of the communication and saving face at the same time. In the following section we provide an overview of the communication strategies that Tania used with her telecollaborative partners.

5.3.2. Communication Strategies Used by Tania to Indicate and Resolve a Communication Problem

This section offers an insight into the communication strategies that Tania used during her interactions in both projects. Table 5.3.18 and 5.3.19 below provide a numerical overview of her strategy use as well as the percentage of all occurrences of a communication strategy.

Table 5.3.12: Communication strategies used by Tania to indicate a communication problem, the number of occurrences and the percentage of all occurrences of a communication strategy

Communication strategies used by Tania to indicate a communication problem	Number of times used	Percentage of all occurrences
Direct Appeal for Assistance	26	40.6%
Clarification Request	9	14.1%
Non-Verbal Indicators	4	6.3%
Fillers	10	15.6%
Confirmation Check	7	10.9%
Comprehension Check	3	4.7%
Explicit Verbal Indicator	1	1.6%
Circumlocution	2	3.1%
Use of L1	0	0.0%
Self-Correction	2	3.1%
Topic Abandonment	0	0.0%
Audio-Visual Support	0	0.0%
Total number of strategies:	64	100%

Table 5.3.13: Communication strategies used by Tania to resolve a communication problem, the number of times used and the percentage of all occurrences of a communication strategy

Communication strategies used by Tania to resolve a communication problem	Number of times used	Percentage of all occurrences
Repetition	9	17.3%
Circumlocution	12	23.1%
Topic Abandonment	2	3.9%
Self-Corrections	11	21.2%
Appeal for External Assistance	10	19.2%
Transfer	0	0.0%
Recast	5	9.6%
Use of L1	1	1.9%
Audio-Visual Support	1	1.9%
Non-Verbal Indicators	0	0.0%
Approximation	1	1.9%
Total number of strategies:	52	100%

The results from the descriptive statistical analysis that the two tables above provide demonstrate that Tania used more numerous strategies to indicate a communication problem (64 times) rather than to resolve it (52 times). When indicating linguistic trouble her most commonly used strategies were Direct Appeal for Assistance (40.6%), followed by Fillers (15.6%), Clarification Requests (14.1%) and Confirmation Checks (10.9%). Regarding her strategy use when resolving a problem Tania's most frequently used ones were Circumlocution (23.1%), Self-Correction (21.2%), Appeal for External Assistance (19.2%) and Repetition (17.3%). These results present valuable information about Tania as a language learner, more specifically in a telecollaborative setting, while interacting with partners from different linguistic and cultural background. The results suggest that when faced with a problem, Tania does usually indicate it, using Direct Appeal for Assistance. Additionally, her frequent use of Clarification Requests, Confirmation Checks and Circumlocution prove that she is a cautious and precise learner at the same time alert and careful about her partners' understanding and comfort. Similarly, Tania's recurrent use of Self-Correction and

Appeal for External Assistance demonstrate her striving for meticulousness and precision as regards her linguistic output.

What is more, based on results from the numerical overview of Tania's use of negotiation patterns provided in Section 5.3.1, we detected a difference in Tania's negotiation behavior, depending on her partners. We can see that in her collaboration with Hugo and Matias Tania displayed her abilities to indicate and resolve linguistic problems much more frequently, compared to her interactions with Malek and Berta. This pattern was repeated in almost all cases. Consequently, we can say that Tania stood out as a collaborative, prudent and enthusiastic communicator during her interactions with Hugo and Matias. Nonetheless, in her conversations with Malek and Berta she did not manage to expose her full potential as a language communicator. This might be a result of their very short time of interaction (only 12' each) as well as both Malek and Berta's low level of English proficiency. Regarding her interactions with Hugo and Matias, we can also see a clearly distinct pattern and a difference in Tania's behavior. Based on the results, more specifically her much higher RFH of use of most patterns with Hugo, we can conclude that Tania was a very self-confident, dynamic and dedicated learner. In her communication with Matias, she was not so meticulously concentrated on the negation episodes but rather on maintaining meaningful and friendly conversation with her partner. Besides, we need to stress that in her interactions with Matias there were very few instances of negotiations episodes which remained unsolved, only 2.45 on average, compared to 16.46 with Hugo. This again, comes to confirm that in her communication with Matias Tania expressed her excellent skills as a communicator, while in her conversations with Hugo she stood out rather as an enthusiastic and committed foreign language learner.

5.4. Case Study: Maria Jana

Maria Jana is an interesting case study participant and was selected as a representative of a cluster of students based on the similarities and common features that they shared. Maria Jana is much more similar to Hugo, Matias, Raya, Andrea and Patricia than she is to other participants. Maria Jana collaborated with three students from Lluís Anton School for relatively short time, between 10-33 minutes with each (See Table 5.4.1 below). On the other hand, in the second project Maria Jana interacted with Patricia in five consecutive sessions, each lasting between 20-30 minutes. As a result of this, Maria Jana and Patricia developed a closer and friendlier relationship, included personal and more detailed discussions in their conversations and built a stronger rapport and trust compared to that with the participants in the first project. It would be curious to observe whether these factors would affect Maria Jana's behavior as a language learner and communicator in the current telecollaborative projects. This section offers illustrative examples together with analysis of the patterns of negotiated interactions and communication strategies that Maria Jana used in both telecollaborative projects, with participants from Lluís Anton School and Anglia School, Spain. To begin with, we offer a numerical overview of the total number of times that she used each pattern with each participant and the total number of uses in both partnerships. Then, illustrative examples are provided and analyzed, offering an in-depth insight into the communication strategies that the learners used to indicate and to resolve linguistic troubles.

5.4.1. Maria Jana's Patterns of Negotiated Interactions

Pattern 1: Listener Indicated-Speaker Resolved

As mentioned, in the Listener Indicated-Speaker Resolved pattern, Maria Jana can be either in the role of the indicator or of the one who solves the linguistic problem. The results from the descriptive statistical analysis demonstrate that this was Maria Jana's most commonly used pattern. As Table 5.4.1 below shows, the relative frequency of her use per hour was 13.07, in most instances indicating - 9.38 rather than resolving the trouble - 3.68. Her highest RFH as an indicator was in her collaboration with Malek - 36.00 and as a repairer it was with Manuel - 10.91. To sum up, she scored higher relevant frequency per hour of following

Listener Indicated-Speaker Resolved pattern with participants from Lluís Anton School than with Patricia from Anglia School.

Table 5.4.1: Number of times that Maria Jana followed Listener Indicated-Speaker Resolved pattern with each partner within her total time of communication by either indicating or resolving the problem and the relative frequency per hour

Maria Jana 's collaborative partners in both projects	Fem./Male	Maria Jana 's total time of commun. in min.	Listener Indicated-Speaker Resolved					
			Total number		Maria Jana indicates		Maria Jana resolves	
			Nº of uses	Rel. freq. per hour	Nº of Uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour
Manuel (Lluís Anton)	<i>M</i>	33´	10	18.18	4	7.27	6	10.91
Carla (Lluís Anton)	<i>F</i>	21´	7	20.00	6	17.14	1	2.86
Malek (Lluís Anton)	<i>M</i>	10´	6	36.00	6	36.00	0	0.00
Patricia (Anglia)	<i>F</i>	115´	16	8.34	12	6.26	4	2.08
TOTAL Nº of uses:		179´	39	13.07	28	9.38	11	3.68

Table 5.4.2 below illustrates one instance in which Malek's request triggered Maria Jana's non-understanding which she indicated using two communication strategies, namely Confirmation Check and Clarification Request. She initially repeated part of Malek's questions "*Team?*" and then she requested for further clarification "*Football team?*". When the mutual understanding was restored and Maria Jana provided the answer "*Barcelona*", Malek appeared very excited about her response in the video recording, smiled and Turned to his classmate with the words "*Hey, she likes Barcelona*" /translated from Spanish/.

Table 5.4.2: Maria Jana -Malek (Mundi School- Lluís Anton School) /Maria Jana indicates

Turn	Transcript	Coding	Comm. strategy used
1	<i>Malek:</i> What’s your favourite team?	Trigger	
2	<i>Maria Jana:</i> Team? Football team?	Indicator	Confirmation Check/ Clarification Request
3	<i>Malek:</i> Team, yeah!	Response	Repetition
4	<i>Maria Jana:</i> Barcelona	Response	
5	<i>Malek:</i> (smiles; turns to his classmate: “Hey, le gusta Barcelona”)	Reaction to Response	

Alternatively, in Table 5.4.3 below, we could see Maria Jana providing a solution for Patricia’s linguistic trouble. Patricia was explaining that some people consider that Catalonia needs “*to be indepe...*” when she suddenly faced a linguistic uncertainty and so made a pause and thought for a few seconds. Then she tried to self-correct and resumed her talk using Transfer from the Spanish verb “*independizarse*”, meaning “to become independent” in English, in attempt to make a verb in English as well “*independizate*”. This communication strategy resulted in Maria Jana’s successful understanding and in her response she provided the correct form “*And do you want it to be independent country?*”.

Table 5.4.3: Maria Jana - Patricia (Mundi School- Anglia School) /Maria Jana resolves/

Turn	Transcript	Coding	Comm. strategy used
1	<i>Patricia:</i> There are people that thinks that Catalonia need to be indepe...independizate so she needs to be out of Spain... like Catalonia being another country.	Trigger/Indicator	Filler/Self-correction/Transfer/ Circumlocution

2	<i>Maria Jana:</i> And do you want it to be independent country?	Response	Recast
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Pattern 2: Listener Indicated-Listener Resolved

Listener Indicated-Listener Resolved pattern was not frequently used by Maria Jana. As the results from the analysis indicate in Table 5.4.4 below, the relative frequency of her use of this pattern per hour was 1.00. More specifically, Maria Jana indicated and resolved a problem twice in her interaction with Carla, which results in RFH - 5.71, and once during her collaboration with Patricia, that is RFH - 0.52. None of Maria Jana's partners indicated and resolved a problem in her speech during their telecollaborative interaction.

Table 5.4.4: Number of times that Maria Jana followed Listener Indicated-Listener Resolved pattern with each partner within her total time of communication by either she or her partner indicating and resolving the problem and the relative frequency per hour

Maria Jana 's collaborative partners in both projects	Fem./Male	Maria Jana's total time of commun. in min.	Listener Indicated-Listener Resolved					
			Total number		Maria Jana indicates and resolves		Maria Jana's partner indicates and resolves	
			Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour
Manuel (Lluís Anton)	<i>M</i>	33'	0	0.00	0	0.00	0	0.00
Carla (Lluís Anton)	<i>F</i>	21'	2	5.71	2	5.71	0	0.00
Malek (Lluís Anton)	<i>M</i>	10'	0	0.00	0	0.00	0	0.00
Patricia (Anglia)	<i>F</i>	115'	1	0.52	1	0.52	0	0.00
TOTAL Nº of uses:		179'	3	1.00	3	1.00	0	0.00

The example below (Table 5.4.5) was taken from a conversation between Maria Jana and Patricia. When Patricia revealed that she “*will have holiday the following week*” Maria Jana looked a bit surprised for a second and then added “*Oh, next week!*” thus providing the correct form by using a Recast strategy, to which Patricia responded with a confirmation “*Yes!*”. The results from the analysis of Maria Jana’s use of this pattern are consistent with those of Tania, which shows that learners keep a low profile and do not use this pattern frequently.

Table 5.4.5: Maria Jana - Patricia (Mundi School- Anglia School) /Maria Jana indicates and resolves/

Turn	Transcript	Coding	Comm. strategy used
1	<i>Patricia:</i> I will have holiday the following week.	Trigger	
2	<i>Maria Jana:</i> (looks surprised) Oh, next week!	Indicator/Response	Non-Verbal Indicator /Recast
3	<i>Patricia:</i> Yes!	Reaction to Response	

Pattern 3: Speaker Indicated – Listener Resolved

Speaker Indicated-Listener Resolved pattern brings to light the ability of the participants to co-construct meaning and form while interacting with people from different cultures using a foreign language, in the current research through telecollaboration. The descriptive statistical analysis of Maria Jana’s data in this specific pattern shows quite interesting results. As Table 5.4.6 demonstrates, during her collaboration with participants from Lluís Anton School she did not apply this pattern at all, that is, she never indicated nor resolved a problem. In her conversations with Patricia, on the other hand, Maria Jana used this pattern in 9 occasions, which means that the relative frequency of her use per hour was 4.70, almost equally distributed between indicating – 2.09 and resolving a problem – 2.61.

Table 5.4.6: Number of times that Maria Jana followed Speaker Indicated-Listener Resolved pattern with each partner within her total time of communication by either indicating or resolving the problem and the relative frequency per hour

Maria Jana 's collaborative partners in both projects	Fem./Male	Maria Jana's total time of commun. in min.	Speaker Indicated – Listener Resolved					
			Total number		Maria Jana indicates		Maria Jana resolves	
			Nº of uses	Rel. freq. per hour	Nº of Uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour
Manuel (Lluís Anton)	<i>M</i>	33´	0	0.00	0	0.00	0	0.00
Carla (Lluís Anton)	<i>F</i>	21´	0	0.00	0	0.00	0	0.00
Malek (Lluís Anton)	<i>M</i>	10´	0	0.00	0	0.00	0	0.00
Patricia (Anglia)	<i>F</i>	115´	9	4.70	4	2.09	5	2.61
TOTAL Nº of uses:		179´	9	3.02	4	1.34	5	1.68

In the example in Table 5.4.7 we notice that Maria Jana encountered a problem of expressing herself while explaining that her family visits the Greek sea rather than the Bulgarian coast in summer. She initiated the sentence with “*We.....mmm...*” and she paused shortly, used Filler and appeared to be thinking in the video recording. Then she went on overtly indicating her trouble to find the right words to convey her idea “*how to say it...*” and resorted to Circumlocution “*it's better for me....mm.. Bulgarian sea is far away...*”. At that moment, in Turn 2, Patricia decided to intervene and again using Circumlocution she aimed to receive confirmation of her understanding by paraphrasing her partners previous turn “*So for you is near the Greece sea than the Bulgarian sea?*”. This was met by Maria Jana's open affirmation “*Yes, yes!*”, nodding and smiling appreciatively in her closing Turn 3.

Table 5.4.7: Maria Jana - Patricia (Mundi School- Anglia School) / Maria Jana indicates/

Turn	Transcript	Coding	Comm. strategy used
1	<i>Maria Jana:</i> We.....mmm....how to say it... (seems to be thinking)... it's better for me....mm.. Bulgarian sea is far away...	Trigger/Indicator	Filler/ Non-Verbal Indicator /Explicit Verbal Indicator/ Circumlocution
2	<i>Patricia:</i> So for you is near the Greece sea than the Bulgarian sea?	Response	Circumlocution
3	<i>Maria Jana:</i> Yes, yes! (nods)	Reaction to Response	Non-Verbal Indicator

Table 5.4.8 that follows shows the opposite example, in this case it was Patricia that faced a problem and Maria Jana sorted it out. Whilst Patricia was explaining that as a child she used to be afraid to travel by ship and providing details of a specific situation she encountered a lexical hindrance. Typically, she indicated it using Fillers and Non-Verbal Indicators but also a variety of other strategies, such as, explicitly signaling her trouble “*what was the word...*” and finally using a Comprehension Check “*Do you understand what I mean?*”. As Maria Jana’s non-understanding remained unsolved Patricia resorted to the use of Audio-Visual Support, that is, she used her mobile phone in order to illustrate the troublesome lexical item by showing an image to her partner. In the end, Maria Jana comprehended what Patricia was struggling to convey and exclaimed in Turn 5 “*Ohhhh...mermaid, mermaid*”, smiling kindly at Patricia, who gave a closing confirmation “*Yeah!*” and popped back to their conversation.

Table 5.4.8: Maria Jana - Patricia (Mundi School- Anglia School) / Maria Jana resolves/

Turn	Transcript	Coding	Comm. strategy used
1	<i>Patricia:</i> (explains she was afraid to travel by ship) The man that was driving the ship told me, ‘Well, we have found ammm (thinking)... mmm...what was the word....wait a second... well, they found an object that they told us was from aaaa.. from a siren.... Do you understand what I mean?	Trigger/Indicator	Filler/ Non-Verbal Indicator / Explicit Verbal Indicator/ Comprehension Check
2	<i>Maria Jana:</i> No (smiles).	Indicator	
3	<i>Patricia:</i> Wait a second...(searches the image on her phone) P: This! I show you a picture (shows the image to camera)Ya?	Response	Audio-Visual Support/ Comprehension Check
4	<i>Maria Jana:</i> Ohhhh...mermaid, mermaid! (smiles)	Reaction to Response	Recast
5	<i>Patricia:</i> Yeah!	Response	

Pattern 4: Speaker Indicated-Speaker Resolved

This section presents those instances in which Maria Jana, in the role of the speaker, both indicated and resolved a communication problem. The results from the analysis provided in Table 5.4.9 below demonstrate that this was not a very usual pattern used by this case study participant. The relative frequency of her use of this pattern per hour was 3.69. Curiously, the RFH was uncharacteristically high in her collaboration with Carla – 5.71 followed by that with Patricia – 4.70. Importantly, we need to emphasize that the time of interaction with Carla

was very short, only 21´, which inevitably influenced students’ communicative personalities. During Maria Jana’s interactions with Manuel and Malek the Speaker Indicated-Speaker Resolved pattern was not detected anywhere in the data.

Table 5.4.9: Number of times that Maria Jana (Mundi School, Bulgaria) followed Speaker Indicated-Speaker Resolved pattern with each partner within her total time of communication and the relative frequency per hour

Maria Jana’s collaborative partners in both projects	Fem./ Male	Total time of commun. in min.	Speaker Indicated-Speaker Resolved	
			Nº of uses	Rel. freq. per hour
Manuel (Lluís Anton)	<i>M</i>	33´	0	0.00
Carla (Lluís Anton)	<i>F</i>	21´	2	5.71
Malek (Lluís Anton)	<i>M</i>	10´	0	0.00
Patricia (Anglia)	<i>F</i>	115´	9	4.70
TOTAL Nº of uses:		179´	11	3.69

The following extract (Table 5.4.10) represents an illustration of Maria Jana indicating a lexical problem in her speech while talking about the Bulgarian educational system with Patricia. We could see in Turn 1 that Maria Jana was clearly struggling to find the correct way to express herself. Initially, she employed pauses and Fillers and then corrected herself in various occasions “*so the first classes....amm.... the first grades.... like the first or...the... little children...*” resorting, additionally, to the Audio-Visual Support, more specifically showing with her hand that she means small children. The combination of these communication strategies resulted in the successful resolution of her linguistic trouble confirmed by Patricia’s response “*Yeah!*” in Turn 2.

Table 5.4.10: Maria Jana - Patricia (Mundi School- Anglia School) /Maria Jana indicates and resolves/

Turn	Transcript	Coding	Comm. strategy used
1	<i>Maria Jana:</i> (talks about Bulgarian educational system)...so the first classes....amm.... the first grades... like (looks troubled, smiles) the first or.... the... little children (with gesture shows little) (smiles)	Trigger/ Indicator	Filler/ Non-Verbal Indicator/Self-Correction/ Circumlocution/Audio-Visual Support
2	<i>Patricia:</i> Yeah! (nods)	Response	Non-Verbal Indicator

Pattern 5: Listener Indicated-Negotiation Not Resolved

Sometimes the listener indicates a linguistic trouble but yet it remains unsolved by the participants. In Maria Jana's conversations this pattern was found quite often. As Table 5.4.11 below shows the relative frequency of her use of this pattern per hour was 5.03, as an indicator her RFH was 2.01 while her partners indicated on average 3.02 times per hour. The results from the analysis demonstrate an interesting outcome. Curiously, in Maria Jana's interactions with participants from Lluís Anton School the negotiation remained unsolved in a lot more occasions compared to that with Patricia from Anglia School. More specifically with Manuel, Carla and Malek the RFH of this pattern was 9.09, 14.29 and 24.00 respectively, while with Patricia it was only 0.52. These results clearly reveal Maria Jana's different behavior as a communicator with her different partners. She obviously remained less involved and concerned about the successful completion of the negotiation process with her partners in the first project and showed significantly more precision, meticulousness and attention to details in her interactions with Patricia, in the second project. As we have already mentioned, these results might be due to the different level of English proficiency as well as the different time of interaction between the participants, which is highly likely to shape and affect their communicative behavior in such telecollaborative projects.

