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Engaging Second Language Teachers in Videoconference-integrated Exchanges: Towards a Social Constructivist Perspective

Sergi Roura

A thesis submitted in partial fulfilment of the requirements for the
Degree of Doctor of Education

University of Edinburgh

2015
Engaging Second Language Teachers in Videoconference-integrated Exchanges: towards a Social Constructivist perspective

Abstract

The questions addressed in this study arose from an earlier project which attempted to provide videoconferencing opportunities for Second Language (SL) teachers to engaging in bilingual “virtual exchanges” for their students (hereafter referred to as “eTandem videoconferencing”). This investigation was initially motivated by the interest on discovering why these teachers and their students did not take the opportunity to participate in the synchronous part of the exchanges.

This qualitative study reports on the developmental paths experienced by twenty SL teachers from the US, the UK, Switzerland and Spain and their pupils in the process. It particularly aims to discover what teachers’ roles emerge in the process. The research also focuses on how these teachers’ practices are consistent with a more social constructivist approach to Computer Assisted Language Learning.

The investigation builds on Hartnell-Young’s theoretical model (2003) of teachers’ roles where computers are used. Data collection involves an initial survey, observation of teachers and students before, during and after the exchanges and video-stimulated recall interviews with the teachers. The research centres on critical incidents experienced by these teachers. Hugues’ model (2009) of the expanded critical incident approach provides the methodological framework. In line with her model, the study has created a multifaceted word picture of these teachers, further characterised by a condensed set of critical findings.

The teachers’ accounts reveal several incidents that inhibited or supported the teachers’ development in terms of how they planned the learning environment regarding the physical space, the virtual setting and the social environment and in terms of how they mediated the implementation of the exchanges towards a more interactive approach. In doing so, this investigation adds to the knowledge base available to educators and researchers by offering greater understanding about these SL teachers’ particular experiences.
Declaration

I hereby declare that I, Sergi Roura has composed this thesis. It is entirely my own work, other than the counsel of my supervisors, and has not been submitted for any other degree or professional qualification.

Signed: ________________________________________________

Date: 02 - June - 2015______________________________________
Dedication

I would like to dedicate this dissertation to Jordina and our children Ariadna and Lluc.
Acknowledgements

It is my pleasure to thank those who made this research study possible. In particular, there are a few people I would be amiss if I did not mention for their outstanding contributions.

Dr. Hamish Macleod and Dr. Cathy Benson – my mentors and rhetorical guides. Their gentle prodding and their questions allowed me to see new perspectives and refine what was only an obscure idea.

The completion of this dissertation would never have been possible without the support of my parents.

Special thanks to my friend, Dr. David Estrada, who pushed me here and who is always around and other colleagues I found on my way, Dr. Enid Figueroa, Dr. Rosemary Douglas, Dr. Kristin Brown, Dr. Carina Siqués and Jaume Vilà.

... and especially ...

The teachers for their time and generosity in sharing their experiences with me. Without their engagement, this thesis would have been impossible to complete.

For all of you, I am deeply grateful.
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Key concepts - Some definitions used as referred in this study

The Youngcast project

A top rated project coordinated by iEARN-Pangea and iEARN-United Kingdom that, as defined in this study, encompasses several groups of Spanish and English SL teachers and their students who participate in various eTandem exchanges (Roura, 2013).

- **Project** - a student project is "an opportunity to learn with another school or classroom centrally managed and coordinated by one or more persons" (Lim, 2009:11).

- **iEARN** - a non-profit global network that enables teachers and youth to use the Internet and other technologies to collaborate on projects that enhance learning.

- **iEARN-Pangea (2014)** - the International Education and Resources Network in Catalonia.

- **The Learning Circle structure** - a way to engage in online learning through the creation of groups of teachers and their students who join in an online space (Riel, 1995, 1997). The Learning Circle structure is divided into six phases: getting ready (Phase 1), opening the circle (Phase 2), planning the circle (Phase 3), Exchanging students’ reports (Phase 4), organizing the circle publication (Phase 5) and closing the circle (Phase 6).

---

eTandem videoconferencing

The online partnerships between SL students of different native languages who work together to help each other learn each other’s mother tongue through the use of videoconference technology (Cziko, 2004).

- **Distance education** - teaching and learning where the "teacher and student are removed from each other, by either time or location, or both" (Sweeney,
2007:20).