Table 5.4.11: Number of times that Maria Jana followed Listener Indicated-Negotiation Not Resolved pattern with each partner within her total time of communication by either she or her partner indicating the problem and the relative frequency per hour

Maria Jana 's collaborative partners in both projects	Fem./Male	Maria Jana's total time of commun. in min.	Listener Indicated-Negotiation Not Resolved					
			Total number		Maria Jana indicates		Maria Jana's partner indicates	
			Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour
Manuel (Lluís Anton)	<i>M</i>	33'	5	9.09	0	0.00	5	9.09
Carla (Lluís Anton)	<i>F</i>	21'	5	14.29	3	8.57	2	5.71
Malek (Lluís Anton)	<i>M</i>	10'	4	24.00	2	12.00	2	12.00
Patricia (Anglia)	<i>F</i>	115'	1	0.52	1	0.52	0	0.00
TOTAL Nº of uses:		179'	15	5.03	6	2.01	9	3.02

In Table 5.4.12 we see Carla posing a question to Maria Jana. In her request Carla used Transfer from the Spanish word “exámenes” meaning “exams” in English “*Do you have a lot of examens?*”, which triggered Maria Jana’s comprehension problem. She indicated her trouble by using Confirmation Checks “*Do I have a lot of friends? Did you say that?*” but, inexplicably, Carla chose not to continue the negotiation episode but to abandon the topic, requesting “*Do you have a pet?*” in Turn 3.

Table 5.4.12: Maria Jana - Carla (Mundi School-Lluís Anton School) /Maria Jana indicates/

Turn	Transcript	Coding	Comm. strategy used
1	<i>Carla:</i> Do you have a lot of examens?	Trigger	Transfer
2	<i>Maria Jana:</i> Do I have a lot of friends? Did you say that?	Indicator	Confirmation Check

3	<i>Carla: Do you have a pet?</i>	Response	Topic Abandonment
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Table 5.4.13: Maria Jana - Manuel (Mundi School- Lluís Anton School) /Manuel indicates/

Turn	Transcript	Coding	Comm. strategy used
1	<i>Maria Jana: Do you like “Dead by Daylight”?</i>	Trigger	
2	<i>Manuel: Repeat!</i>	Indicator	Direct Appeal for Assistance
3	<i>Maria Jana: Do you like “Dead by Daylight”? Do you know this game?</i>	Response	Repetition/ Comprehension Check
4	<i>Manuel: (talks to his classmate in Spanish)</i>	Indicator	Non-Verbal Indicator
5	<i>Maria Jana: Did you hear me?</i>	Response	
6	<i>Manuel: Yeees!</i>	Reaction to Response	
7	<i>Maria Jana: Will you answer the question?</i>	Response	
8	<i>Manuel: Noooooo (smiles, looks nervous)</i>	Reaction to Response/ Indicator	Non-Verbal Indicator
9	<i>Maria Jana: Ok, ok.</i>	Reaction to Response	

Table 5.4.13 shows another example of Listener Indicated-Negotiation Not Resolved pattern, in this occasion Manuel indicating a problem of understanding. After Maria Jana’s question “Do you like “Dead by Daylight”?” Manuel used Direct Appeal for Assistance to indicate his trouble followed by Maria Jana’s repetition of the request and a Comprehension Check “Do you know this game?”. Perhaps, due to his on-going non-understanding Manuel started

fidgiting and talking to his classmates in Spanish, ignoring Maria Jana's efforts to maintain the flow of communication. She went on, requesting "*Do you hear me?*" and Manuel answered "*Yeess!*" seeming kind of annoyed but probably was simply feeling uncomfortable so after Maria Jana's final attempt "*Will you answer the question?*" he just responded "*Nooooo*". In this way Manuel clearly marked his rejection to continue the meaning negotiation process, it was visible in the video recording that his linguistic trouble persisted and he was starting to lose face with his collaborative partner. Maria Jana must have perceived that he was feeling a bit awkward and embarrassed, therefore, she just smiled and said "*Ok, ok*".

Pattern 6: Speaker Indicated-Negotiation Not Resolved

Speaker Indicated-Negotiation Not Resolved is Maria Jana's least frequently used pattern. Table 5.4.14 below demonstrates that the RFH of her use of this pattern was only 0.67. It was Maria Jana that indicated a linguistic hindrance once in her conversation with Carla and once with Patricia and the trouble remained unresolved. This pattern was not detected in any other instances during her interactions with the participants from both telecollaborative projects.

Table 5.4.14: Number of times that Maria Jana followed Speaker Indicated-Negotiation Not Resolved pattern with each partner within her total time of communication by either she or her partner indicating the problem and the relative frequency per hour

Maria Jana 's collaborative partners in both projects	Fem./Male	Maria Jana's total time of commun. in min.	Speaker Indicated-Negotiation Not Resolved					
			Total number		Maria Jana indicates		Maria Jana's partner indicates	
			Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour
Manuel (Lluís Anton)	<i>M</i>	33´	0	0.00	0	0.00	0	0.00
Carla (Lluís Anton)	<i>F</i>	21´	1	2.86	1	2.86	0	0.00
Malek (Lluís Anton)	<i>M</i>	10´	0	0.00	0	0.00	0	0.00
Patricia (Anglia)	<i>F</i>	115´	1	0.52	1	0.52	0	0.00
TOTAL Nº of uses:		179´	2	0.67	2	0.67	0	0.00

In the extract below (Table 5.4.15) Maria Jana was describing typical food from her country, which is a salty pastry and can be made with different ingredients, one of which is leek. This was the lexical item that triggered her problem of expressing as she appeared to not know this vocabulary in English. She initially indicated the problem with a short pause, used an Explicit Verbal Indicator “*I don't know*”, Fillers “*ammmm*” and finally resorted to Use of L1 strategy, adding “*in Bulgarian called “npaz” /leek/, in English I have no idea*”. This particular lexical item did not seem to hinder the communication process as it did not obstruct the flow of their conversation and Maria Jana carried on with her discourse. In the following section we provide an outline of the communication strategies that Maria Jana used with her partners in both telecollaborative projects.

Table 5.4.15: Maria Jana - Patricia (Mundi School-Anglia School) /Maria Jana indicates/

Turn	Transcript	Coding	Comm. strategy used
1	<i>Maria Jana:</i> (talks about typical food) ...I don't knowammmm (looks away, thinking)...in Bulgarian it's called "праз" /leek/, in English I have no idea (smiles)	Trigger/Indicator	Explicit Verbal Indicator/ Filler/ Non-Verbal Indicator/Use of L1

5.4.2. Communication Strategies Used by Maria Jana to Indicate and Resolve a Communication Problem

This section offers an insight into the communication strategies that Maria Jana used during her interactions in both projects. Table 5.4.16 and 5.4.17 below provide a numerical overview of her strategy use as well as the percentage of all occurrences of a communication strategy.

Table 5.4.16: Communication strategies used by Maria Jana to indicate a communication problem, the number of occurrences and the percentage of all occurrences of a communication strategy

Communication strategies used by Maria Jana to indicate a communication problem	Number of times used	Percentage of all occurrences
Direct Appeal for Assistance	20	21.3%
Clarification Request	22	23.4%
Non-Verbal Indicators	10	10.6%
Fillers	12	12.8%
Confirmation Check	17	18.1%
Comprehension Check	4	4.2%
Explicit Verbal Indicator	4	4.2%
Circumlocution	3	3.2%
Use of L1	1	1.1%
Self-Correction	0	0.0%
Topic Abandonment	1	1.1%
Audio-Visual Support	0	0.0%
Total number of strategies:	94	100%

Table 5.4.17: Communication strategies used by Maria Jana to resolve a communication problem, the number of times used and the percentage of all occurrences of a communication strategy

Communication strategies used by Maria Jana to resolve a communication problem	Number of times used	Percentage of all occurrences
Repetition	8	19.5%
Circumlocution	12	29.3%
Topic Abandonment	3	7.3%
Self-Corrections	2	4.9%
Appeal for External Assistance	0	0.0%
Transfer	0	0.0%
Recast	4	9.8%
Use of L1	1	2.4%
Audio-Visual Support	4	9.7%
Non-Verbal Indicators	5	12.2%
Approximation	2	4.9%
Total number of strategies:	41	100%

The results from the descriptive statistical analysis of the data collected from Maria Jana's interactions with all participants reveal that she used more numerous strategies to indicate a communication problem (94 times) rather than to resolve it (41 times). When indicating a linguistic problem her most commonly used strategies were Clarification Requests (23.4%), Direct Appeal for Assistance (21.3%), and Confirmation Checks (18.1%). As for the communication strategies used to resolve a problem Maria Jana's most frequently used ones were Circumlocution (29.3%) and Repetition (19.5%). From these results we can draw useful conclusions about Maria Jana characteristics as a language learner and interlocutor with participants who are culturally and linguistically different from her. The results demonstrate that when she encounters a problem of understanding or revealing her point she would normally indicate it. The high frequency of her use of Clarification Requests, Confirmation Checks and Circumlocution signals her determination to understand and to be understood, as

well as her motivation, consideration and attentiveness towards her partners and the project itself.

The descriptive statistical analysis of Maria Jana's negotiation patterns provided in Section 5.4.1. shed light on her negotiation behavior with her respective partners in the telecollaborative projects. Due to the fact that the participants from Lluís Anton School had lower level of English proficiency there were more conditions for a linguistic problem to arise, therefore, to be indicated and resolved. Indeed, this was evident in most of the patterns analyzed in this study, namely Maria Jana was involved in negotiation processes mainly with Manuel, Carla and Malek (Lluís Anton School). Quite the reverse, in Speaker Indicated-Listener Resolved pattern there were negotiation episodes only between Maria Jana and Patricia and not with the rest of the participants. In a nutshell, Maria Jana took part in meaning negotiation acts more often with participants from Lluís Anton School, where she strove to cooperate, contribute and resolve problematic incidents. During her collaboration with Patricia, from Anglia School, however, Maria Jana displayed her enthusiasm, involvement and friendliness to her partner, noticeable throughout all the video recorded data from their sessions.

5.5. Case Study: Daniel

The focus of the current section is on the third case study participant, Daniel, who is a representative of a large cluster of learners sharing similar features, such as Hana, Jimena, Manuel, Pablo, Ivo, Malek, Berta, Eric, Carla, Noah, Arnau and Gabriel. Daniel collaborated with three students from Lluís Anton School, namely Eric, Hana and Noah and one participant from Anglia School, Pablo (See Table 5.5.1 below). Daniel was different from Tania and Maria Jana in that he displayed more enthusiasm, involvement and commitment to the participants in the first project compared to that with Pablo, in the second one. For instance, Daniel developed a much friendlier and emotional bond with Eric, with whom he interacted for 69 minutes in total, than with Pablo, whose total time of communication was 66 minutes. As we have previously mentioned, Pablo's level of English was close to native as he had lived in the United States for a couple of years. We can only assume that this could be a potential reason for Daniel to appear more distant, reserved, and also uneasy and distracted at times in his conversations with Pablo. By looking into Daniel's meaning negotiation and communication strategies we would like to explore whether the abovementioned factors affect Daniel's behavior as a language learner and communicator in telecollaboration. This section presents illustrative examples together with analysis of the patterns of negotiated interactions and communication strategies that Daniel used in both telecollaborative projects, with participants from Lluís Anton School and Anglia School, Spain. Just as with the other case study participants, we offer a numerical overview of the total number of times that Daniel used each pattern with each participant and the total number of uses in both partnerships. After that, illustrative examples are provided and analyzed, aimed at offering a deeper understanding of the communication strategies that the learners used to indicate and to resolve linguistic problems.

5.5.1. Daniel’s Patterns of Negotiated Interactions

Pattern 1: Listener Indicated-Speaker Resolved

Listener Indicated-Speaker Resolved is the pattern that was most frequently detected in the data of Daniel’s interactions in both projects. The results from the descriptive statistical analysis indicate that the relative frequency of his use of this pattern per hour was 11.03, the highest RFH Daniel scored with Noah - 30, however, we need to take into consideration their very limited time of communication, only 12 minutes. This pattern was not detected in his interaction with Hana from Lluís Anton School.

Table 5.5.1: Number of times that Daniel followed Listener Indicated-Speaker Resolved pattern with each partner within his total time of communication by either indicating or resolving the problem and the relative frequency per hour

Daniel ‘s collaborative partners in both projects	Fem./Male	Daniel’s total time of commun. in min.	Listener Indicated-Speaker Resolved					
			Total number		Daniel indicates		Daniel resolves	
			Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour
Eric (Lluís Anton)	<i>M</i>	69’	13	11.30	7	6.09	6	5.22
Hana (Lluís Anton)	<i>F</i>	27’	0	0.00	0	0.00	0	0.00
Noah (Lluís Anton)	<i>M</i>	12’	6	30.00	3	15.00	3	15.00
Pablo (Anglia)	<i>M</i>	66’	13	11.82	7	6.36	6	5.45
TOTAL Nº of uses:		174’	32	11.03	17	5.86	15	5.17

In Table 5.5.2 we see an example in which Daniel indicated an understanding problem after Pablo’s request “*Do you like the educational system in Bulgaria?*” by using Filler (“*Amm...*”) and next directly requesting assistance. In response, Pablo rephrased his question, thus making it simpler and allegedly more accessible for his partner, which ended up as a successful communication strategy as it led to Daniel’s detailed response in Turn 4.

Table 5.5.2: Daniel – Pablo (Mundi School-Anglia School) /Daniel indicates/

Turn	Transcript	Coding	Comm. strategy used
1	<i>Pablo: Do you like the educational system in Bulgaria?</i>	Trigger	
2	<i>Daniel: Amm...can you repeat!</i>	Indicator	Filler/ Direct Appeal for Assistance
3	<i>Pablo: Do you like the education in Bulgaria?</i>	Response	Circumlocution
4	<i>Daniel: Well....the education in Bulgaria is not so good because our school starts at seven o'clock and it's too early.</i>	Reaction to Response	

The extract below (Table 5.5.3) shows Daniel and Eric talking about typical drinks, more specifically, wine. It was Eric who introduced the topic by saying that wine is a typical Spanish drink, followed by Daniel's interest in the color of the wine. Eric signaled his non-understanding by asking for assistance "What?" and Daniel simplified his inquiry by shortening it to only using the key words "What color?". Still, adding to his simplification technique, Daniel wished to exemplify it and suggested "Blue or...". It is highly likely that this caused even more confusion in Eric, as he responded "Vino" (wine), intending to make clear what he was talking about. Daniel, then, starting to look a little impatient, replied "Yes, and we have "vino". Our "vino" is white and red. What's the color of your "vino"?". Apparently, Eric did not grasp the essence of the question again and this time tried to abandon the topic, starting to talk about another typical Spanish drink, called "horchata". However, Daniel was very determined and did not seem keen to leave the situation unsolved. He made yet another effort, using again the Spanish word "vino" for "wine" so as to ease his partner's understanding but Eric's response "yes" did not indicate this. After Daniel's next try "What color? And we have wine and the color is white and red..." did Eric finally manage to understand and provided a short but meaningful answer "White". At the end, Daniel closed

this lengthy but successful negotiation episode with the words “*White! And we have white*” expressing alignment with his collaborative partner.

Table 5.5.3: Daniel – Eric (Mundi School-Lluís Anton School) /Daniel resolves/

Turn	Transcript	Coding	Comm. strategy used
1	<i>Eric:</i> Typical drink of Spain is wine.		
2	<i>Daniel:</i> What color is the wine?	Trigger	
3	<i>Eric:</i> What?	Indicator	Direct Appeal for Assistance
4	<i>Daniel:</i> What color? Blue or...	Response	Repetition/Circumlocution
5	<i>Eric:</i> Vino.	Reaction to Response	Use of L1/ Non-Verbal Indicator
6	<i>Daniel:</i> Yes, and we have “vino”. Our “vino” is white and red. What’s the color of your “vino”?	Response	Circumlocution
7	<i>Eric:</i> Horchata (<i>a typical Spanish drink</i>).....	Indicator	Topic Abandonment
8	<i>Daniel:</i> What color is the wine?..... “Vino”..you have...	Response	
9	<i>Eric:</i> Yes. (looks confused)	Reaction to Response	Non-Verbal Indicator
10	<i>Daniel:</i> What color? And we have wine and the color is white and red...	Response	Repetition/ Circumlocution
11	<i>Eric:</i> White.	Reaction to Response	
12	<i>Daniel:</i> White! And we have white. (smiles)	Reaction to Response	

Pattern 2: Listener Indicated-Listener Resolved

Listener Indicated-Listener Resolved pattern was identified on average 1.72 times per hour in Daniel's interactions (See Table 5.5.4). To be precise, it was Eric, in 1 occasion, and Noah, in 4 occasions, which indicated and sorted out a problem in communication, whereas Daniel was not detected to follow this pattern anywhere in the data collected from his collaborations with partners from both projects.

Table 5.5.4: Number of times that Daniel followed Listener Indicated-Listener Resolved pattern with each partner within his total time of communication by either he or his partner indicating and resolving the problem and the relative frequency per hour

Daniel 's collaborative partners in both projects	Fem./Male	Daniel's total time of commun. in min.	Listener Indicated-Listener Resolved					
			Total number		Daniel indicates and resolves		Daniel's partner indicates and resolves	
			Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour
Eric (Lluís Anton)	<i>M</i>	69'	1	0.87	0	0.00	1	0.87
Hana (Lluís Anton)	<i>F</i>	27'	0	0.00	0	0.00	0	0.00
Noah (Lluís Anton)	<i>M</i>	12'	4	20.00	0	0.00	4	20.00
Pablo (Anglia)	<i>M</i>	66'	0	0.00	0	0.00	0	0.00
TOTAL Nº of uses:		174'	5	1.72	0	0.00	5	1.72

In Table 5.5.5 we could see that Daniel's wrong pronunciation of the word "December" drew Eric's attention and prompted his use of Recast strategy, who directly provided the correct form of the lexical item. Eric's response was accompanied by a smile and it is highly probable that he wanted to demonstrate his empathy and identification with his partner, rather than standing out as more expert or knowledgeable in his command of English.

Table 5.5.5: Daniel - Eric (Mundi School-Lluís Anton School)

Turn	Transcript	Coding	Comm. strategy used
1	<i>Daniel:</i> Yes, we celebrate Christmas on the 24 th of Dekember.	Trigger	
2	<i>Eric:</i> December, yes! (smiles)	Response	Recast/ Non-Verbal Indicator

Table 5.5.6: Daniel - Noah (Mundi School- Lluís Anton School)

Turn	Transcript	Coding	Comm. strategy used
1	<i>Daniel:</i> Do you go on Barcelona stadium?	Trigger	
2	<i>Noah:</i> Eee...Have you went! (shows his index finger on camera, nods)..Have you went to the Barcelona stadium!	Indicator/Response	Recast/ Non-Verbal Indicator/ Repetition
3	<i>Daniel:</i> Yes!	Reaction to Response	
4	<i>Noah:</i> How many times?		
5	<i>Daniel:</i> One.		

The conversation between Daniel and Noah illustrated in Table 5.5.6 above is rather attention-grabbing and curious. Daniel opened the episode with the question “*Do you go on Barcelona stadium?*” which Noah immediately identified as wrong and in Turn 2 he responded, intending to recast his partner’s speech, saying “*Eee..Have you went!*”. Interestingly, Noah accompanied his repair showing his index finger and nodding on the camera, as if wanting to clearly point out to Daniel that he made a mistake and that this was the correct form. As we have already mentioned before, Noah is a native speaker of English

and, therefore, it is really extraordinary that his repair was actually grammatically wrong in English. He, then, formulated the whole question, aiming at providing the correct form of the request “*Have you went to the Barcelona stadium!*”. Hearing this, Daniel decided that Noah was posing the question to him, so he gave an answer “*Yes!*”. In Turn 4 Noah followed up on the topic “*How many times?*”, so their communication went on smoothly and uninterrupted.

Pattern 3: Speaker Indicated-Listener Resolved

The Speaker Indicated-Listener Resolved pattern was rather uncharacteristic for Daniel. Table 5.5.7 shows that he scarcely used it in both projects, that is, the relative frequency of his use per hour was 0.69. He, actually applied it only in 2 occasions in his conversation with Pablo and did not use with any other participant.

Table 5.5.7: Number of times that Daniel followed Speaker Indicated-Listener Resolved pattern with each partner within his total time of communication by either indicating or resolving the problem and the relative frequency per hour

Daniel ‘s collaborative partners in both projects	Fem./Male	Daniel’s total time of commun.	Speaker Indicated – Listener Resolved					
			Total number		Daniel indicates		Daniel resolves	
			Nº of uses	Rel. freq. per hour	Nº of Uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour
Eric (Lluís Anton)	<i>M</i>	69´	0	0.00	0	0.00	0	0.00
Hana (Lluís Anton)	<i>F</i>	27´	0	0.00	0	0.00	0	0.00
Noah (Lluís Anton)	<i>M</i>	12´	0	0.00	0	0.00	0	0.00
Pablo (Anglia)	<i>M</i>	66´	2	1.82	0	0.00	2	1.82
TOTAL Nº of uses:		174´	2	0.69	0	0.00	2	0.69

The only two instances in which Daniel applied the Speaker Indicated-Listener Resolved pattern were detected in the conversation provided below, in Table 5.5.8. In Turn 1 we noticed Pablo’s struggle with a vocabulary item while he was describing what “tortilla” is,

he showed an image of this food to his partner and then added “*It’s like aaaa...*”. In that moment Pablo encountered a lexical hindrance and he indicated his trouble clearly making long pauses, looking away from the camera, as if thinking and trying to remember a certain word, the again he repeated “*...like aaaa..*”. It was then, when Daniel first intervened and suggested a solution “*Potato*”. Pablo took up on his proposal and said “*Yes, it’s made of potato, eggs and onion. You mix it and you cook it and it’s like...*” in this way showing appreciation to his partner’s contribution and his desire to provide support and cooperation. However, the lexical problem still remained and Pablo marked it again using Fillers and Non-Verbal Indicators, he gave it yet another try, then overtly indicated it “*I don’t know..*” and finally gave up “*it’s that!*”. In Turn 4 we see Daniel’s second attempt to resolve the problematic situation and assist his collaborative partner saying “*Pancake!*”. This time his contribution was more helpful but even so Pablo was not completely satisfied with the word “*Yes! It’s like a big pancake...*” and as a final attempt he used his L1 and added “*biscocho*” which means “a cake” in English. This, however, was merely a linguistic nuance which did not hinder the understanding process and their discourse went back to talking about other typical food.

Table 5.5.8: Daniel - Pablo (Mundi School-Anglia School)

Turn	Transcript	Coding	Comm. strategy used
1	<i>Pablo:</i> (describes tortilla and shows an image of it on his phone) ...This! It’s like aaaa...(thinking, looks away from camera)..like aaaa..	Trigger/Indicator	Filler/ Non-Verbal Indicator
2	<i>Daniel:</i> Potato.	Response	
3	<i>Pablo:</i> Yes, it’s made of potato, eggs and onion. You mix it and you cook it and it’s like... aaammm (thinking, looks way from camera)	Reaction to Response/Indicator	Filler/ Non-Verbal Indicator/Explicit Verbal Indicator

chocolate.... it's like..... I don't know.. it's that!		
4	<i>Daniel:</i> Pancake!	Response	Recast
5	<i>Pablo:</i> Yes! It's like a big pancake...biscocho!	Reaction to Response	Use of L1

Pattern 4: Speaker Indicated-Speaker Resolved

The instances in which Daniel indicated and resolved a problem while in the role of a speaker were also not very plentiful; the relative frequency of his use of this pattern per hour was 1.38 (See Table 5.5.9). This pattern was only detected twice in Daniel's collaboration with Noah (RFH – 10.00), and the same number with Pablo (RFH – 1.82). With the other two participants Daniel did not apply this pattern.

Table 5.5.9: Number of times that Daniel (Mundi School, Bulgaria) followed Speaker Indicated-Speaker Resolved pattern with each partner within his total time of communication and the relative frequency per hour

Daniel 's collaborative partners in both projects	Fem./Male	Daniel's total time of commun. in min.	Speaker Indicated- Speaker Resolved	
			Nº of Uses	Rel. freq. per hour
Eric (Lluís Anton)	<i>M</i>	69'	0	0.00
Hana (Lluís Anton)	<i>F</i>	27'	0	0.00
Noah (Lluís Anton)	<i>M</i>	12'	2	10.00
Pablo (Anglia)	<i>M</i>	66'	2	1.82
TOTAL Nº of uses:		174'	4	1.38

In Table 5.5.10, when Daniel could not comprehend Noah's inquiry whether he was born in Bulgaria, Daniel asked "*What?*". Noah repeated his question, but Daniel failed to understand again and therefore, resorted to yet another communication strategy, using a Clarification Check "*I can't understand you! What's [bo:n]?*". Straightaway, Daniel turned to his teacher

and asked her for assistance “*Miss, what is [bo:n]?*” (my translation from Bulgarian) and only after she pronounced the lexical item slowly and clearly, did he manage to comprehend and responded “*Aaaa, ok! Yes, I was born in Bulgaria*”. This extract reveals Daniel’s determination and commitment to resolve the problematic situation, even having to use three different types of communication strategies in order to complete the meaning negotiation process.

Table 5.5.10: Daniel - Noah (Mundi School-Lluís Anton School)

Turn	Transcript	Coding	Comm. strategy used
1	<i>Noah: Were you born in Bulgaria?</i>	Trigger	
2	<i>Daniel: What?</i>	Indicator	Direct Appeal for Assistance
3	<i>Noah: Were you born in Bulgaria?</i>	Response	Repetition
4	<i>Daniel: I can’t understand you! What’s [bo:n]? (He turns to his teacher and asks her “Miss, what is [bo:n]?”, the teacher repeats slowly “born”). Aaaa, ok! Yes, I was born in Bulgaria.</i>	Reaction to Response	Clarification Check/ Appeal for External Assistance

Pattern 5: Listener Indicated-Negotiation Not Resolved

In Daniel’s interactions we identified various instances in which the listener indicated a linguistic problem but the trouble remains unsolved. In fact, the RFH of his use of this pattern was quite high – 5.15, of which Daniel scored highest as an indicator in his communication with Noah – 5.00, and both Eric and Hana had high RFH, 6.96 and 6.67 respectively, as indicators of linguistic trouble without it being sorted out successfully (See Table 5.5.11). Curiously, during the conversations between Daniel and Pablo no instances of such pattern were discovered.

Table 5.5.11: Number of times that Daniel followed Listener Indicated- Negotiation Not Resolved pattern with each partner within his total time of communication by either he or his partner indicating and resolving the problem and the relative frequency per hour

Daniel 's collaborative partners in both projects	Fem./Male	Daniel's total time of commun. in min.	Listener Indicated-Negotiation Not Resolved					
			Total number		Daniel indicates		Daniel's partner indicates	
			Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour
Eric (Lluís Anton)	<i>M</i>	69'	10	8.70	2	1.74	8	6.96
Hana (Lluís Anton)	<i>F</i>	27'	4	8.89	1	2.22	3	6.67
Noah (Lluís Anton)	<i>M</i>	12'	1	5.00	1	5.00	0	0.00
Pablo (Anglia)	<i>M</i>	66'	0	0.00	0	0.00	0	0.00
TOTAL Nº of uses:		174'	15	5.17	4	1.38	11	3.79

Table 5.5.12 shows a conversation between Eric and Daniel in which Eric opened up with the request “*Do you have religion as a subject at your school?*”. As we have previously explained, this question always causes understanding troubles for the Bulgarian students because religion has never been part of the Bulgarian school system, therefore, they do not associate religion with a school subject. Consequently, when Eric posed this question, it triggered Daniel’s non-understanding which he indicated using Direct appeal for Assistance, first in Turn 2, then in Turn 4 a Clarification Request (“*I can’t understand!*”) and Non-Verbal Indicator (looking confused and shrugging his shoulders), and then in Turn 6 yet again he resorted to Direct Appeal for Assistance. In response, Eric applied Repetition in all three occasions and when Daniel realized that his partner was not going to use a different strategy to resolve the problematic situation, he simply answered “*Yes*”. Nonetheless, his facial expressions detected in the video recording were a clear demonstration that he did not grasp the request and merely provided a response so as to end this negotiation episode. Surely, Eric perceived Daniel’s uncertainty and responded with a smile and a friendly “*Ha...OK*” leaving the troublesome situation unresolved.

Table 5.5.12: Daniel - Eric (Mundi School- Lluís Anton School) /Daniel indicates/

Turn	Transcript	Coding	Comm. strategy used
1	<i>Eric:</i> Do you have religion as a subject at your school?	Trigger	
2	<i>Daniel:</i> What?	Indicator	Direct Appeal for Assistance
3	<i>Eric:</i> Do you have religion as a subject at your school?	Response	Repetition
4	<i>Daniel:</i> I can't understand! (looks confused)	Indicator	Clarification Request/ Non-Verbal Indicator
5	<i>Eric:</i> Do you have religion as a subject at your school?	Response	Repetition
6	<i>Daniel:</i> Please, speak up!	Indicator	Direct Appeal for Assistance
7	<i>Eric:</i> Do you have religion as a subject at your school?	Response	Repetition
8	<i>Daniel:</i> Yes. (looks confused, makes funny faces)	Reaction to Response	Non-Verbal Indicator
9	<i>Eric:</i> Ha...(smiles) OK.	Reaction to Response	Non-Verbal Indicator

Quite the reverse, in Table 5.5.13 it was Hana that indicated a problem of understanding, after Daniel's inquiry "*What's your pet?*", which she indicated using Direct Appeal for Assistance twice – in Turn 2 and 4. Daniel repeated the question twice more and after hearing the request three times in total and still not understanding it, Hana must have felt awkward as she started talking to her classmates in Spanish, obviously trying to avoid the embarrassing situation and the loss of face. This attitude of hers apparently irritated Daniel to some extent, as in Turn 7 he was seen turning to his teacher and commenting in Bulgarian

that the Spanish participants were not being serious and respectful enough. Anyhow, he went back to the camera and posed a different question in attempt to maintain the flow of their conversation renouncing his previous request.

Table 5.5.13: Daniel - Hana (Mundi School-Lluís Anton School) /Daniel resolves/

Turn	Transcript	Coding	Comm. strategy used
1	<i>Daniel:</i> What's your pet?	Trigger	
2	<i>Hana:</i> Repeat, please!	Indicator	Direct Appeal for Assistance
3	<i>Daniel:</i> What's your pet?	Response	Repetition
4	<i>Hana:</i> Repeat!	Indicator	Direct Appeal for Assistance
5	<i>Daniel:</i> What's your pet?	Response	Repetition
6	<i>Hana:</i> (talks to her classmates in Spanish)	Indicator	Non-Verbal Indicator
7	<i>Daniel:</i> (to his teacher: "Miss, they are only pulling their hair and laughing") ... Do you like school?	Response	Topic Abandonment
8	<i>Hana:</i> No.	Reaction to Response	

Pattern 6: Speaker Indicated-Negotiation Not Resolved

As the results from the descriptive statistical analysis demonstrate Speaker Indicated-Negotiation Not Resolved pattern was detected on average 1.03 times per hour in Daniel's collaborations. Table 5.5.14 below shows that in 3 occasions, only in his interactions with Pablo, Daniel indicated a linguistic hindrance and it was left unsolved. No other instances of

this pattern were identified in Daniel’s video recorded data from both telecollaborative projects.

Table 5.5.14: Number of times that Daniel followed Speaker Indicated-Negotiation Not Resolved pattern with each partner within his total time of communication by either he or his partner indicating and resolving the problem and the relative frequency per hour

Daniel ‘s collaborative partners in both projects	Fem./Male	Daniel’s total time of commun. in min.	Speaker Indicated-Negotiation Not Resolved					
			Total number		Daniel indicates		Daniel’s partner indicates	
			Nº of uses	Rel. freq. per hour	Nº of Uses	Rel. freq. per hour	Nº of uses	Rel. freq. per hour
Eric (Lluís Anton)	<i>M</i>	69’	0	0.00	0	0.00	0	0.00
Hana (Lluís Anton)	<i>F</i>	27’	0	0.00	0	0.00	0	0.00
Noah (Lluís Anton)	<i>M</i>	12’	0	0.00	0	0.00	0	0.00
Pablo (Anglia)	<i>M</i>	66’	3	2.73	3	2.73	0	0.00
TOTAL Nº of uses:		174’	3	1.03	3	1.03	0	0.00

Table 5.5.15 reveals Daniel struggling with a vocabulary item that he could not recall while talking about traditions in his country. He initiated the discourse with “*In Bulgaria we have many traditional...amm...*” and he signaled a lexical hindrance, using pauses and seeming confused in the video recording. Next he added “*not presents but I don’t know the word*” explicitly indicating that he was facing a vocabulary problem. It is highly likely that he mentioned the word “presents” due to phonetic transfer from his L1, namely, the word “празник”/praznik/ means “a holiday” in English, which was exactly what Daniel wished to express. This is made clear in his next utterance “*One of them is Yordanovden*” where he tried to exemplify the problematic word. His attempt, however, is not very useful as the word “*Yordanovden*” is unfamiliar for a person who comes from a different cultural background and has no knowledge of Bulgarian traditions. “*Yordanovden*” (Saint Jordan’s Day) is a very popular name day in Bulgaria, celebrated on the 6th of January, as previously explained in

Section 4.4. The following section provides an overview of the communication strategies that Daniel used with his partners in both telecollaborative projects.

Table 5.5.15: Daniel - Pablo (Mundi School-Anglia School) /Daniel indicates/

Turn	Transcript	Coding	Comm. strategy used
1	<i>Daniel:</i> (talks about traditional holidays) In Bulgaria we have many traditional..... amm (looks confused) ..not presents but I don't know the word. One of them is "Yordanovden".	Trigger/ Indicator	Filler/ Non-Verbal Indicator/Explicit Verbal Indicator/ Circumlocution

5.5.2. Communication Strategies Used by Daniel to Indicate and Resolve a Communication Problem

In this section we present the communication strategies that Daniel used during his interactions in both projects. Table 5.5.16 and 5.5.17 below provide a numerical overview of the strategies that he employed as well as the percentage of all occurrences of a communication strategy.

Table 5.5.16: Communication strategies used by Daniel to indicate a communication problem, the number of occurrences and the percentage of all occurrences of a communication strategy

Communication strategies used by Daniel to indicate a communication problem	Number of times used	Percentage of all occurrences
Direct Appeal for Assistance	26	29.9%
Clarification Request	12	13.8%
Non-Verbal Indicators	22	25.3%
Fillers	17	19.5%
Confirmation Check	2	2.3%
Comprehension Check	0	0.0%
Explicit Verbal Indicator	5	5.8%
Circumlocution	0	0.0%
Use of L1	3	3.4%
Self-Correction	0	0.0%
Topic Abandonment	0	0.0%
Audio-Visual Support	0	0.0%
Total number of strategies:	87	100%

Table 5.5.17: Communication strategies used by Daniel to resolve a communication problem, the number of times used and the percentage of all occurrences of a communication strategy

Communication strategies used by Daniel to resolve a communication problem	Number of times used	Percentage of all occurrences
Repetition	18	26.5%
Circumlocution	13	19.1%
Topic Abandonment	5	7.3%
Self-Corrections	4	5.9%
Appeal for External Assistance	13	19.1%
Transfer	1	1.5%
Recast	3	4.4%
Use of L1	4	5.9%
Audio-Visual Support	3	4.4%
Non-Verbal Indicators	3	4.4%
Approximation	1	1.5%
Total number of strategies:	68	100%

The results from the descriptive statistical analysis of the data collected from Daniel's interactions with all participants demonstrate that he used slightly more strategies to indicate a communication problem (87 times) rather than to resolve it (68 times). As Table 5.5.16 indicates Daniel did not make use of a wide range or diverse strategies to indicate that there was a problem. In fact, his most commonly used strategies were Direct Appeal for Assistance (29.9%), Non-Verbal Indicators (25.3%), Fillers (20%), and Clarification Requests (13.8%) and the rest of the strategies he used scarcely. The same results were detected in his use of strategies to solve a communication problem (See Table 5.5.17). Namely, his most frequently used ones were Repetition (26.5%), Circumlocution (19.1%) and Appeal for External Assistance (19.1%) and the remaining strategies Daniel used in very few occasions. The above mentioned results represent Daniel as the language learner who used more limited variety of communication strategies to negotiate for meaning compared to the other case study participants. Besides, his high use of Direct Appeal for Assistance, Clarification

Requests and Appeal for External Assistance show that he negotiated on lexical items and meaning more often rather than of form, noticeable in his low number of Self-Corrections and Recasts.

As have already mentioned, Daniel showed different behavior as an interlocutor depending on his collaborative partner. With his partner Eric (Lluís Anton School) Daniel proved to be a very talkative, enthusiastic and dedicated participant. He posed many questions, always followed the conversation, stayed alert for potential linguistic trouble and put a lot of effort to resolve it in case it arose. It is worth mentioning that Daniel spent the most telecollaborative time with Eric (69'); besides it is highly likely that their similar level of language proficiency contributed to this mutually successful and fruitful collaboration. Daniel's second partner, Hana (Lluís Anton School), had very low level of English which hindered the comprehension process; she frequently failed to understand Daniel and her responses were poor, simple and without any details, which made it impossible to build a meaningful and in-depth conversation. With Noah (Lluís Anton School), Daniel had an interesting collaboration but due to the very limited time of their interaction (12') it is hard to draw any reliable conclusions. In the second project Daniel collaborated with Pablo for approximately the same time as with Eric (66') but as we have mentioned, Pablo's almost fluent level of English most probably disturbed Daniel and made him feel a bit uncomfortable. In the video recordings we could notice that Daniel was less cooperative and motivated than in the first project, he seemed a little dreamy and inattentive at times. We must also lay emphasis on the fact that in the second project Daniel participated from his home while in the first one he was in the school setting, with the rest of his classmates and teachers which may have had a stimulating and motivating influence on Daniel.

5.6. Students'and Teachers'Perceptions of the Impact of the Telecollaborative Project on Learners'Communication Skills

In the current chapter we have already provided numerical and descriptive analysis of students' use of communication strategies; the purpose of this section, however, is to offer the perspective of all the participating students and teachers regarding the impact of the current telecollaborative projects on learners' communication skills. As previously mentioned, results in this section are yielded from the content analysis of participants' pre-project and post-project questionnaires and face-to-face interviews and they are thought as a complement to the analysis of communication skills actually displayed during interactions that were presented previously (See Section 3.6). In Section 4.5 we have provided information about the participating students and teachers who submitted questionnaires and/or gave interviews (See Table 4.5.1). Overall, the analysis of the data revealed that the majority of the students noticed an improvement in their ability to communicate in English after the project.

Interestingly, most of the learners that reported to have noticed an improvement in their communication skills actually had lower level of language proficiency. It seems that these participants perceived the project as much more beneficial and motivating than those who had higher level of English. As we have already mentioned (See Section 4.5 *Students and teachers' perceptions of the telecollaborative interactional context*), one of the findings in this project has been that the participants perceived that it helped them overcome the anxiety and nervousness of having to communicate in a foreign language with people from a different cultural background.

Amira, in Extract 150, for instance, pointed out that she was nervous at the beginning but expressed her contentment with her performance at the end “*yes, in the last meetings I did really good job*”. Likewise, Tania (Extract 151) revealed her enjoyment with the projects, remarking on the opportunity to speak exclusively in English “*I did not have the chance to use Bulgarian to explain what I mean*”, as well as on the importance of pronunciation and interactional skills “*I think that my skills of answering and posing questions have improved*”.