- **Tandem language learning** - “defined in the study as two students of different native languages who work together to help each other learn the other language” (Cziko, 2004).

- **Videoconference technology** - a broad term that “allows people at two or more locations to see and hear each other at the same time” (Lim, 2009:11).

- **Desktop videoconferencing** - the videoconference technology that the majority of schools in this study have used defined as “a communication system developed traditionally for individual via desktop computer” (Walker, 2005 in Keohane, 2010:21).

- **Conference room-based videoconferencing technology** - “a larger scale multi-user videoconferencing system placed into existing conference rooms for the purpose of remote communication” (ibid). Only one school refer to a conference room system.

- **Dedicated videoconferencing facilities** - “solely for the purpose of videoconferencing communication” (Hirsh, Sellen and Brokopp, 2005).

---

**The Youngcast Research project**

This study follows a qualitative approach to record the developmental paths experienced by English and Spanish SL teachers from different countries when participating in videoconference-integrated eTandem exchanges. In order to discover how SL teachers actually did as they exploit the potential of eTandem videoconferencing in their SL classrooms, I invited them to participate in what I refer to as the Youngcast Research Project.

**Participant-teachers**

In total, this exploratory study involves 20 international SL teachers from different countries who accepted to participate in the research study and that I sometimes define as participant-teachers in
case the context within the study requires to distinguish them from other groups of teachers. When
the context requires so, I refer to other staff members (e.g. ICT coordinators, other SL teachers or
project coordinators) who collaborated with the 20 participant-teachers as non-participant teachers.

Virtual learning community

“Groups of individuals, partly geographically distant from one another, [...] coming together
temporarily to work in collaboration towards a common goal or a mutual purpose” Preece (2001).
This group of people may or may not meet one another face-to-face and “emerge when enough
people bump into each other often enough in cyberspace” (Powell, Piccoli and Ives, 2004 in
Keohane, 2010).

- **Face-to-face communication** - “an exchange of facial expressions, words, gestures, and gaze for achieving common understanding” (Mukawa et al., 2005).

- **Local vs. remote classroom** - Jamieson et al. (2000) refer to physical places and
electronic spaces to distinguish between the physical location of students in a
physical classroom and that of online participants. I use Anastasiades et al.’s
(2010) terms; they distinguish between local classrooms versus remote
classrooms respectively.

- **Intergroup and intragroup audience** - Regarding the students, they (ibid) also
distinguish two different groups of audience: intragroup and intergroup
audience. The former includes those students collaborating with each other in the
physical classroom. The latter comprises the students collaborating with the
other learners from the remote class.

- **Virtual team** - “teams that are dispersed by geography, organization, or time and
connected through information technology to accomplish specific organizational
tasks” (Powell, Piccoli and Ives, 2004 in Keohane, 2010).
In the context of this study, *interactions* refer to specific instances of exchanges between eTandem teachers and between eTandem students; these are understood to be instances of the teachers’ processes and the students’ active learning-related involvement in trying to establish more message-oriented communication with their eTandem partners. The longer-term goal is to help SL students become self-regulated and autonomous learners in this process.

- **Social presence** - the “degree of salience of the other person in the interaction and the consequence salience of the interpersonal relationships” Short, Williams and Christie (1976:65). Attributed to a communication medium, Andres (2006 in Keohane, 2010:39) relates social presence to the manner in which the medium “allows individuals to maintain an awareness of others in a group and the impression that the group is communicating through mutual interaction”.

- **Constructivism** - "Learning to the constructivist is an adaptive process involving assimilation, accommodation and equilibrium, in which the learner tests constructions against those of others, negotiates meaning and constantly reconstructs and recognizes personal interpretations or experiences” (Greenwood, 2002 in Sweeney, 2007:21)

- **Social constructivism** - "Vygotsky’s concept that emphasizes the idea that the individual interprets the world through social interaction with others and especially by using language in those interactions” (Sweeney, 2007:21). The study looks at the way in which SL teachers participating in the exchanges apply eTandem videoconferencing in accordance with a more social constructivist approach.