Extract 150:

Amira: *At the beginning I was a bit nervous....but then in the last meetings I was really good...yes, in the last meetings I did really good job (smiles).*

Extract 151:

Tania: *I really believe that my English has improved because I did not have the chance to use Bulgarian to explain what I mean and I realized that sometimes the correct pronunciation of the words is very important for the mutual understanding. I think that my skills of answering and posing questions have improved.*

In Extracts 152 and 153 we see Daniel and Eric expressing similar opinion, sharing the belief that their English has improved because the project helped them overcome their shyness and enhance their confidence “*I used to be, like, shy to speak in English but now I feel like I have more confidence to talk to people in English*” (Eric). Interestingly, in Extract 154, Malek revealed the perception that his English level was rather basic prior to the project “*Before I was a real disaster, I didn’t speak English at all....I only knew the numbers, the colors, and “hello” and nothing else*”. After the project, however, he stated to have noticed an improvement “*Now I feel as if I know more English*” as a result of the spontaneity of the conversations as well as his own efforts to understand “*When the boy was talking, he was saying words and I was kind of understanding, some were similar to Spanish, ...and well, thinking a lot*”.

Extract 152:

Daniel: *Yes, my English has improved, especially the speaking and my shyness. Before when we used to go on holidays abroad it was me who was supposed to speak in English but I was really nervous and now it's much less...*

Extract 153:

Eric: *Yes, I think it has improved. I used to be, like, shy to speak in English but now I feel like I have more confidence to talk to people in English...and yes, before I was afraid!*

Extract 154:

Malek: *I have changed a lot! Before I was a real disaster, I didn’t speak English at all....I only knew the numbers, the colors, and “hello” and nothing else. Now I feel as if I know more English. When the boy was talking, he was saying words and I was*

kind of understanding, some were similar to Spanish, ...and well, thinking a lot (smiles).

All the above-mentioned participants revealed their satisfaction with the telecollaboration projects and recognized their positive contribution to their communication skills. In addition, some participants claimed that the project had impact on their vocabulary intake. Such is the case of Angela (Lluís Anton School, Spain), for instance, who apart from mentioning the importance of real-time face-to-face communication also identified an increase in her vocabulary as well as language awareness and consciousness (See Extract 155).

Extract 155:

Angela: Yes, I think that my ability to communicate in English has improved a bit because I have got used to speaking in English, even though it was for a short time, but yes, I could communicate quite well and I think that this is the most important thing....because the most important aspect of the language is to speak, more important than your ability to write, for example....I liked it very much because while you communicate with the another person you don't know what he will say, you don't have it written, like a script, but you have to improvise, and if you manage to improvise then it means you have good level of English. I have also learned some words...."almonds", for example, and "shape" and "meat balls"....yes, I have learned some word while communicating. Sometimes, I realize that I just speak in English but I don't connect the words well, but it is not such a big deal because you make associations and imagine what the word could mean and then it's easier...so, yes, I believe I have improved my English.

Hugo, from Lluís Anton School, Spain, is another participant who valued greatly the project and considered that it contributed to the increase of his lexical knowledge, his ability to communicate as well as raised his motivation and awareness of the importance of English. Extract 156 below shows that Hugo provided a very detailed and wholehearted response, finishing his answer with the words *"it was fantastic because it was an experience that I had never had before and not everyone can have so I felt fortunate, you know, that I could do something that no everybody can do"*.

Extract 156:

Hugo: Yes, my English has improved because she was telling me words that I didn't understand, I didn't know, but then after she explained the meaning to me I started using them and it was better....it is basically like in a classroom but in class it is boring....talking with someone via Skype is much better, it's more fun. This is like it is preparing you for the real life, we speak to them....yes, I can see I need it....apart from that, English is very important now, in your everyday life you always use it because it is like the language that everybody speaks. Without English how would we communicate with other people who don't speak our language? Well, in English!

I cannot speak other languages but they will speak English, like us. It is very important. Now you start to appreciate the things that they have taught us in school. I should have paid more attention in class, shouldn't I (smiles)?

It was great fun, it was fantastic because it was an experience that I had never had before and not everyone can have so I felt fortunate, you know, that I could do something that no everybody can do.

Yet, not all participants perceived significant improvement in their ability to communicate in English. As we have mentioned, it was mainly students with high level of language proficiency who reported that they did not notice considerable improvement in their communication skills. It is important to point out that only a small number of participants stated such lack of improvement, however, their overall perception of the telecollaborative experience was very positive. Extracts 157, 158 and 159 below show Andrea (Anglia School, Spain), Iana (Mundi School, Bulgaria) and Patricia's (Anglia School, Spain) responses in the post-project interview to the question whether they have noticed any improvement in their language skills after the project. We can clearly observe that in their replies all three participants mentioned that they attribute this lack of improvement to the insufficient duration of the project, that is, the limited time that they had to dedicate to such experience. They also revealed that having had more sessions might not only have led to better linguistic skills but would as well have given them the opportunity to discuss broader topics and engage in more in-depth discussion on the topics.

Extract 157:

Andrea: No, because there were very few sessions so as to notice so rapidly an improvement.

Extract 158:

Iana: I don't think it has improved considerably. Maybe if we had the chance to speak more, yes.

Extract 159:

Patricia: Yes, this project helped me expand my vocabulary and I have used everything I know. I think that only 5 sessions are not enough so as to see a change in your language level. Honestly, I expected to improve more.

When communication breakdown occurred, students were faced with the necessity to deal with this problematic situation, hence, resort to communication mechanisms in order to restore the mutual understanding and avoid miscommunication or failed communication. Such mechanisms were mainly Direct Appeal for Assistance and Clarification Request (See Excerpts 160, 161 and 162).

Extract 160:

Andrea: I asked her to repeat again or I told her that I had not heard her well.

Extract 162:

Maria Jana: I asked her to repeat, if necessary a few time. It happened very often that the girl had accent and there was noise in the room. Sometimes I understood by the context, other times I did not understand exactly what she was saying but I didn't interrupt her so that she can finish expressing her idea.

Extract 163:

Daniel: I was asking them to repeat... This was my most common phrase... Can you repeat?, What? but sometimes they didn't hear me and they continued talking.

Another common strategy that the learners mentioned in their replies is Topic Abandonment (See Excerpts 164, 165 and 166). Malek's response, in Extract 164, is noteworthy, since he is the only participant who stated to have faked understanding even in situations when he faced a comprehension problem. Of course, such instances are difficult to detect and complex to categorize as we cannot really be sure of what is happening in the learners' mind.

Extract 164:

Malek: *I answered “yes, yes, yes” and continued talking about something.*

Extract 165:

Manuel: *I changed the question (smiles).*

Extract 166:

Raya: *Yes, when I asked them a question I waited for 2 minutes and they were either not hearing me or did not understand me and then he would ask me the same question or a completely different question.*

Extract 167:

Galia: *When my partner didn't understand me I asked additional questions, if we didn't understand yet I gave up.*

Patricia (Extract 168) is the only participant who mentioned the Audio-Visual Support strategy even though she was not the only one who resorted to it. Students either utilized used their mobile phones when they encountered a lexical problem and showed the image to their partners or made use of the videoconferencing mode and mimed or used gestures to compensate for a vocabulary insufficiency. In Extract 169 and 170 we see Amira and Hugo making reference to the Appeal for External Assistance strategy, which was actually quite commonly used by the learners (See Section 5.2.2.). Students applied this strategy when they faced a non-understanding problem or had difficulty in expressing themselves and turned to their classmates or teacher for support rather than requesting help from their partner or resorting to another communication strategy to resolve the hindrance.

Extract 168:

Patricia: *If she used a word that I did not know I asked her to explain it to me. She sometimes said a term in Bulgarian but then she explained what it was in English. As for me, I must admit that there were words that I did not know in English so in some occasion I had to look for photos on my phone and show it to her. On the whole, though, we managed to understand each other pretty well.*

Extractt 169:

Amira: They speak Bulgarian there, right?...When she didn't understand some words she would say them in her language to the teacher...yes, the language was really cool!

Extract 170:

Hugo: It was great fun to talk to other people but I sometimes did not understand them well but I was trying hard. If I still didn't understand I asked her to explain it to me again or I asked you because I didn't understand what she was explaining.

Apart from the learners' own perceptions we considered that teachers' viewpoint was significant and valuable and we trust that their responses would shed light into the impact of such telecollaborative project on students' communication skills and motivation to communicate online. All interviewed teachers from Lluís Anton School, Spain and Mundi School, Bulgaria expressed their great satisfaction and acknowledged the positive impact that the project had on their students. No teacher from Anglia School, Spain was interviewed since it was the researcher who was the instructor of the participating students at that moment. Since the researcher's opinion might be subjective and, therefore, it is already included in this dissertation's discussion chapter.

In Extracts 171 and 172 Aina and Boyana appear to have similar opinion about the projects, laying the emphasis on the unique opportunity it provided for their students to communicate with other children in a real, face-to-face situation which offered them the chance to use English as a communication tool. It is exactly this specificity of the real communicative environment that enhanced learners' awareness of the importance of the language as well as their motivation, interest and enthusiasm.

Aina also pointed out that when doing the traditional activities in class students failed to grasp the real necessity and significance of English and perceived it as yet another school subject. As she claimed "*they just don't see this need and they don't take it seriously*" but what the project managed to achieve was exactly what she was hoping for, that is, "*we have managed to make the children see this necessity to learn a language, so that they can speak and communicate with others, otherwise they realize they cannot understand*". Aina went on

to explain that she noticed a change in children's attitude and their "*big effort to understand and speak using the resources that they had to communicate with the other kids*", which she considered fundamental. However, she did emphasize the need for more sessions in order for the students to realize the "*need to study and learn in order to be able to communicate*" with their partners.

Extract 171:

Aina (teacher at Lluís Anton School, Spain): *I think that the project was very interesting for the children mainly because they use English in real communicative situation, they need to use it. If you do an activity in class they just don't see this need and they don't take it seriously. In my opinion, with this project we have managed to make the children see this necessity to learn a language, so that they can speak and communicate with others, otherwise they realize they cannot understand.*

I saw a change in children's attitude because as we took them from different levels, well, there were kids who were not interested in English at all and so I saw how they were making a big effort to understand and speak using the resources that they had to communicate with the other kids, and this was fundamental. This was the idea of the project, change their perception...the only bad thing was that too few could participate.

And also I think that we needed more sessions because I could observe the change in their attitude after the third or fourth session...before that it was just "well, I just go and chat and that's it"....and it was not until a few sessions had passed that Malek saw the need to study and learn in order to be able to communicate with his partners.

In her interview Boyana, a teacher at Mundi School, Bulgaria, said that she was pleasantly surprised by the effect that the project had on the children "*I didn't expect it was going to be such an emotional experience for the students...yes, the children were really having fun, they were excited*" (See Extract 172). Boyana mentioned that it motivated the students "*in an easy and natural way*" and stimulated their curiosity regarding the language "*They were curious themselves, "how do I say this, how do I say that?"*" ". And finally, she added that "*this is a new experience, experience that breaks the standard and monotonous learning process. This is totally different!*".

Extract 172:

Boyana (teacher at Mundi School, Bulgaria): *I didn't expect it was going to be such an emotional experience for the students...yes, the children were really having fun, they were excited...and I didn't expect it was going to be so interesting. At the beginning I thought it was going to be something traditional, a typical methodology...but every time it was more and more compelling, more interesting, more motivating.*

And every time they wanted to be better prepared than the previous, and even we helped. They were curious themselves, "how do I say this, how do I say that?" ...some kids even making notes on a piece of paper in advance without we instructing them or telling them anything....not to miss something, some questions. Every time they wanted to be better...and the conversation to be deeper, with more questions and more details. We asked our kids, even they wanted it themselves, to come a bit earlier, 10 min, half an hour earlier to get ready, to get organized, yes.

The most precious thing about this idea is that the children are facing a real situation; different from the imaginary, role play games in the books, from the virtual world of the video games, and the strength of this real situation is that it motivates the children in an easy and natural way. For them this is a new experience, experience that breaks the standard and monotonous learning process. This is totally different!..."We did something totally different!" ...and this was the most important thing for them, they will remember it.

Some kids were even taking note while they were talking. Raya was taking note, I saw her...she decided alone, we didn't tell them, so that she can later share it with the rest, you see? Because you forget things and then- what was it, what did she say?...This experience also taught them to organize their speech.

Undeniably, all teachers found this experience enjoyable and beneficial for their students. Yet, we wanted to investigate into the challenges and difficulties they faced during the organization and implementation of such innovative project in the schools' curricular. In line with the drawbacks mentioned by the students, the teachers mentioned the difference in language proficiency (Extracts 173, 174 and 175), the insufficient duration of the project (Extract 171), the lack of involvement of some participants (Extracts 173, 175), and the technology (Extract 173) as some of the major obstacles. Teachers also stated the complexities of organizing an online synchronous project, such as difficulty in finding a

partner school, matching the objectives and the schedules, organizing the tasks and pairing of the students, among others.

Extract 173:

Boyana (teacher at Mundi School, Bulgaria): *Well, the level of the language...they were sometimes laughing at some .."ahh this one said so..". and also the thin we already mentioned, that they asked the same questions, some of them of course, not everybody. The pronunciation alsobut it was emotional to see in front of you totally different children, with different attitude...ah yes, maybe something they didn't like is their attitude, they were too relaxed, were nor serious towards the idea...but they wave, they laugh...well, the boys mainly. And the other problem was the technology, I expected it to be at a higher level, with the widespread use of internet but...*

Well, what else can I say? This was a precious experience for both students and teachers and it provoked more ideas for future projects.

Extract 174:

Lidia (teacher at Mundi School, Bulgaria): *Maybe the difficulty that my students faced was that the Spanish ones were often late. Also, the Spanish students' lower level of English was a bit challenging.*

Extract 175:

Marina (teacher at Mundi School, Bulgaria): *In my opinion they enjoyed their talks with the Spanish children a lot. It was a great opportunity for them to meet someone with different culture, background and habits. The only thing they didn't like much was the difference in their language skills and preparation. They think some of the Spanish children couldn't understand their questions.*

The project was a breath of fresh air in the learning process at Mundi Mundi language school.

Yet again, the result of the analysis of both students and teachers' responses indicates the overall favorable view regarding the impact of this innovative tool on learners' communication skills and motivation. However, as Dooly (2011) warns, technology is not a "panacea for challenges facing language teachers", referring to Warschauer's words from 1996 which still seem valid even today:

“New technologies will not revolutionize, or even improve, language learning unless they are well understood and intelligently implemented. The Internet itself is only a tool, albeit a powerful one, in the hands of good or bad pedagogy” (Warschauer, 1996, p. ix).

5.7. Chapter Summary

To sum up, the three case study participants provided invaluable information about learners’ communicative behavior in a telecollaborative educational setting. All three of them interacted with participants who had different levels of language proficiency; the time of their interactions was also different, that is, each case study participant had long interactions with some partners and rather short with others. As mentioned, we conducted hierarchical cluster analysis with the aim to provide further insights into the *similarities* and *differences* between the participants and/or groups of participants, thus identifying clusters of students who share similar interactional features. Therefore, we picked out one case study participant which would be representative of each cluster of students. Accordingly, Tania was selected as a representative of students, such as Iana, Amira, Manuela, Nadia and others. Maria Jana was the representative case study participant of a group of learners, such as Hugo, Matias, Raya, Andrea and Patricia. And, finally, Daniel represented students, such as Ivo, Malek, Berta and Eric among others.

The first case study participant, Tania, had the highest time of collaboration with Matias, who also had the highest level of English proficiency in comparison to her other partners. During their collaboration, Tania revealed her brilliant communicative skills, and proved to be a very dedicated and thoughtful learner. The results from the numerical overview of Tsviti’s use of negotiation patterns provided in Section 5.3.1, demonstrated that Tania’s negotiation behavior varied depending on her collaborative partners. Namely, in her collaborations with Hugo and Matias Tania displayed her abilities to indicate and resolve linguistic problems much more frequently, compared to her interactions with Malek and Berta. Her incapacity to express her full potential with Malek and Berta might be attributed to their very short time of interaction as well as both Malek and Berta’s low level of English

proficiency. Regarding her interactions with Hugo and Matias, we could also notice a difference in Tania's behavior. In her communication with Matias, she proved to be concentrated more on sustaining a meaningful and friendly conversation and at the same time leaving very few meaning negotiation episodes unsolved as opposed to her interactions with Hugo. These results demonstrated that in her communication with Matias Tania managed to express her skills as a communicator, while in her conversations with Hugo she was seen as a motivated and committed foreign language learner. As for her use of communication strategies the results suggested that when faced with a problem, Tania did normally indicate it, using Direct Appeal for Assistance, Clarification Requests, Confirmation Checks and Circumlocution among others. Besides, her frequent use of Self-Correction and Appeal for External Assistance demonstrated that Tvesti is a careful and precise learner who is conscious and considered about her linguistic output.

Likewise, Maria Jana interacted the longest with Patricia, who also had the highest level of language proficiency. As a result, we detected a similar pattern, namely, their interaction proved to be extremely successful and rewarding regarding the manifestation of their communication skills and the establishment of a close and friendly connection. The descriptive statistical analysis of Maria Jana's negotiation patterns provided in Section 5.4.1 demonstrated that she was involved in meaning negotiation acts more often with participants from Lluís Anton School. This might be due to the fact that the participants from Lluís Anton School had lower level of English proficiency which led to more conditions for a linguistic problem to arise, therefore, to be indicated and resolved. In these circumstances, Maria Jana made an effort to contribute and solve these problematic occurrences, providing help and cooperation. During her collaboration with Patricia, from Anglia School, however, Maria Jana displayed greater dedication, enthusiasm, friendliness and stronger emotional bond to her collaborative partner. Regarding her use of communication strategies, the results from the descriptive statistical analysis revealed that Maria Jana used more strategies to indicate a communication problem rather than to resolve it. Her most commonly used strategies were Clarification Requests, Direct Appeal for Assistance, Confirmation Checks, Circumlocution and Repetition. From these results we could conclude that when she faced a problem of

understanding or expressing herself she was willing to indicate it. Additionally, we noticed her determination to understand and to be understood, as well as her consideration and care towards her partners.

The last case study participant, Daniel also demonstrated different behavior as an interlocutor depending on his collaborative partner. He communicated for almost the same time with Eric (69') and with Pablo (66'); Eric had relatively low level of English while Pablo, on the contrary, showed almost native-like language skills. Curiously, Daniel felt more comfortable, cheerful and motivated in his interaction with Eric rather than with Pablo. In all probability, Daniel might have felt uneasy and intimidated at times by Pablo's language proficiency level and therefore was seen as a bit reserved and reticent during their interactions. Daniel's other partner, Hana, had very low level of English which hindered the comprehension process. As she frequently failed to understand him, Daniel was seen a little frustrated at times and responded in a similar fashion, by providing poor and simple responses, which, consequently, made it difficult to build a meaningful interaction. With Noah Daniel had an interesting collaboration but the very limited time of their conversation did not provide us with sufficient data so as to draw any reliable conclusions. The results from the descriptive statistical analysis of Daniel's use of communication strategies showed that he used slightly more strategies to indicate a communication problem rather than to resolve it. His most commonly used strategies were Direct Appeal for Assistance, Non-Verbal Indicators, Fillers, Repetition, Circumlocution and Appeal for External Assistance. These results indicated that Daniel used more limited variety of communication strategies to negotiate for meaning compared to the other case study participants. Additionally, he negotiated on lexical items and meaning more often rather than of form.

To end, the time of interaction together with the similarity of language proficiency level of the participants in each interaction were detected as two major factors that had a significant effect on the display and development of students' communicative personalities in the current telecollaborative projects. The data has also revealed that the participating students and teachers considered that, in general, this innovative tool had a positive impact on learners' communication skills and motivation. It is our belief that these results will add

valuable insights and contribute to the better understanding and more successful implementation of this tool for language learning as well as intercultural exchange in the traditional classroom setting.

CHAPTER 6: DISCUSSION AND CONCLUSIONS

The previous chapters presented results from the analysis of data yielded from the implementation of two telecollaborative projects between adolescent students from Spain and Bulgaria. These intercultural exchanges took place in a task-based teaching-and-learning classroom environment. The data from this study revealed interesting patterns and strategies that learners used in this particular context, which helped provide answers to the research questions investigated in this dissertation.

In Section 6.1 in this chapter, I will discuss results related to the first research question: “What interactional strategies do secondary school learners of English as a foreign language use during task-based telecollaborative interactions with learners of English from a different cultural and linguistic background?”. In Section 6.2, I will discuss results answering the research question “When encountered with a communication problem, what patterns of negotiated interactions do such learners follow in order to indicate and resolve that problem?”. Finally, in Section 6.3 I will discuss results related to the research question “What communication strategies do such learners use in order to indicate and resolve communication problems during such intercultural telecollaborative interactions?”. In Section 6.4 I propose recommendations for setting up intercultural telecollaborative projects for educational purposes in secondary schools; next in Section 6.5, I suggest recommendations for future research in this field, and, with Section 6.6, I end this thesis with my personal remarks and final conclusions on the affordances and applications of telecollaboration in education.

6.1. Interactional Strategies in Secondary School Intercultural Telecollaborative Projects for Second Language Learning

The first focus of this project was on the skills of information discovery and interaction displayed by second language learners in computer-mediated communication as have been defined within Byram's (2008a) model of Intercultural Communicative Competence. More specifically, we investigated the types of interactional features, such as emotive words and phrases, displays of alignment, boulomaic modality, use of audio-visual resources, and question posing (including general inquiries as well as follow-up, and personal opinion questions) that adolescent students used during two intercultural telecollaborative projects. As noted in the Literature Review (See Chapter 2.5), these skills form a component of the larger construct of intercultural communicative competence and, by taking a closer look at them, we have the opportunity to get in-depth understanding of how learners build successful relationship with their partners and how they obtain the information that they need to learn about foreign cultures in a telecollaborative context.

As regards the first research question, we found that the adolescent students on the whole tended to use a lot of emotive words and phrases and very often displayed alignment with their partners. On the other hand, learners resorted to boulomaic modality and audio-visual resources rather less frequently. Besides, the study has shown that participants posed a large number of general inquiry questions, rather than follow up and personal opinion questions. These results are coherent with those of Ware and Kessler (2014) whose participants posed a large number of information-seeking questions rather than interpretation questions. In both Ware and Kessler's and in our study, the more successful of the groups - those with uninterrupted contact - tended to signal their engagement with their partners through the tools of modality, lexical choices, and alignment markers. Similar results were found by O'Dowd (2005), who revealed that, according to students, class-to-class videoconferencing permitted them to "bond and to get to know each other better; it allowed for quick and honest exchanges of questions and answers as well as the clarification of meaning; and it enabled them to receive multiple answers to their questions about the target culture". Overall, the

videoconferencing medium proved to be suitable for the development of learners' skills of discovery and interaction in real time.

Importantly, in our study we found out that learners chose different strategies depending on their interlocutor. This pattern emerged throughout all the data, that is, there was clear evidence that learners demonstrated different behavior and utilized the interactional strategies with varying frequency depending on who their interlocutor was. Students tended to signal their engagement with certain partners through the tools of lexical choices, alignment markers and modality. With other interlocutors, however, they tended to employ fewer such markers of openness and provided less depth to the responses.

Such behaviour seems to be affected by some crucial factors. In this study we have observed the importance of the different total time dedicated by each telecollaboration couple to communication and the stability of the telecollaboration partnership, as well as learner's motivation to perform the tasks, level of language proficiency, personal interests, and personality. It was found that, the more time participants communicated with one another, the more opportunity they had to establish a stronger bond between them. As Xiao (2007) claims, second language acquisition is "emotionally driven and demands a high level of personal engagement [...] Affective components, such as feelings, values, appreciation, enthusiasm, motivation, and attitudes contribute as much and often more to language learning than the cognitive skills". Therefore, one of the crucial factors to ensure this positive attitude towards the experience as a whole is the sufficient time to dedicate to the collaborative partners. Wang and Coleman (2009b), for instance, found out that students were worried about the lack of time in class for carrying out the activities based on the Internet. Likewise, Caluianu (2018) claims that some of the difficulties faced by practitioners of the method are coordinating timetables, levels of proficiency and educational goals, lack of institutional support, cultural clashes, and lack of time. In their interviews and questionnaires, the participants in our study also shared their wish to have had more time to collaborate and get to know their partners better.

The study has also brought to the fore how important stability of project partners is. In this study, the first telecollaborative project was less structured and more flexible than the second one and, as a result of this, participants communicated with several partners whereas in the second project they had one stable partner. The interactions between these stable dyads, proved to be more collaborative and prolific. The participants in such stable dyads tended to use more follow-up and personal opinion questions compared to those dyads which were more random and not so constant. The use of follow-up and personal opinion questions may signal the learner's desire to widen and develop the conversation, gather more information and demonstrate interest, normally aiding in delivering comprehensive, multi-dimensional cultural information about their native countries. Ware (2013) found similar results in her study, demonstrating that, among the interactional features she observed, three were used most frequently to establish common interests: providing and asking for personal information, displaying alignment, and following up on topic threads. O'Dowd (2003) found that learners who were able to form a successful relationship with their partners and were able to obtain the necessary information to learn about the foreign culture had learned to incorporate certain characteristics into their e-mail correspondence. He summarized these as the ability to: a) take into consideration the socio-pragmatic rules of the partner's language, b) not only provide basic information but also analysis and personal opinions about the topic, c) ask questions that provoke feedback and reflection from their partner, d) not only concentrate on the task but also develop a personal relationship with their partner, e) identify and respond to the necessities and interests of their partner and encourage them to provide extra information about the topics which interested them. Our findings are in line with O'Dowd's in spite of the different context and different participants of his study, namely, a year-long e-mail exchange between Spanish and English university language learners, not adolescent ones.

In the current study we demonstrated that, when learners were motivated and expressed enthusiasm to interact with their partners, they used emotionally tagged words and phrases more often. Besides, these emotive lexical choices were aimed at providing more detailed information, detecting cultural phenomena and establishing a close personal relationship,

revealing higher level of involvement and dedication. On the other hand, in instances when the participants were less motivated in the communication with their interlocutor, there was a lower number and diversity of emotionally tagged words in their output. These messages were less strongly keyed with interest and emotion in their participation and were less open and elaborate. However, Ware (2013) did not find the same results in the study she conducted between learners who exchanged emails in an intercultural project. As we mentioned above, she showed that displaying alignment was one of the most frequently used interactional feature. In 2002 Belz explored the socio-institutional dimensions of German-American telecollaboration and the ways in which they may shape foreign language learning and use. Through e-mail, synchronous chat, and web-based information exchange, the university students collaboratively engaged in a series of tasks aimed at developing foreign language competence and intercultural awareness. Apart from institutional differences in computer access, academic calendars, and accreditation systems, Belz found that personal rapport was a significant factor in successful telecollaborative foreign language study. In our telecollaborative study, secondary school learners participated in synchronous videoconferencing meetings to discuss culture related topics. Regardless of the differences in the research context, in line with Belz, we revealed that rapport between the dyads was an essential factor for the success of the partnership and it shaped learners' use the interactional features.

Similarly, when participants were motivated, a greater number of alignment moves tagged as high level of alignment were identified in their output during the conversations. These interactions tended to be highly collaborative, as learners expressed their opinion and feelings, used more numerous and more elaborate contributions, added details and indicated interest. Yet again, the differences that we detected depended on who their collaborative partner was which reflected on the level of motivation and positive attitude. The same pattern was identified in the data regarding the use of boulomaic modality and audio-visual resources. Those dyads that demonstrated higher level of motivation used these interactional features more often as opposed to the dyads that showed less interest in their communication. In 2014 Ware and Kessler collected data from blog postings which supported text-based

messages, hyperlinks, and embedded videos in a similar telecollaborative study between participants from USA and Spain. In analyzing the responses, they found that students who scored higher on their Intercultural Discourse Questionnaire tended to make a greater effort to provide depth and context to their responses and to make personal connections with their partners. They keyed such willingness most often through the use of boulomaic modality, or markers of emotion or involvement that can be signaled through modal or through lexical choices of emotionally tagged words and through adjectives and emphasis adverbs. These findings are in line with what we revealed in our study; however, Ware and Kessler (2014) did not measure or quantify each interactional feature but rather provided a general proof of the link between students' motivation and interest and the use of interactional features during telecollaboration.

The results from the questionnaires and interviews offered the perspective of the participating students and teachers regarding the impact of the current telecollaborative projects on learners' attitudes and gained insights into how they perceived these online interactional contexts. The findings showed that the intercultural videoconferencing environment enhanced learners' motivation and confidence to learn the target language. The results also confirmed that this experience encouraged sharing of ideas, views and opinions and provided real-time situations in which the participants felt the necessity to use English. The videoconferencing technology provided an opportunity for the students to interact with international partners which made it a beneficial and stimulating experience for everyone. On the whole, all participants expressed their appreciation and value of the project and the majority stated that it contributed to the increase of their lexical knowledge, their ability to communicate, as well as their raised motivation and awareness of the importance of English above others (Belz, 2002; Lee & Markey, 2014; Schenker, 2012).

According to Xiao (2007) one reason for learners' motivation might be their fascination with the novelty of the videoconferencing mode, which eliminates physical barriers and allows people from different countries to communicate. Another reason for participants' positive attitude could be the opportunity to receive authentic input and feedback as well as to talk to peers with different cultural and linguistic background. Dörnyei and Csizér (2016) created a

list of techniques for teachers on how to motivate language learners. The authors claim that taking part in online exchanges with native speakers can result in “increasing learners’ linguistic self-confidence, making the class interesting, promoting learner autonomy, personalizing the learning experience, and especially familiarizing learners with the target language culture” (Bates, 2017). Many researchers have stressed the importance of interacting with native speakers of the target language (Lee, 2009; Lee & Markey, 2014; Ware, 2005; Martinsen, 2011). The students in this research, however, were all non-native speakers, that is, they received non-native input, which, nevertheless, did not lessen participants’ motivation. On the contrary, some learners revealed that the fact that their partners were non-native speakers actually created a less threatening environment, as both sides were learning the target language, thus both of them made errors and faced linguistic problems. Similarly, Kohn and Hoffstaedter’s study (2017) of non-native adolescent learners demonstrated that telecollaboration provides rich opportunities for authentic communication, intercultural communicative competence development, and transcending the foreign language classroom to include elements of real life.

In their study Arnold, Ducate, Lomicka, and Lord (2005) examined social presence of foreign language teachers in virtual asynchronous learning communities and identified three categories: affective, interactive, and cohesive. They found that participants of an online discussion establish their social presence through: (a) expression of emotions, (b) use of humor, (c) self-disclosure; (d) continuing a thread, (e) asking questions, (f) complimenting, (g) expressing appreciation or agreement, and others. Although their study investigated teachers’ social presence in asynchronous setting, very similar functions were detected in our current research of secondary students during synchronous telecollaboration. More specifically, the participants in the successful partnerships did resort to most of the above-mentioned functions in attempt to “enhance the emotional and affective sense of community and sense of belonging” (Arnold et al., 2005).

On the whole, another component in our study that was demonstrated to lead to higher motivation - and, thus, to more successful telecollaborative interaction - was the similarity of linguistic skills between the partners. Overall, the present study brought to the fore that, if

the dyad had similar level of language proficiency, the participants utilized the interactional features more frequently, which resulted in more in-depth and fruitful conversations that allowed for raising intercultural awareness and knowledge of the participants. In contrast, if there was a considerable gap between their language skills, the learners very often faced significant understanding problems and struggled to find topics to discuss which later led to frustration and decrease in their motivation to maintain the conversation. Our findings are in line with observations previously made by O'Dowd and Ritter (2006) and Hauck (2007) who have pointed out the language proficiency level as one of the crucial factors for the successful outcome of the telecollaborative experience. Also Belz (2001) has demonstrated how a lack of proficiency in the foreign language can lead to students writing shorter correspondence than their partners and that this can consequently be interpreted by their partners as a lack of openness and friendliness. The results derived from data collected in both questionnaires and interviews in the current study have suggested that participants in both projects considered the difference in linguistic proficiency as the major drawback of the telecollaborative experience.

Results from the questionnaires and interviews also revealed that most of the participants perceived improvement in their language proficiency after communicating online with their partners (Yamada, 2009; Lee, 2009; Schenker, 2012). Interestingly, most of the learners that reported such improvement in their communication skills actually had lower intermediate level of language proficiency. It seems that these participants perceived the project as much more beneficial and motivating than those who had higher level of English. Nonetheless, only a small number of participants with advanced command of language stated such lack of improvement and their overall perception of the telecollaborative experience was very positive. These participants attributed this lack of improvement to the insufficient duration of the project and the limited time that they had to improve their linguistic skills as well as to engage in more in-depth discussion on the topics. In a research survey into teachers' and learners' practices and the perceptions of intercultural foreign language teaching and learning, especially using Internet technologies at China's higher education institutions, Wang and

Coleman (2009b) also found out that students were worried about the lack of time in class for carrying out the activities based on the Internet.

In 2015 Helm conducted a survey in which she investigated the present practices and attitudes towards telecollaboration in European universities. Ninety-three per cent of all participating educators voiced their extremely positive attitudes towards telecollaboration. Many of the educators with experience in telecollaboration (72%) stated that their students found it useful for their learning, developed their foreign language skills (54%), their ability to communicate effectively online (63%) and especially their intercultural awareness (75%). The participating students in Helm's study also expressed their positive attitude (86%) and enjoyment of using ICT to learn a foreign language. Interestingly, a larger number of students had positive attitude and believed that telecollaboration enhanced their intercultural communication skills, foreign language and online communication skills than educators with experience in telecollaboration. Our study, similarly, demonstrated the overall positive attitude of participants towards the project; however, the instructors who took part in the current research did not have any previous experience of telecollaboration.

Another important factor that we need to consider is student's individual identity and personality since, as we have seen in the present study, not everybody marks his/her speech with expressiveness or feelings but some rather tend to use more neutral rhetoric. As the Common European Framework of Reference for Languages (Council of Europe, 2001) points out: "The communicative activity of users / learners is affected not only by their knowledge, understanding and skills, but also by selfhood factors connected with their individual personalities, characterized by the attitudes, motivations, values, beliefs, cognitive styles and personality types which contribute to their personal identity" (May et al., 2010). Also, as the CEFR goes on to say, these "attitudes and personal factors greatly affect not only the language users'/learners' roles in communicative acts, but also their ability to learn" (Common European Framework of Reference for Languages: learning, teaching, assessment, p. 105-106). When defining personality traits the CEFR differentiates, for example, between silent / talkative, enterprising / shy, optimistic / pessimistic, introvert / extravert, self-assured

/ lacking self-assurance, openness / narrow- mindedness, as well as cognitive styles and intelligence.

Similarly, in their state-of-the-art article on interaction and instructed second language acquisition Loewen and Sato (2018) argue that there are certain individual differences that have an effect on interaction. The authors mention some of the most researched ones, such as “(a) anxiety, (b) cognitive abilities, including language aptitude, and working memory, (c) willingness to communicate, (d) learner beliefs, and (e) age”. The relationship between interaction and psychological individual differences, however, has still not received sufficient attention. Despite the fact that the focus of the current study is not specifically on investigating the above-mentioned factors, we have clearly detected that certain participants were more nervous than others and this affected their communication. Likewise, some learners demonstrated better language skills and willingness to interact than their peers which led to a more successful telecollaborative partnership. According to Dewaele (2017), individual differences such as personality and learning styles are believed to influence interaction. In line with these claims, the results of our study showed how differently participants in intercultural telecollaborative projects may express their motivation and interest in the interactions. Some of the students in the current project seemed not to utilize numerous emotive lexical words or alignment moves in their output during the interactions with the partners. In addition, these were quite limited in number as well as in diversity regardless of the learner’s language proficiency level. Some other participants voiced their motivation and interest in the partnership by posing plenty of questions (either general inquiry, follow-up, or personal opinion), requesting a lot of additional information from their partners about cultural specific topics, or providing detailed facts about their own culture, traditions and customs.

All the affective variables mentioned above and their effects on the virtual exchanges have been identified as major factors impacting telecollaboration by researchers such as Belz (2001), O'Dowd and Ritter (2006), Ware (2005), and Hauck (2007). While these factors should certainly be taken into account when organizing a telecollaborative project, I believe that we should not and cannot predict and avoid all potential hindrances that might appear

during an interaction. It is unrealistic to expect that the people you encounter would always have the same motivation, similar linguistic skills, interests or personalities, which are all issues that learners will one day have to face in real life situation and they should be prepared to cope with them. Rather, I would say that telecollaborative projects could help learners deal with problems such as anxiety of communicating in a foreign language with people from different cultural and linguistic background, interact with people with different linguistic skills, be able to identify cultural differences and be aware of their own cultural specificities, communicate with people who have different personalities or interests than their own, among others. Telecollaborative projects should aim to provide learners with a scenario which would be as close as possible to a real life situation and thus enhance their communication skills and boost their confidence to interact.

Additionally, in educational context we will always face the reality of the classrooms, that are heterogeneous in different ways and also the reality of the organization of such projects, since it is very difficult if not impossible to find a partner classroom that has exactly the same student population as regards those factors. As Belz (2003) claims, “It is very important to understand that these contextually-shaped tensions are not to be viewed as problems that need to be eradicated in order to facilitate smoothly functioning partnerships [...] Structural differences frequently constitute precisely these cultural rich-points that we want our students to explore” (p. 87). O’Dowd and Ritter (2006), therefore, recommend that educators interested in organizing telecollaborative projects should have an in-depth understanding of the possible reasons for failed communication and should develop techniques and practices which they can use in the course of their online exchanges in order for their students benefit fully from the exchanges.

Besides personality differences, O’Dowd (2016) mentions yet another concern regarding the telecollaborative tasks, since, as he claims, there may be a “tendency in intercultural telecollaboration to shy away from difficult themes and subject matters and to smooth over difference in all but its most superficial manifestations”. Having witnessed my participants’ interactions, I agree with O’Dowd that many of telecollaborative tasks often reveal a superficial approach by participants - in his studies, undergraduates in Spanish-

American exchanges - to culture based on traditional communicative classroom topics such as musical tastes, travel, sports etc. Ware and Kramsch (2005) describe this as “the illusion of commonality” that students can take away from intercultural contact. In our study, which focuses on secondary schools, we found the same phenomenon that O’Dowd discovered in undergraduate schools. Namely, both teachers and learners tended to focus more on light topics, such as music, sports and routines, and avoided more profound matters such as cultural stereotypes, religious beliefs and ethnic differences within society. As a result, just like O’Dowd (2016) and Ware and Kramsch (2005), some of our learners were left with this “illusion of commonality” stating in their interviews, for instance “we are very similar because we listen to the same music” (Jimena, Lluís Anton School) or “the boys like football, just like us” (Malek, Lluís Anton School). I believe that these findings are valuable and could help teachers predict and solve such potential problems before starting a telecollaborative project by (a) engaging their students in classroom discussions about the exchange (including culture, stereotypes, racism, beliefs, intercultural awareness, and others), (b) communicating with the partner teachers to understand the sociocultural context of the partner class, (c) collecting and analyzing online interactions and subsequent feedback from their students (Robert O’Dowd & Ritter, 2006), and (d) preparing meaningful and challenging tasks and discussion topics.

In sum, the findings of this study demonstrate that the adolescent non-native participants displayed a range of interactional features during telecollaborative interactions with their peer partners, using English as a common language. Similar findings, though with different age populations, were identified by Ware (2013), Ware and Kessler (2014), and O’Dowd (2006b), however, our study offered additional, more detailed information providing a numerical overview of each interactional feature. Additionally, we discovered that students’ use of these interactional features varied depending on their interlocutors. As we point out, some potential factors for these variations might be the different total time of communication, the stability of the partners, the degree of motivation, the level of language proficiency, and differences in personal interests and personality traits, among others. The results from this research serve as just an initial step in exploring how videoconferencing

might be used to support adolescent language use in task-based online intercultural projects. As we have seen, our data has uncovered the need for teachers and instructors who implement intercultural telecollaborative projects to prevent “the illusion of commonality” from taking place. In Section 6.4 and in light of all these findings I provide recommendations along these lines.