- **Scaffolding** - the process by which a teacher (or peer) helps a student master a task that he is unable to carry out alone, by controlling certain elements of a task until the learner is able to complete the entire task (Hartnell-Young, 2003).
Scaffolding provides a structure (Mckenzie, 1999) that is gradually dismantled as learners become more independent and create personal systems. "Teachers can scaffold student learning by providing levelled opportunities for students to be introduced to new material, interact with it, reflect on it, form constructs, and form those constructs with others in more than one context" (Sweeney, 2007:46). Hartnell-Young (2009) includes among scaffolding tools dialogue in the social context and she (2003:67) clarifies that the limits of the ZPD on any task are established, in part, “through interactions between teachers and students or between peers”.

**Table 0.1:** Key definitions applying to this thesis
1 **A rationale for researching eTandem videoconferencing in second language classrooms**

The teaching and learning of a foreign language has developed to meet SL students’ communicative needs over the years. One of the major challenges for educators in general and Second Language (SL) teachers in particular is to provide their SL students with the sort of technical resources and linguistic skills necessary to join the global communication network successfully.

This on-going adaptation not only implies the mastering of technology for didactic aims, but a growing awareness of social changes; these changes imply to develop with the rapidly changing nature of information and communication technologies (ICT) as reflected on the widespread use of web 2.0 resources such as social networking sites (e.g. Facebook, 2014), blogs or other online resources (e.g. Google Scholar, 2014), for example.

Long-distance potential relationships within SL classrooms had been previously constrained in their development by limited social variation in foreign language classrooms. Both asynchronous computer-mediated communication (ACMC) and synchronous computer-mediated communication (SCMC) environments have significant potential to broaden the social setting and with it the classroom discourse options.

The technologies involved on these environments are evolving rapidly over the years, from written to oral and oral-visual interaction. Wang (2004a, in Peterson, 2009) categorises oral-visual interaction using computer-mediated communication (CMC) as “the highest level of CMC-based interaction at the present time”; this kind of interaction is what Yanguas (2010) has referred to as oral computer-mediated communication (OCMC) and distinguishes
between video and audio CMC groups. Other authors call it simply synchronous computer-mediated communication (Sweeney, 2007) or simply videoconferencing (Anastasiades et al., 2010).

This study follows a qualitative approach to record the developmental paths experienced by English and Spanish SL teachers from different countries when participating in videoconference-integrated eTandem exchanges. These experiences involve an online partnership between students who are learning each other’s mother tongue. I have used the term eTandem videoconferencing (Cziko, 2004) to describe those international online exchanges between them.

The aim of the research attempted to cover the experiences of SL teachers participating in eTandem language learning. The online nature of the investigation allowed me to reach a large number of potential participants; but its qualitative nature and its long-term inquiry did not make it easy for me to motivate a large number of educators wishing to participate in it. This obliged me to start with a small group of twenty teachers, anticipating that some of them would vanish from the experience.

The setting for this study comprises nine English SL classrooms, one in the Canary Islands and eight from around Catalonia, and their correspondent eTandem partners (Spanish SL teachers) in other English speaking countries: six in United States, two in United Kingdom and one in Switzerland. Two primary classrooms in Catalonia also joined the project with the idea of piloting with each other for a potential future eTandem partnership with classrooms from other countries.
1.1 Setting the stage

1.1.1 The learning space: technology-enabled classroom

During the initial phase of this study, many schools were taking part in the pilot phase of an initiative from the Department of Education in Catalonia (EduCAT1x1, 2014) that provided many schools with a high student to computer ratio. An initiative like this offers promising environments to support individual and small group learning as they equip almost every child with a computing device that provides personalised learning tools. This large investment of government funds into computer-based technologies in Catalan schools meant that many teachers used computers in their classrooms to the point of substituting books with computers.

The choice of replacing the book by a computer opens many methodological possibilities for the dynamics of the classroom but at the same time it means a challenge to many teachers who find that a pedagogical framework does not exist to help them to implement these possibilities. A demand for teacher professional development and for the construction of a pedagogical framework became particularly important in this Catalan context. The initial introduction of the EduCat1x1 in classrooms meant the entrance of publishers generating online materials without a clear change of methodology as the online materials generated were totally influenced by the textbooks.

The Department of Education in Catalonia supported its policy decision until budget-cutting times in schools that brought with it cuts in professional development and increasing disillusionment in classrooms. Far from being a local problem, this picture extends globally. Sweeney (2007), for example, refers to schools in US when she states that, in such budget-cutting times, each department in primary and secondary public schools needs to justify its
effect on student learning and admits that only more research might set the stage for more funding.