6.2. Patterns of Negotiated Interactions in Secondary School Intercultural Telecollaborative Projects for Second Language Learning

This study also aimed to examine negotiation of meaning during telecollaboration between non-native speakers of English in a task-based language classroom environment. More specifically, we disclosed patterns of negotiated interactions when communication breakdowns occurred in the two telecollaborative projects under study. This investigation found out that, when learners faced a problem of understanding or expressing themselves, they followed certain patterns depending on by whom the communication problem was indicated and resolved. Six categories emerged from the data collected in the projects.

Participants in the current study followed a “Listener Indicated-Speaker Resolved” pattern most often. That is, the listener indicated that there was an understanding problem or a difficulty in expressing oneself which was finally resolved by the speaker. In most cases episodes were short as the communication problem was solved within a few turns; in other instances, however, they were rather lengthy and rich illustrations of participants’strive to come to a successful negotiation of meaning. Participants’self-identification as foreign or non-native speakers in Pasfield-Neofitou’s (2011) terms, may have been at play in this latter case. As the main goals of the participants in the present study were to use their L2 online for social and educational purposes, their language status as L2 learners, rather than experts in English, may have softened the potential danger of loss of face and, therefore, trigger longer episodes and, consequently, more output. Therefore, it might have been easier for the students in these telecollaborative projects to indicate linguistic troubles or invite corrective feedback and other forms of repair.

Another interesting phenomenon that we detected in our data, just like Van der Zwaard and Bannink (2014) did in their study, was that during the video interactions, when NNS had to negotiate complex issues, sometimes they gave verbal signs of understanding, but gave off non-verbal signs of confusion or non-understanding. That is, although sometimes learners verbally indicated understanding, their lack of it was evident in their non-verbal behavior or in their response. Van der Zwaard and Bannink's study (2014), however, investigated interaction between native speakers and non-native speakers of English in a task-based advanced second language classroom via two forms of real-time one-to-one computer-mediated communication: video calling and instant chat-messaging. The current study, nonetheless, focuses on non-native speakers of English in an intermediate-advanced language classroom during synchronous videoconferencing telecollaboration. In many instances the speakers in our study perceived these non-verbal indications and modified their output in order to aid their partners.

Interestingly, the second most frequent pattern of negotiated interactions detected in the data was "Speaker Indicated-Speaker Resolved". These results are also in line with Wang's (2006) findings which indicated that videoconferencing allowed his participants to modify their output when there was a breakdown in task completion. This pattern is related to learner's self-confidence and shows autonomy; therefore, it was used by some learners and not by others. As we have already mentioned, students have different personalities and individual features, which may affect the way they behave and respond to such collaborative environment, especially when they are faced with a problematic situation. Loewen and Sato (2018) found similar results in their review on the role of interaction for second language acquisition (SLA). This review surveyed the instructed SLA research, both classroom and laboratory-based, that had been conducted primarily within the interactionist approach. The authors reveal that L2 anxiety has received significant attention by researcher; nevertheless, not sufficiently within the interactionist approach. Sheen (2008) for instance, demonstrated that low-anxiety learners gained more from feedback than high-anxiety learners. In the same way, Rassaei (2015) showed that low-anxiety students noticed the corrective feedback more than high-anxiety learners. Nonetheless, these studies investigated high school or adult

learners in a traditional classroom setting, while the current study focuses on secondary school students and second language learning during telecollaboration.

The results based on the questionnaires and interviews indicated that all the participants in the current study perceived that this project helped them deal with the anxiety and nervousness of having to interact with people from a different cultural and linguistic background. In their responses they pointed out that one of the biggest advantages of the project was the fact that it helped them break the linguistic barrier and overcome the fear of interacting in a foreign language, thus making them more confident and self-reliant communicators. In a study by Bates (2017) among university students who communicated online with native speakers he found that seventeen out of eighteen students reported feeling nervous or anxious prior to the online conversations with native speakers; however, more than half of the class changed their opinions by the end of the semester. Saba (2016) found similar results in university setting during telecollaboration.

“Listener Indicated-Negotiation Not Resolved” was the third most common pattern utilized by the participants in this investigation. This was a rather attention-grabbing discovery as it demonstrated that, in numerous occasions, the listener did indicate a potential problem in the output but yet it was left unresolved. It is noteworthy, however, to remark that those episodes which were not resolved might have been a result of either (1) learners’ low level of command, or (2) the perception that the problem was not impeding communication and, therefore, participants negotiated not to solve it. We could, hence, relate this to the strategy of Avoidance which has been documented in literature in telecollaboration (Ware, 2005; Kost, 2004; Van der Zwaard, 2017; Akiyama, 2020). Van der Zwaard (2017) found similar results in institutional task-based language learning context in which university students telecollaborated. She also discovered striking resemblances to Goffman’s (1967) description of features of the interaction. Although Goffman examined informal, conversational, face-to-face interaction, Van der Zwaard (2017) suggested that his observations also apply to (digital) interaction processes in task-based institutional settings. Likewise, the non-native speakers in our data often resorted to a type of communication strategy that Goffman identified as “the avoidance process” in face-to-face interactions:

As defensive measures, [the interactant] keeps off topics and away from activities that would lead to the expression of information that is inconsistent with the line he is maintaining. At opportune moments he will change the topic of conversation or the direction of activity. (Goffman, 1967: 16)

In a telecollaborative study that Ware (2005) conducted between advanced university students who were engaged in asynchronous discussions, she also revealed that the participants resorted to such an avoidance strategy. What is more, she demonstrated that many students avoided directly engaging with their online partners in case of communication breakdown or non-understanding. According to this author, this avoidance strategy “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”.

A much less common pattern that was detected in our data was “Speaker Indicated-Listener Resolved”. These findings are in line with other studies which have investigated negotiation of meaning from a socio-interactive perspective and have demonstrated that initiating negotiation of meaning is a dispreferred feedback mechanism (Schegloff, 2000; Van der Zwaard & Bannink, 2014). In fact, people would normally wait for their communication partner to resolve the potential problem in the output that emerges during interaction rather than overtly indicate it. Not wanting to acknowledge non-understanding is undeniably due to issues of face, or what Goffman (1959) defines as “impression management”. He compares the human self to a theatre, claiming that “when we interact we are on stage where we have to put on a performance; when we do not interact we are off-stage, where we do not have to worry about impression management”. As we said, admitting to non-understanding is a dispreferred strategy, unless the participant is performing an activity which is specifically aimed at negotiating for meaning in order to complete a task successfully. Thus, some learners are likely to employ risk-avoidance strategies in order to maintain the conversation (Shin, 2009). In contrast, other students might not find it so worrying to indicate a communication problem and, therefore, it is more likely for these learners to take risks in order to solve communication breakdowns. Once again, it comes down to

learners' individuality, their self-confidence, maturity, motivation, and autonomy (Schenker, 2012b; Flowers et al., 2019), which impact and shape their behavior as language learners and intercultural speakers.

Another pattern which was scarcely found in our data was "Listener Indicated-Listener Resolved". The infrequent use of this pattern in the current telecollaborative projects demonstrated that the listeners were not intrusive. That is, they did not tend to indicate a linguistic problem and then resolved it themselves. In most cases they left it to the speaker to solve the hindrance or modify their output, which was a lot less invasive and threatening for both participants and at the same time contributed to a more enjoyable and satisfying collaborative interaction. In a longitudinal telecollaborative investigation among university students Akiyama (2017) revealed that the learners preferred recasts over other types of feedback because these were time-saving, instant and the least invasive, in this way allowing participants to focus primarily on meaning rather than on form. Additionally, the data demonstrated that when corrective feedback was provided in the way learners favoured it, successful uptake increased. According to Loewen and Philp (2006), recasts are pedagogically "expeditious, less threatening to student confidence, and less intrusive to the flow of interaction" (p. 551). On the one hand, our findings are in line with Akiyama's (2017) as regards participants' desire to be less intrusive, on the other, recasts were a rather less preferred strategy used by the secondary school participants in our study.

Lastly, the pattern that learners used most seldom was "Speaker Indicated-Negotiation Not Resolved". These results suggest that, if the speaker indicated a problem, it was usually resolved. This demonstrates learners' wish to be cooperative and do peer work, that is, undertake the task in collaboration since, as sociocultural theories claim, second language acquisition takes place within the social interactions in which learners participate (Vygotsky, 1978; Ellis, 2015). Apparently, the participants in the current study understood that they needed to collaborate and cooperate in order to maintain the flow of conversation and to assure successful interaction, especially in cases of non-understanding or communication breakdown. As we have explained above, this lack of resolution might also be due to either

learners' linguistic insufficiency or the fact that there was no direct threat for the successful outcome of the communication.

The results from the current study demonstrate that learners followed different patterns of negotiated interactions when they encountered linguistic trouble and, eventually, in most cases the problematic situation was resolved. Nevertheless, it is important to note that students did not always initiate meaning negotiation when they were faced with a linguistic problem. That is to say, in many instances of non-understanding the participants did not indicate or signal any problem and either feigned understanding or simply ignored it and continued the interaction. This might be due to the learners' wish to keep a more fluid interaction, not to be obtrusive of the task, or simply to save face. These findings are in line with Van der Zwaard and Bannink's (2016) study in which they discovered that non-native participants frequently did not engage in negotiation of meaning despite non-understanding, especially during video interactions.

However, when there was an indication of a hindrance or non-understanding, most triggers were content related. As Yanguas (2010) and Pica, Kanagy and Falodun (1993) indicate, the nature of the task appears to be responsible for the type and focus of the negotiations, that is, negotiations are highly sensitive to the task. According to the task design of the present study, students in both projects had to discuss culture related topics, thus, difficulties in understanding cultural differences appeared to be a major problem in telecollaboration between Spanish and Bulgarian learners. As we have noted in Chapter 2, many researchers, such as Guth and Helm (2010), O'Dowd (2019) and Godwin-Jones (2019), have demonstrated that intercultural contact through synchronous or asynchronous communication enhances learners' own culture awareness and the development of intercultural communicative competence. Results of the current study are consistent with these findings. In both telecollaborative exchanges participants negotiated for meaning when they had difficulties with culture-related issues and the negotiation promoted intercultural communicative competence. However, O'Dowd (2007) warns us that to ensure the success of the intercultural exchange it needs to be integrated properly into the language classroom. He claims that negotiation on culture-related issues may shift learners' attention from lexical

acquisition to culture awareness, and give priority of fluency over accuracy. Importantly, O'Dowd alerts that if non-understanding of culture-related issues is persistent it may frustrate learners and lessen their interest in cross cultural communication. In the current study, there were no native speakers of English involved and the participants did not share a common first language. Such a design is different from the usual culture-exchange studies in which one side helps the other or students learn each other's native languages, (Zhao, 2010b). As we mentioned, the design of the current investigation allowed for equalizing the position of the participants, as neither side had privilege or linguistic advantage over the other.

In sum, the analysis of students' patterns of negotiated interactions during task-based telecollaboration in a secondary school educational setting revealed that most often it was the listener who indicated an understanding problem or a difficulty in expressing oneself and it was resolved by the speaker. The investigation also found that videoconferencing allowed the participants to modify their output when there was a breakdown in task completion, which is related to learner's self-confidence and shows autonomy. Moreover, we discovered that in numerous occasions the listener did indicate a potential problem but yet it was left unresolved. In the current study it was also demonstrated that initiating negotiation of meaning is a dispreferred repair sequence as hardly ever the speaker indicated a problem and the listener intervened in order to resolve it. What is more, we found that the listeners in this investigation were not intrusive. The participants tended to choose a lot less invasive and threatening strategies, thus contributing to a more enjoyable and satisfying collaborative interaction. And, finally, the study found that, if the speaker indicated a problem, it was usually resolved. Apparently, the participants in the current study understood that they needed to collaborate and cooperate in order to maintain the flow of conversation and to assure successful interaction, especially in cases of non-understanding or communication breakdown.

6.3. Communication Strategies in Secondary School Intercultural Telecollaborative Projects for Second Language Learning

One of the aims of this investigation was to examine the kinds of communication strategies used by the participants in telecollaborative projects in order to (a) indicate a communication problem, and (b) resolve the problem when a communication breakdown occurs. We need, however, to bear in mind the specificity of this research, that is, the results are yielded from data collected from secondary school non-native speakers of English, who had Intermediate to Advanced language proficiency level during task-based telecollaboration. The findings of this study, therefore, are very useful for secondary school classrooms with such profile of learners but might not be applicable to other learning contexts and, therefore, generalizability should be dealt with care.

The study under investigation found out that learners in both projects resorted to various strategies to negotiate for meaning when they encountered a problem of understanding or expressing themselves. Nonetheless, as we mentioned above, students did not always initiate meaning negotiation when they encountered a linguistic problem in their output.

In the current study a total number of twelve strategies to indicate a communication problem were detected. The most commonly used ones were Direct Appeal for Assistance and Clarification Request. Clearly, the difficulty of understanding lexical or cultural items pushed the learners to ask for assistance. In 2001 and 2002, Lee conducted two separate studies with intermediate learners of Spanish and found out that learners employed Requests for help, Clarification and Comprehensions Checks most often. Her findings, however similar to ours, were found in a different context, namely, participants were engaged in weekly chat discussions during computer-mediated communication, discussing open-ended questions on everyday topics. Besides, in the current investigation, Non-Verbal Indicators and Fillers were quite frequently detected in the data. As Zhao (2010) suggests, the audio and video communication channels at videoconferencing urge learners to make spontaneous oral responses and, therefore, learners need to organize ideas and pick the right language forms

while they are talking. Just as we found in our study, Zhao revealed that this delay in the process produces gaps in the conversation and as a result, the use of Fillers as a strategy is frequently used in videoconferencing. Smith (2003) discovered similar results, adding that Fillers are employed arguably as a signal of attentiveness during a “lull” in the conversation, thus allowing for a limited amount of “down time” before a response. As we have already mentioned in the Literature Review Chapter, research addressing communication strategy use in videoconferencing is not sufficient. Zhao’s study (2010) is probably the most similar to the context of the current research as it investigated meaning negotiation and communication strategy use among non-native speakers of English in text chat and videoconferencing. However, the participants were university students discussing culture-related topics using English as the common language. As regards the use of communication strategies in videoconferencing, Zhao’s findings were different from the results of the current research. More specifically, Zhao demonstrated that Fillers, Comprehension Checks and Framing were most commonly used in such context, while in our study, as we stated above, the three most frequently used communication strategies were Direct Appeal for Assistance, Clarification Request and Non-Verbal Indicators.

Confirmation and Comprehension Checks were less frequently detected in our data. These are strategies that students used when they wanted to make sure that what they had heard was correct or when they felt the need to confirm that their partner comprehended them and mutual understanding was achieved. Despite the fact that these were not the most commonly used strategies it has, however, provided us with evidence that these participants were comfortable to ask for confirmation and to check understanding when it was necessary. Nevertheless, these learners may only have indicated that they might not have understood something if they were really worried that this could impede the communication. Similarly, participants checked their partner’s understanding only in cases when they expected a comprehension trouble which may obstruct the flow of interaction. These were mainly instances relating to cultural issues, such as typical food, traditions or celebrations. Even though Zhao (2010) and O’Dowd (2016) found similar results in their investigations, the participants in their studies were university students. The findings of the present study,

however, are relevant and applicable to a different population, namely, Intermediate-to-Advanced secondary school learners and as regards projects involving non-native speakers of the language being used.

Explicit Verbal Indicators together with Circumlocution, Use of L1 and Self-Correction were rather untypical strategies as indicators of a communication problem in the educational projects experienced by our participants. Explicit indication that there is a problem which impedes the communication would force the speaker to modify his/her output or provide additional input. As we have already noted, however, the participants in the current intercultural exchanges did not appear to be intrusive and chose to signal a potential problem by using other communication strategies which seemed more subtle, tactful and discreet. Lastly, Topic Abandonment and Audio-Visual Support were scarcely found in the data. These results suggest that only as a final alternative did the learners resort to Circumlocution, Use of L1 and Self-Correction and, very rarely, to Topic Abandonment or Audio-Visual Support as a means to indicate that there was a hindrance in conveying either meaning or form during telecollaboration.

Our findings are in line with Lee's (2001, 2002), who discovered that students employed Requests for Help as well as Clarification and Comprehensions Checks most often. Comprehension checks, however, were not frequently detected in the current study. This is probably due to the students' wish not to obstruct the flow of the conversation and, therefore, they only checked their partner's understanding when they expected a communication breakdown. Besides, Smith's (2003b) revealed that the most frequently used strategies were Substitution, Framing of a topic, Fillers, and Politeness Markers while the participants in this investigation resorted to Direct Appeal for Assistance, Clarification Requests and Non-Verbal Indicators most often. In her study Zhao (2010), similarly, discovered that videoconferencing pushed learners to use Fillers most frequently. In the current study, nonetheless, this phenomenon was not detected, that is, the Filler strategy was not the most commonly used one by the participants in our investigation. One of the reasons might be learners' preference of other communication strategies which would ensure the resolution of the communication problem.

In their study conducted in 2008 Ting and Lau discovered that there was minimal use of discourse based strategies, namely, Comprehension Checks and Clarification Requests. In the current projects, on the contrary, Clarification Requests were the second most frequently used strategy. It was also discovered that the participants in the study used different strategies depending on their collaborative partner. Additionally, we found that the proficiency level of the learners plays an important role on their communication strategy choice (Mei & Nathalang, 2010; Ismail & Kaur, 2012). Yet again, we need to stress that the difference between the findings in the above-mentioned investigations and the current study might be attributed to the participants' profiles, their linguistic proficiency, educational context, tasks, duration of the project and others.

As regards resolving communication problems encountered during the interaction, participants used eleven different kinds of strategies (See Section 5.2.2 in Chapter 5), but most often the strategy of Repetition. It was employed by the participants to reinforce the meaning of a word or to make adjustments to the pronunciation, thus aiding their partner's comprehension. In many occasions, after the listener signaled a problem, the speaker simply repeated the word or phrase, probably expecting to be understood. We can suppose that the students considered it the fastest and easiest way to solve a hindrance. In many instances the repetition of a word or phrase did solve the problem and communication was resumed. If the comprehension problem persisted, then the speaker would usually resort to a different strategy in attempt to solve the linguistic trouble (Kost, 2004). Interestingly, Kötter, (2003) found dissimilar results in a study he conducted between university students who participated simultaneously online with multiple users through chat. Kötter compared his results with those in face-to-face contexts and discovered several differences. More specifically, in his study he detected no repetitions, few recasts, few comprehension checks, and a lot more requests for clarification, elaboration, or reformulation. Quite the reverse, in our study, which was conducted between secondary school students during telecollaboration, we found that Repetition was the most frequently used strategy to resolve a communication problem. As Kötter himself states, the complete absence of repetitions in the internet text based corpus is justified by the fact that it there is no reason to repeat an utterance without any change in

intonation or stress, so the communication mode in this case is what conditioned the use of this communication strategy.

The second most common strategy employed by our students was Circumlocution, that consisted of simplifying the speech, describing, rewording or giving an example of the term or idea that hindered the understanding. That is, when faced with a communication problem the participants chose to provide further input, usually simplifying their output, so as to avoid breakdown. Similarly, Ting and Lau (2008) discovered that gaps in communication were mostly bridged by restructuring utterances. Learners in this study made use of this strategy when they faced a lexical problem. The use of this strategy shows the willingness and resolution of the learners to be understood and to convey their ideas in a clear way, at the same time assuring the flow of the conversation. What we discovered in the data from the videorecorded interactions was that very often the participants used this strategy. Circumlocution was predominantly used by those learners who had higher level of language proficiency and revealed their ability to deal with language in a more flexible way. These were participants who had sufficient skills so as to modify their output in such mode of synchronous, immediate communication which provides them with limited time to respond. In most cases this strategy proved sufficient so as to solve the problematic situation. The students who had low level of English normally resorted to less demanding strategies, such as Repetition, Topic Abandonment, Transfer or Use of L1. Very often these learners needed more than one strategy in order to come to a successful solution of a problem, and in other cases, as they were unable to solve it; the students simply abandoned the topic and continued the interaction. In a study conducted in 2012 Ismail and Kaur demonstrated that when there was a lexical hindrance and participants needed to use Circumlocution, they used three common types of Circumlocution strategies in order to ensure the successful interaction. Moreover, depending on their proficiency levels, students quite often made descriptions, references and cited examples in their output. This comes to suggest that, in line with our findings, the proficiency level of the learner plays an important role on the learner's communication strategy choice.

Topic Abandonment and Self-Correction were the third most common strategy that the learners used to solve a linguistic hindrance. In most instances when Topic Abandonment was identified, negotiation of meaning did occur previously but the learners were faced with an overwhelming linguistic impediment that they did not know how to resolve. The participants may either not have fully understood the input or they did not know what to say so they initiated a new question or changed the topic. Therefore, the avoidance of topics or switch to a new topic was a safe or easy way to provide feedback to incomprehensible input, assure the flow of interaction and, in many cases, avoid the loss of face. Our results also revealed that learners in this study were able to pay attention to their own output and made certain modifications using Self-Corrections. As Swain (1995) proposed, noticing a form as output of the target language helps to bridge the gap between L1 and L2. The results found in this study were in line with Lee (2001, 2002), who discovered that learners used self-repairs to make their input comprehensible to their discussion partners. Lee's (2001) also detected that more proficient learners –those who had the Intermediate-High to Advanced level of proficiency– showed their capacity to use Self-Repairs. Lee suggested that, after recognizing their own mistakes, learners corrected both lexical items and sentence structures. The current study revealed that synchronous online interactions encourage negotiation for both meaning (ideas) and form (grammar). Although learners may have sometimes experienced difficulties recognizing their errors, they felt the immediate need to provide feedback to their peers during the online negotiation (Lee, 2001). However, the data in Lee's study was collected in an educational context which was different from the context of our study. His participants were university non-native speakers studying Spanish as a foreign language who participated in online discussions using a private chatroom. Also in line with our results, Pica (1994) has pointed out that non-native speakers made fewer adjustments to their own output due to their insufficiency of linguistic knowledge. That is, the learners who have lower level of language proficiency might not have the ability to provide self-corrections or do not believe further modification is needed for comprehensibility (Pica, 1994). Yet again, Pica's (1994) data collection context was different from the current one as she investigated native and non-native English speakers of different English proficiency levels who engaged in task-based written interactions.

When analyzing the data of the videorecorded telecollaborative sessions we found out that students often turned to their teacher or classmates for assistance when they faced linguistic trouble. This Appeal for External Assistance was a strategy used by the participants quite repeatedly; interestingly, previous literature on telecollaboration does not record this strategy, especially in this context. In most instances, our learners turned to their teacher or classmates for assistance when they faced a lexical problem of expressing themselves, that is, they either did not know the word or could not recall it at that specific moment. It is highly likely that this was a result of the immediate component of the videoconferencing mode of interaction. In merely two occasions throughout all the data did the learners encounter a problem of understanding the lexical item and requested help by copying the pronunciation of the word that they had heard to their classmate or teacher.

Consequently, this communication device was mostly used by the participants in this study when they faced linguistic insufficiency. We can suppose that students considered this strategy to be an effective and reliable technique that would ensure the resolution of the potential hindrance in the fastest possible way. It is important to note that in the majority of cases the learners intended to solve the problem and used a communication strategy before resorting to Appeal for External Assistance. In some instances, however, they directly requested help from their teacher or classmate as the speaker might have perceived it as an imminent need to avoid communication breakdown (Schenker, 2012b). This phenomenon has been detected in the studies by Trenchs (1998) and Trenchs-Parera (1996), but as regards the use of e-mail in educational setting.

Transfer strategy, which consists of learners inventing words by using L1-and L2-based resources (Dörnyei & Scott, 1997, Tarone, 1981), was detected in the data as often as Appeal for External Assistance. Transfer is a typical strategy for non-native speakers to negotiate for meaning (Lee, 2001; Zhao, 2010). It is again the spontaneity of the telecollaborative environment and the necessity to respond quickly to feedback that enhances the need to use this communication strategy (Lee, 2002). What we have found in the current study is that students apply it spontaneously in telecollaboration in an effort to make themselves understood, keep the interaction flowing and avoid interruption in the communication

because of lack of knowledge. Nevertheless, in most cases students might not have even realized that they have used a structure or lexical term that is incorrect in the target language. Such was the case of Angela when she was using repeatedly the word “idiom” wanting to say “language” (the Spanish word “idioma” means “language” in English). This caused even further confusion for her partner as the word “idiom” has a completely different meaning in English. Angela, however, did not realize until the end of the interaction that she was transferring the meaning of this word from her own language so the negotiation episode ended with Topic Abandonment.

Recasts are modifications of a learner’s erroneous output into its correct form. Earlier studies have claimed that learners pay attention to both input and output errors as they negotiated toward mutual comprehension (Gass & Varonis, 1985; Pica & Doughty, 1985). This pattern, however, was not found in this study of non-native speakers. Our findings concur with that of Van der Zwaard and Bannink’s research (2014) as they found it was a dispreferred strategy by the participants who very often ignored each other’s linguistic errors. The use of incorrect forms did not prevent our students from interacting with each other which demonstrated that they strove to respond to the input quickly, so that they could follow the flow of the conversation. Generally speaking, students were more interested in exchanging ideas rather than trying to correct each other’s linguistic mistakes or grammatical errors (Lee, 2011). We can also assume that participants in this study were less intrusive and were reluctant to point out their partner’s L2 language errors. One possible explanation could be the fact that the participants were peers and they did not want to appear more proficient than the other participants in a conversation (Kötter, 2003; Bower et al., 2011) or maybe because they were not self-confident in their knowledge of the L2.

Other strategies were seldom used by the participants in the current investigation. For instance, they hardly ever used their L1 when they encountered a lexical problem. This finding of L1-based strategies is in accordance with that reported in Mei and Nathalang’s study (2010), who found out that mainly some low proficiency students employed the Use of L1 simply because they did not have sufficient vocabulary knowledge. In a few occasions, we noticed that some of our learners made use of their L1 because they might have considered

it irrelevant to explain this specific lexical item as this would not hinder the comprehension and understanding of the whole conversation.

Other strategies that our learners rarely employed were Audio-Visual Support, Non-Verbal Indicators and Approximation. Learners sometimes used gestures or mimicry on camera in order to compensate for vocabulary insufficiency. Interestingly, they did not use their phones as online dictionaries but rather to show a photograph or image of a word they found difficult to explain. Apart from meaning negotiation, the audio-visual resource was often used by students to provide visualization of an object, tradition or food that is typical of their country and, therefore, difficult for them to explain in words as some of these concepts simply do not exist in English. Zhao (2010), for instance, found dissimilar results; the participants in her study used this strategy quite often to aid meaning negotiation in videoconferencing. Very scarcely the learners in the current investigation used Non-Verbal Indicators, such as smiling, nodding, laughing, or showing thumbs up as a means to facilitate the negotiation process. Similarly, very rarely they used Approximation when due to lack of vocabulary they generalized the meaning of words (Lee, 2001; Kouwenhoven & Ernestus, 2016). This might be because learners were conscious and careful of the output they produced and rather than generalize the meaning they opted for other, more explicit communication strategies, such as Circumlocution or Appeal for external Assistance. The participants might not have been so inclined to use Approximation as they might have felt uncertain and hesitant as to whether it would ensure the successful outcome of the problematic situation. Whereas, using Circumlocution or Appeal for external Assistance proved to be a more efficient communication strategy which almost always led to resolving the communication breakdown.

In summary, reacting to incomprehensible input appeared to be meaningful for learners because it “allowed them to try out different vocabulary and language structures in order to modify input and output. The modified interactions, therefore, facilitated mutual understanding” (Lee, 2001). As for linguistic inaccuracy, most often, learners disregarded each other’s mistakes and carried on with the conversation, demonstrating that learners focused on the meaning of the communication rather than on the form. Nevertheless, we need

to state that, in the current study, the participants showed that they are attentive and conscious of their output. In line with Lee (2001), I consider that, despite the importance of promoting communication, which is the key for SLA, students need to be recommended and guided pedagogically to maintain a balance between function, content, and accuracy. Therefore, understanding problem-management in L2 communication is crucial, as L2 speakers spend a lot of time and effort struggling with language difficulties and deficiencies, and yet they are not prepared to cope with performance problems. In Section 6.4, and considering these findings, I provide recommendations along these lines.

To end, a very important finding in the current study was the fact that students' use of interactional features, negotiation patterns or communication strategies varied depending on their interlocutor. This finding is highly significant as it demonstrated that student's behavior, both as an intercultural speaker and as a language learner, changes in different contexts. Consequently, the results of such case studies describing participants in one particular setting might offer a limited perspective in the final results. More specifically, if we investigate a certain student during his collaboration with another student the findings that we discover might not be the identical if the same participant collaborated with a different learner. For this reason, further telecollaborative research is necessary investigating learners interacting with various partners. Otherwise, final results need to be dealt with a lot of care in order to avoid generalization or misinterpretation of the data.

6.4. Recommendations for Setting up Telecollaborative Projects

When considering the implementation of a telecollaborative exchange, several factors have to be taken into consideration in order to ensure the effectiveness of the project. As O’Dowd and Ritter (2006) stated, their *Inventory of Reasons for Failed Communication in Telecollaborative Projects* could “provide tutors involved in the area of Network-Based Language Teaching with a greater understanding of the many complex factors which come into play when students engage in online collaborative tasks with partner learners in distantiated cultures”. However, we should understand the dynamics of telecollaborative exchanges and recognize that “failed communications”, as we have seen in the present study, are very often a result of complex factors and, therefore, sometimes inevitable. As Magnan (2008) argues, when organizing intercultural exchanges, “there are a number of extralinguistic, social, cultural and institutional factors that must be dealt with beforehand in order to ensure successful collaborations, for example, finding appropriate and compatible partner classes and colleagues to work with; finding sufficient overlap in the calendars/schedules of the two institutions” (see Belz, 2001; Belz & Müller–Hartmann, 2003), or dealing with different expectations from the project (Thorne, 2003; Ware 2005). Moreover, the differences in linguistic proficiency of both learners, as well as individual differences, such as motivation, attitudes and the maturity of the learners, must also be considered, as we have seen in the current study. In the current section, I will briefly outline some recommendations for planning and implementing a telecollaborative exchange including a) how to find a partner class, b) how to design tasks and activities, and c) how to prepare and support the telecollaborative exchange (Schenker, 2012b) so that lessons learnt in the present study may be useful to secondary school teachers who wish to implement more successful intercultural telecollaborative projects.

When selecting a partner class for the telecollaborative project, several factors have to be taken into account. For instance, the academic calendars of the participating institutions should match allowing for the desired length of the exchange. Actually, this was a problem that we encountered during the organization of the projects. More specifically, during the pilot study the English instructor of the partner school suddenly informed us that the

headmaster did not allow for more than three telecollaborative sessions due to the tight curricula that teachers needed to follow. From then on, hence, we had to be careful and at a very early stage ensure the possibility of the desired length of the exchange. Also, it is important that both classes have motivation for the project because, if one group of students is not motivated, the success of the virtual exchange may be put in danger. According to Schenker (2012b), students who have no motivation “may not participate fully, may not fulfill all requirements, or may not respond in timely manners”. Besides, she adds that “lack of motivation may impact the amount of willingness students demonstrate to communicate cross-culturally and their receptiveness to learning about the target culture and language”. In order to ensure the motivation in the exchanges in this investigation we made the participation voluntary.

Importantly, the classes need to have similar language abilities in order to communicate together in the target language so that both sides are able to complete the assigned tasks together and can learn collaboratively. As we have already explained, however, in the first project we did not have the last word in the design and we had to adapt the number and the selection of participants to schools’ suggestions (see Section 3.8 *Limitations of the study*). Therefore, in the first project, there were dyads with a significant difference in their language proficiency, which caused understanding problems, frustration and often a certain inability to maintain the conversation and fully perform the tasks. In the second project we managed to pair the students better, in accordance to their linguistic level. This was possible because I was the instructor of the Spanish participants and I have also known the Bulgarian instructor for many years, which facilitated the communication and collaboration between us. As a result, the second project went smoothly, without any major breakdowns in communication or dissatisfaction of the participants.

Another factor to consider is the class size. In a telecollaborative exchange, it is important that every student can have a partner, that is, class sizes should be similar (O’Rourke, 2007). In the first telecollaborative project we ran into this problem as there was a different number of students on both sides willing to participate. As a result, some learners had to share their time online with various partners, which also led to motivation issues and sometimes caused

dissatisfaction and loss of interest (see Section 3.4 *Methodological challenges in Telecollaborative research*). This lack of reciprocity also affected the duration of the sessions which was at times uneven among the dyads (see Section 3.8 *Limitations of the study*). In the second project we managed to avoid such inconveniences by previously deciding on and selecting an equal number of voluntary participants from both sides.

As Dooly (2008b) puts it when designing tasks, we need to take into consideration the particular needs of the learners, such as their sociocultural background, different preferences in communication modes, and different abilities and learning styles (Dooly, et al., 2008). In our study, decisions regarding the design of tasks were taken after careful discussions between the researcher and the instructors, yet it was the teachers who approved and accepted the final design of the activities. The structure of the tasks as well as the prompts for the discussion topics were adapted from a study conducted by Ware and Kessler (2014) in which they investigated the interactional patterns used by the learners in a classroom learning environment during an online intercultural project (see Section 3.4.2 *Design Research*). Finally, in both projects it was the teachers' decision to adjust the topics in accordance to their students' interests, language proficiency or curricular issues.

The tasks should certainly be appealing for the learners and throughout these tasks they should be able to exchange ideas, evaluate and analyze them collaboratively (Dooly, et al., 2008). In order to ensure that the telecollaboration meets the educational needs and requirements of both sides, it is important that the tasks are negotiated and accepted by both instructors. In this research, for instance, we conducted a pilot study in which the discussion topics were more general and some of the students commented negatively on this, while others reported overall satisfaction with the selected discussion topics, suggesting entertainment, music, travel, environmental issues, voluntary work and cultural diversity as other topics they would like to discuss. Some of these were later included in the telecollaborative exchanges, after negotiation with the instructors (see Section 3.4.2 *Design Research* for discussion topics in both projects).

Before the beginning of the telecollaborative exchange, students must be prepared for their role in the project. In what Dooly (2008a) calls the preliminary stage, participants should be provided with detailed information about all aspects and the collaborative work that the project entails. The goals need to be clearly explained and the students have to be very well familiar with the tasks, the schedule of the meetings, and the expected outcomes (Schenker, 2012b). They must also be ready to use the technology and be conscious of their part and responsibilities in the exchange (Müller-Hartmann, 2007). During the collaboration, it is essential that students are provided with guidance and assistance in all aspects of the project (Müller-Hartmann, 2007).

This pre-session stage might influence strongly on the way students engage in the exchange and retain their motivation hence it might affect the overall fruitful outcome and positive attitude towards the whole experience. The preparation stage should be dealt with responsibility and precision in the face of finding a way to fit it within the traditional course curricula. In the case of telecollaboration, this preparatory phase should include work on specific discourse styles, linguistic and pragmatic competence, and, without a doubt, a focus on raising students' awareness of IC, the concept of culture, the differences and the connection with the two targeted cultures. Very often we anticipate that students would have understanding of the connection between language and culture but, in the case of this study, whose participants were young adolescents, we have realized that they needed some guidance and aid in order to cope successfully with the multilayered and complex field of intercultural communication. For instance, Malek who is accustomed to living in a multicultural society (his parents are from Pakistan and he lives in Spain) and spoke several languages (Spanish, Catalan, Urdu and English) showed lack of knowledge on what culture is, what it includes and how to discover differences and similarities between the cultures. Therefore, we believe that there is a need to introduce telecollaborative exchanges but these should be included more systematically in the curricular along with a solid introduction to basic notions of intercultural communication in the target language and culture.

Unfortunately, in the first project of the current study due to organizational obstacles (See Section 3.3.2 *Research Design*) students did not have sufficient time to dedicate to in-class

preparation. To compensate, the researcher, the instructor and the technician were always present in the computer lab during task performance in order to provide any technical or linguistic support if necessary. The Spanish participants were given task sheets with questions before every session, prepared by their teacher, which they could use in order to facilitate their conversation. This decision was taken by the instructor at the participating Spanish school as she wanted to provide her students with additional support and make sure that it was a comfortable and enjoyable experience for the learners. The instructor at the Bulgarian school, however, decided not to do so. In the second telecollaborative project enough time was provided for preparation in the preliminary stage. As we saw, the preparation stage is a very important part of the telecollaborative project as it might affect students' engagement, motivation and satisfaction with the experience. Therefore, teachers should be conscious and face the responsibility of this phase and try to find a way to fit it within the course curricula. We consider that, when introducing telecollaborative exchanges, systematic introduction of some basic notions of culture and intercultural communication should be provided. As we have already explained, in the first project we did not have the opportunity to previously brief students on such topics and, as a result, a lot more intercultural misunderstandings and troubles were detected, as opposed to the second project. In the second project, though, learners had sufficient time for preliminary in-class preparation in which they discussed topics of potential cultural misunderstanding and linguistic troubles that students expected to face during the telecollaboration.

As Schenker (2012b) warns, miscommunication and tension might arise in intercultural projects, and, as Ware (2005) recommends, these instances of misunderstandings may be used as a focus for conscious and reflective analysis and discussion in the classroom. What is more, analyzing these messages together in class could support the students in gaining cross-cultural awareness (Müller- Hartmann, 2007) and help them to compare "their own experiences to those of others thereby avoiding viewing the target culture in monolithic ways" (Schenker, 2012b). Another possible way to support the telecollaborative exchange is to encourage students to keep a reflective journal or blog in which they can contemplate on the exchange, and which could be beneficial in case of frustrations and concerns of the

exchange. In both projects of the current study, after the telecollaborative sessions, learners were given the chance to explain to their classmates what they have learnt about their partners and discuss any possible misunderstandings with the teacher. Due to the fact that not all students were able to take part in the experience, very often participants reported that they felt “special” (Hugo, Lluís Anton School) for having this opportunity and opened topics for wider culture related and linguistic discussions in the classroom.

As we have demonstrated in Section 6.1, learners use a variety of interactional strategies in secondary school telecollaborative projects for second language learning. According to Ware (2013a), however, “simply teaching our students how to notice the language choices they make, and how those choices open up and close down opportunities for their partners, is but one piece of a larger, interconnected puzzle and cannot in isolation develop intercultural communication skills”. Nonetheless, offering opportunities for students to examine their language choices in authentic interactions can enhance their awareness of intercultural notions which are encoded in the language they use (Ware, 2013a). In line with Ware and Kessler (2014) we believe that the ability to describe online communication skills is fundamental for secondary language educators as providing students with opportunities to participate in international online interaction in school-based environment is one way of enhancing communication and the use of new technologies in educational context (O’Dowd, 2010).

The current study has also shown that participants in secondary school telecollaborative projects use a variety of patterns of negotiated interactions and communication strategies (See Sections 6.2 and 6.3) for second language learning. What we found was that, when faced with an understanding problem, learners usually indicated it by directly appealing for help (“*What?*”; “*Can you repeat?*”) and, as a means to solve the trouble, they mostly repeated the utterance. Our recommendation is that students should be taught and trained into using a wider variety of communication strategies because as language learners they will very frequently encounter such hindrances and should be able to deal with them. Teachers should, therefore, encourage learners to focus on form as well as on meaning and urge them to use more diverse and suitable strategies depending on their needs. Such strategies are

Confirmation and Comprehension Checks or Clarification Requests to indicate a problem of understanding or Self-Correction, Circumlocution or Approximation to resolve the troublesome situation. Students' familiarity and capacity to use various communication strategies would also help them avoid communication failure or non-understanding during telecollaboration. As we have found in our study, very often participants needed to resort to different strategies in order to ensure the successful outcome of the interaction, therefore, we consider it essential for SL learners to be conscious and to train into using effectively a variety of communication strategies.

On the whole, the requirements that learners themselves and their instructors claimed fundamental for the successful outcome of the project were (1) the emotional level, (2) the pairing process, (3) the necessity of prior preparation, (4) the similarity in language proficiency, (5) the sufficient duration of the project, and (6) the involvement and dedication of participants. Teachers additionally stated the complexities of organizing an online synchronous project, such as (1) difficulty in finding a partner school, (2) matching the objectives and the schedules, (3) organizing the tasks and (4) pairing of the students, among others. It is highly likely that these difficulties cause the delay of implementation of telecollaboration into mainstream educational system. In spite of these obstacles, however, the high levels of participants' satisfaction and the exceptionally positive attitude towards telecollaborative activities have been demonstrated in this and in numerous other studies and, thus reinforce our determination to disseminate this innovative practice in future.

6.5. The Pandemic and Post-Pandemic Era and Recommendations for Future Research in Telecollaboration

COVID-19 was first experienced in Wuhan, China in late December 2019 and only a few months later the World Health Organization announced the pandemic spreading of the virus infection throughout the world with the global death toll exceeding a hundred thousand by April 2020 (Cahapay, 2020). According to the United Nations' policy brief (2020), the "COVID-19 pandemic has created the largest disruption of education systems in history, affecting nearly 1.6 billion learners in more than 190 countries and all continents". They claim that 94 per cent of the world's student population has been affected by the closures of learning spaces. It has also impacted the numerous primary, secondary, high-school and university teachers and instructors who suddenly had to be forced to go online, in most cases without any experience. I myself, being one of those teachers, who had to face the unanticipated challenges of this totally new way of online teaching.

Unfortunately, the COVID-19 crisis has caused unprecedented education disruption and in order to avoid a learning crisis to become a catastrophe for an entire generation, we all need to take urgent actions. These decisions will certainly have lasting economic and social effects on education and on societies altogether (United Nations, 2020). Therefore, in order to moderate the potentially harmful consequences of the COVID-19 pandemic, the United Nations and The International Commission on the Futures of Education's new report (<https://en.unesco.org/news/education-post-covid-world>) presented ideas and recommendations for concrete actions today that will advance education tomorrow.

Some of the recommendations referred to (1) supporting the teaching profession and teachers' readiness; (2) expanding the definition of the right to education to include connectivity; (3) removing barriers to connectivity; (4) strengthening data and monitoring of learning; (5) strengthening the articulation and flexibility across levels and types of education

and training; and (6) making free and open source technologies available to teachers and students (United Nations, 2020; <https://en.unesco.org/news/education-post-covid-world>).

This crisis has, however, stimulated innovation within the education sector. As a consequence of confinement periods and compulsory online teaching, distance learning solutions - such as the intercultural videoconferencing task-based projects between students that we designed way before the pandemia - have been developed thanks to quick responses by governments and partners all over the world (United Nations, 2020). At present, educational systems are preparing for the post-COVID-19 era characterized as the “new normal”, a term that has been used in different contexts to mean that “something which was previously not typical has become typical” (Cahapay, 2020). In the educational context, there has been extensive research on the application of online modality in the new normal post-COVID-19 era (e.g. see Mulenga & Marbán, 2020 on digital learning; Basilaia & Kvavadze, 2020 on online education; Naciri et al., 2020 on mobile learning; Sintema, 2020b on digitalized virtual classroom; Cahapay, 2020). We are now, actually, seeing the more wide-spread application of hybrid and blended teaching and learning within educational institutions.

Although the current study was designed and implemented with students who were in the classroom on school premises before the COVID-19 crisis, it shows results that should be taken into account when implementing intercultural telecollaborative projects with learners who are fully online. Such projects may become more motivating and appealing in a world in which all students and instructors have become more used to communicating online. We also believe that people will become more conscious of the importance of intercultural knowledge, tolerance, and citizenship in the globalized world we live in. Therefore, I trust that further research should be done in this area, specifically focusing on comparing telecollaborative projects between groups that follow regular, in-situ classes and groups who are entirely online.

Learning and education are continuously changing, thus, triggering even faster and much needed developments in the field of videoconferencing technology. For this reason, it is essential to continue investigating many of the components, restraints and affordances of

online synchronous interactions discussed earlier. In line with Kern, Ware and Warschauer (2017), I believe that more work that investigates multimodal learning environments is needed. Computers have undoubtedly shaped the ways we communicate and due to the greater accessibility of digital media, teachers and students are also integrating new modes of learning into the language classroom. In some cases, instructors resort to more conventional approaches, such as the use of audio or video clips to enhance the standard uses of the target language, but we also expect innovation in network-based language teaching and learning caused by newer technologies such as podcasting, wikis, blogs, multimedia presentations, use of social media, mobile learning apps and web-based projects. Surely, as a consequence of digitalization and, thus, eliminating the limits of communication within countries, another area of future research will be directed toward more critical exploration of cross-cultural knowledge and awareness as well as issues such as identification and contact in online contexts. As Kern, Ware and Warschauer (2017) argue, work in this area will not only affect the way we define language learning, but also “how we define key concepts such as communicative competence, and how we frame online pragmatics and sociolinguistics”.

In this line of thinking, extended research will be necessary on the relationship between form-focused in-class activities and online collaborations whose primary aims are social interaction and the demonstration of identity and cultural awareness. This will inevitably lead to changes in classroom dynamics, purposes and teaching strategies. For this reason, I believe that it will be vital to investigate into the changing roles of teachers - we should remember that some students relied on their instructors to solve communication problems and that teachers were key in designing and implementing the specific projects - and students and how these changes will affect the classroom environment, especially in the post-pandemic era, which will surely cause numerous transformations in our society as a whole.

The writing up of the chapters in this dissertation has coincided with the COVID-19 lockdown crisis in which language teachers around the world, like myself, have had to implement online teaching with few planning possibilities. In my case, the experience gained during the design of this dissertation project, the pilot study and the data collection had provided me with skills and knowledge related to telecollaboration that proved useful for the

fast implementation of online teaching. The fact that I was already familiar with the technology and the software was of great importance and I could anticipate potential difficulties for my students. I had also learnt that the online tasks need to be more dynamic and not lengthy as learners' attention span was much shorter during online interaction. My locked-down students, as most of those in other online classrooms this year 2020, used computer-mediated communication just with their instructor and their classmates. However, the skills that we all - teachers and students - learned will surely make more telecollaborative projects be developed in the academic years to come since the need for better intercultural communication and international collaborations has socially come to the fore.

During our journey through the rich but complex learning environment that telecollaboration is, we benefitted from the plentiful gains and profits that this mode has availed us. However, this was neither straightforward nor trouble-free experience. Researchers have come to an agreement that, in order to take full advantage of the IC learning potential, it is important to continue obtaining more in-depth knowledge in the field of telecollaboration, more specifically, to address issues, such as pairing of students, monitor work on task, task design and sequencing, and the need to adapt it to the students' preferences and experiences with intercultural interaction (O'Dowd & Waire, 2009) among others. In his review synthesizing the practice of SCMC-based telecollaboration Akiyama (2018) also observed that there is a lack of telecollaborative projects that go beyond one semester, most likely due to various sociocultural and curricular constraints. However, we agree with the author that longitudinal telecollaborative projects that go beyond one semester are needed in order for researchers to detect observable changes.

In sum, the shock of the COVID-19 crisis on education has been unprecedented (United Nations, 2020) but yet it has unveiled countless opportunities for innovation, modernization and adaptation of the present methods of teaching and learning to the needs of the current generation which, from now on, will see computer-mediated communication as part of their everyday classes and, therefore, may be better predisposed to telecollaborating with students in other countries. The current study has demonstrated that the participants found the project enjoyable and beneficial, providing them with an authentic and purposeful cross-cultural

experience. It is our belief that, due to the Covid-19 and the online learning, more and more students will want and need to make use of the multiple opportunities that telecollaborative exchanges can offer. However, further research is needed, more specifically investigating the affordances and hindrances of telecollaboration in educational settings and its use for L2 development as well as to enhance successful intercultural communication among learners from other linguistic and cultural backgrounds.

6.6. Final remarks

The pace of diffusion of digital media and wireless networks has never been faster before, due, in the last few months, to the COVID-19 situation which has boosted even further the naturalization of computer-mediated communication in all areas of our lives. I would like to lay emphasis on the fact that we are now witnessing in secondary and primary schools the first generations of digital natives who have grown up using the Internet and, therefore, perceive it as an entirely conventional way of interaction. These new characteristics of the ever growing role of digitalization in our lives have created the need of incorporating the new learning approaches in the educational setting. Many of those digital native learners, however, still face the rigid and sometimes outdated context in schools and universities, obsolete curricular planning and instructors with limited technological competences. So I wonder whether the online teaching that COVID19 has forced schools into will have changed those outdated methodologies when the crisis is definitely over. In view of that, I believe that educational institutions need to understand these new learners and to adapt to their approaches to learning, working and living.

The results of the present study have reaffirmed my belief that telecollaborative exchanges - or videoconferencing, the term that the COVID-19 crisis has made more popular - contribute to the development of transversal skills, digital literacies, intercultural awareness, and the ability to live and work together with people from other cultural backgrounds (Guth & Helm, 2010). The benefits and gains of telecollaboration may be plentiful. However, I agree with O'Dowd (2018) in that we should be wary of potential problems and challenges as we seek to expand these practices to greater numbers of classrooms and institutions. These include

students having limited access to technology in many parts of the world (including students in what is considered the first world), teachers' limited digital competences, time-differences hindering synchronous communication, and institutional resistance to the inter-institutional approach to learning (O'Dowd, 2013). Currently, telecollaboration is increasingly gaining recognition at international level, but there is still a clear need for communication and coordination among the organizations and institutions, which hinders the further dissemination of this educational approach (O'Dowd, 2018).

The growing significance of technology integration together with its complexity calls the attention to the importance of teacher education as well. Future success of telecollaboration will, therefore, require researchers' and teachers' mutual efforts and determination to integrate project goals, task design, logistical issues, and technology within the new educational setting. In her very recent study, Lobato (2020) investigates this new educational context, more specifically in Catalonia, characterized by the implementation of new pedagogical methods such as project-based instruction. She argues that this new program, called "Escola Nova 21", was created with the aim to enhance the transition towards a more innovative educational system which promotes learners' participation, motivation and cooperation. The characteristics of this new project-based classroom environment offer an ideal context for the implementation of telecollaboration in educational setting. What is more, I trust that telecollaboration should be an indispensable part of the curriculum since the youth of today, the so called digital natives, will one day also have to be skillful intercultural natives. Namely, they will most probably live in cultural and ethnic diverse society, thus, they will need the capacity to competently deal with cultural plurality without having to sacrifice their own identities (Trenchs-Parera & Pastena, 2021).

Telecollaboration has a relatively short history in the field of education, but in the last decades, and especially as a result of Covid-19 and online teaching during the confinement, the research and application of this innovative practice has been expanding exponentially. In spite of the problems and difficulties that it poses for educators, telecollaboration has been recognized as a useful, effective and powerful tool in the field of intercultural communication and ICC (Guth & Helm, 2010). This investigation offers considerations as to creating

comprehensive pedagogical models which would enhance the use of telecollaboration, specifically in the field of secondary school L2 learning setting, and encourage both students and educators to implement it in their curricular.

Given the fast evolution of technologies and computer-mediated interaction, flexibility will be a fundamental requirement for teachers and researchers as they further explore language learning and teaching in the new era of digital communication. As Kern et al. (2017) claimed:

By adopting the same habits of mind that we seek to inspire in our students—autonomous learning; inventive thinking; and critical perspectives on the intersection of language, technology, and culture—teachers and researchers can help ensure that the impressive potential of network-based teaching to transform language learning is achieved.

Since the world has changed dramatically during the past few months, we are currently witnessing a dire need to better understand the life and worldviews of the new kinds of digitalized students and to be more active in preparing the society for digital transformation in all sectors, including education. We believe that this digital transformation of education could empower learners, teachers and schools to manage and search for efficient pedagogical models, which will cooperate with traditions and innovations. We expect and trust that territories will disappear and society will not be built on borders and boundaries, but rather on the notions of a globalized world. And, when this time comes, we hope that the new generations will be prepared to cope with and live in a world which is diverse, multicultural and cosmopolitan, and which comprises more than one sole set of cultural beliefs, values, philosophy and behavior.

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APPENDICES

APPENDIX 1: Consent form to be signed by participant's parent

Dear parents,

I am a researcher from the University of Pompeu Fabra, Barcelona, Spain and I am doing research on the use of technology to enhance foreign language learning. Mundi School was chosen to collaborate with Lluís Anton School in Barcelona because both institutions are innovative and are open to the use of interactive tools in the classroom.

With this letter I would like to ask for your permission for your child to participate in this project. The participation does not pose any kind of risk. Children will participate in an intercultural project, doing computer-based activities with their peers in Barcelona, which will be video recorded. I guarantee the ethical and responsible use of the data collected in this research and that it will only be used for the analysis of the research. I can also assure you that the information will not be used for any public purposes and in case that the results and conclusions of this study are to be published the identity of the participants will be protected by using pseudonyms and never their real names.

If you have any questions or doubts regarding the project, please do not hesitate to contact me through my email address: yordanka.chimeva@gmail.com.

Yordanka Chimeva

Researcher

I,, parent of, a student from class from Mundi School, Blagoevgrad, give permission for my child to participate in the research study described above, called 'The use of videoconferencing to enhance interaction and intercultural competence in foreign language education'⁹. The researcher in this project is Yordanka Chimeva, doctoral student from the University of Pompeu Farbra, Barcelona.

Thank you very much for your participation!

⁹ This was the provisional title of the thesis which later underwent changes.

APPENDIX 2: Pre-project questionnaire

/English version/¹⁰

1. What is your name?
2. How old are you?
3. In which country were you born?
4. How long have you been living in Catalonia/Blagoevgrad?
5. What is your mother tongue?
6. Do you speak any other languages? Which ones? Who do you speak these languages with?
7. What language do you speak with your family?
8. Where are your parents from?
9. Do you have family or friends who are not Spanish/Bulgarian? Which language do you speak with them?
10. Have you visited other countries? Which ones? For how long?
11. What are your hobbies and interests?
12. What do you expect from the project?
13. What do you know about the Spain/Bulgaria?

¹⁰ All participants were provided with a consent form and conducted the interviews and questionnaires in their native language, Spanish or Bulgarian respectively. Here, we provide only the English version.

APPENDIX 3: Post-project questionnaire

/English version/

1. Did you like the project? What exactly did you like?
2. What did you not like about it? What would you change?
3. How did you feel during the conversations? Why did he feel that way?
4. When he didn't understand your partner, what did he do?
5. What were your expectations before the project? Did these expectations come true?
6. What was different from what you expected? Did anything surprise y
7. What did you learn about their culture?
8. What similarities and differences did you find between you and the Spanish children?
9. Do you think your English will improve after this project? How / what exactly?
10. What has this project contributed to you personally?
11. If this is the second project in which you participate, what differences and similarities do you find between the two? What did you like more and what did you not like?

Thank you for your participation!

APPENDIX 4: Pre-project interview

Interview protocol^{11 12}:

Thank you for coming. I appreciate the time you've taken to come in for this talk. The purpose of it, other than giving me a chance to know each of you a little better, is also to find out more about English teaching in Spain/Bulgaria, which helps my research project. Do you mind if I have the tape recorder running?

1. Do you like learning languages? What languages do you speak?
2. How did you practice your oral English?
3. Have you travelled to other countries? Where? Did you speak any other language there?
4. If you were given a choice between one-to-one videoconferencing sessions with native speakers or videoconferencing interaction with other English learners, which one would you choose? Please explain why?
5. What do you expect from the experience?
6. What topics do you want most to discuss with the other students?
7. What aspects of your English do you expect to be improved after the videoconferencing sessions?
8. What do you expect to learn about the participants from Spain/Bulgaria?
9. Do you think it is a good way to learn English? Why (not)?
10. Do you think videoconferencing should be incorporated in your language classes? Why? Why not? How?
11. Is it important for you to see your partner on the screen? How do you think it could help you? Why is it important? Why not?
12. What do you think is the best way to learn English?

¹¹ All interviews were semi-structured and did not follow a strict order or content of the questions.

¹² The questions for the pre-project interview were adapted from Xiao's (2007) study.

APPENDIX 5: Post-project interview

Interview protocol

Thank you for coming. I appreciate the time you've taken to come in for this talk. The purpose of it, other than giving me a chance to know each of you a little better, is also to find out more about English teaching in SpainBulgaria, which helps my research project^{13 14}. Do you mind if I have the tape recorder running?

1. What is your opinion about the project? What was the best and the worst part of using videoconferencing in these sessions?/ What did you enjoy most/least about the project?
2. What did you learn from it?
3. Is it a good way to learn English? Why (not)?
4. Do you think your English improved as a result of participating in this online learning project? What aspects have you felt improved in your English? Which ones do you think didn't improve? If Not, why not?
5. How did you feel about the task (i.e. did you enjoy it, find it boring, dislike it, learn a lot from doing it, etc.)? Please briefly explain your answer. (*Always pros and cons!!!!*)
6. How would you compare learning in this way with participating in more conventional language classes?
7. Do you think it is better or worse than the activities you do in your classroom? What activities did you like/not like?
8. Do you think videoconferencing should be incorporated in your language classes? Why? Why not? How?
9. During the sessions did you sometimes not understand what the other student was saying?
What did you do?
10. Did you at any time pretend you understood your partner?
11. Did you feel uncomfortable/nervous?
12. Do you think talking with the students online was similar to talking in real life? In what sense?
13. When you noticed a mistake made by your partner did you sometimes correct him/her? How did you correct him/her?

¹³ The post-project interviews were semi-structured and did not follow a strict order or content of the questions.

¹⁴The questions for the post-project interview were adapted from (Xiao, 2007) study.

14. Did you worry about making mistakes while you were speaking?
15. When you were curious about something, would you ask your partner about it? If not, why not?
16. Did you find some common things between you and your partners when doing the task? What? Did you find any differences in the way you and your partners did the task? What?
17. Did you find it difficult to describe and talk about your home culture to your partner? Why? What was difficult to talk about?
18. Was there anything that you explained about your culture that was not understood? Why do you think this happened?
19. Was it important for you to see your partner on the screen? How did it help you? Why was it important? Why not?
20. Do you think this project was successful? What made it successful?
21. What would you do to improve the videoconferencing sessions?

APPENDIX 6: Teachers' interviews

Interview protocol

1. Have you had any previous experience with the use of technology in the classroom?
If yes, can you explain in details about the experience?
2. Are you willing to use technology in the classroom? Why/not/?
3. Do you think this project will contribute with something to the learning process? If yes, how?
4. What did you learn from it?
5. Is it a good way to teach English? Why (not)?
6. Do you think your students' English improved as a result of participating in this online learning project? What aspects have you felt improved in their English? Which ones do you think didn't improve? If not, why not?
7. How did you feel about the task (i.e. did they enjoy it, find it boring, dislike it, learn a lot from doing it, etc.)? Please briefly explain your answer. (*Always pros and cons!!!!*)
8. How would you compare teaching in this way with participating in more conventional language classes?
9. Do you think it is better or worse than the activities you do in your classroom? What activities did you like/not like?
10. Do you think videoconferencing should be incorporated in your language classes? Why? Why not? How?

APPENDIX 7: Consent from parents to use photographs

Dear parents,

I am a researcher at Pompeu Fabra University, Barcelona, and I am conducting research on the use of technologies to promote foreign language learning. In 2018/2019, your son/daughter participated through language school in an intercultural project through a video conference.

With this letter I ask for your permission to use the photos below in the study.

Please mark the images (✓) that you authorize to be included in the doctoral dissertation.

/both blurred and images without filter were presented with an option to put a tick in front of the photograph that the parent authorizes to be used/

I assure you of the ethical and responsible use of the data from this study, and that in the event that the results and conclusions of this study are published, the identity of the participants is protected by a pseudonym.

If you have questions about the survey, you can contact me by email:
yordanka.chimeva@gmail.com.

Yordanka Chimeva,

Project researcher

I, parent of, allow the use of the images marked above, only for educational purposes.