Without the support of the institutions, many teachers look for personal initiatives that might allow them to develop professionally. Several non-governmental educational associations joined forces to try to express their discontent with the implemented methodological policy with initiatives such as the 21 actions (Jornades iEARN, 2013) carried out in the Jornades d’iEARN-Pangea. Among these actions, participants on the manifesto included the importance of integrating worldwide projects such as the ones coordinated by iEARN.

Godwin-Jones (2005) points to how these new uses of existing technologies (e.g. videoconference technology, videopodcasting) provide additional channels for oral communication and with it unique opportunities for language learning. These new uses of technology also make necessary the creation of new models where teachers could develop in their new roles. In this sense, an in-depth look at the personal views and experiences of the SL teachers participating in the eTandem exchanges may benefit other colleagues who are trying to apply eTandem videoconferencing in their SL classrooms. This investigation will also be helpful when these SL teachers and even school administrators propose a change of methodology in their school system and in particular, when they propose implementing videoconferencing technology in their schools towards a social constructivist approach.

1.1.2 The learning challenge: SL Acquisition

The situation of the acquisition of English as a third language in Catalonia has been titled in a recent article in press as ‘the never-ending story’ (Sanchez, 2012); a situation that is
corroborated by a study on the acquisition of English (Education First and the University of Cambridge, 2011) that placed Spanish students of English as a SL on the position 18 out of 23 European countries.

School-aged children in Catalan schools learn English as a third language in communities where, for the most part, their first language (Catalan) is dominant and Spanish is also used. Outside the English as a Second Language (ESL) classroom, students rarely use English in the Catalan-speaking or Spanish-speaking communities in which they live. Ballesteros (2012) highlights a common mistake in many Catalan schools to begin teaching English through grammar rather than through speaking. Accordingly, global studies suggest that English teaching in all its forms needs to shift towards teaching successful communication strategies (Education First and the University of Cambridge, 2011).

1.1.3 The Youngcast Project

My study stems from my background as a primary, secondary and also tertiary SL teacher but also from my experience as a member-coordinator in national and international projects with iEARN (2014) in Catalonia (iEARN-Pangea). The investigation is opportunistically located within the context of one of the worldwide projects coordinated by iEARN-Pangea: the Youngcast Project (Roura, 2010e). This project encompasses several groups of Spanish and English SL teachers and their students who participated in various eTandem exchanges.

The pedagogical design of the Youngcast Project (Roura, 2013) is based on the Learning Circle structure (Riel, 1997), that is, a way to engage in online learning through the creation of groups of teachers and their students who join in an online space. The Learning Circle structure is divided into six phases (Figure 1.1). This is a structured programme of
asynchronous and synchronous teachers’ and students’ activities to support participants on their way to the synchronous eTandem exchanges. The final aim of these exchanges was to establish long-term synchronous communicative encounters with their eTandem partners.

This eTandem link-up was initially designed and first launched in 2008 by coordinators of iEARN-Pangea and iEARN-United Kingdom (Figure 1.2). More than 100 teachers participated in the in-service programme for the project (phase 1). Around 40 classrooms participated in the activities suggested (phases 2) prior to the group synchronous exchanges. These involved, for example, the creation of videopodcasts and an initial whole-class synchronous presentation. Many eTandem partners also started the planning of the
synchronous exchanges following instructions from the lesson plan designed by their teachers (phase 3).

As one of the initial coordinators of the project, I observed that both primary and secondary students taking part in the eTandem link-up were very active in their participation in the asynchronous activities suggested where they created and shared several videopodcasts between the schools. However, the synchronous activities between groups suggested (phase 4) aroused important concerns for me regarding the low participation of the schools: only six classrooms had taken part in the videoconferences (Phase 4). Only one of the groups repeated the videoconferences with the same eTandem partners (Phase 6).

<table>
<thead>
<tr>
<th>Youngcast project</th>
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<tr>
<td>Academic Year</td>
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<td>2008 - 2009</td>
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<td>2008 - 2010</td>
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<tr>
<td>2010 - 2013</td>
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Table 1.1: Youngcast Project overall timeframe
1.1.4 The Youngcast Research Project

One way to discover what had really occurred was to trace the events leading up to the problem asking teachers participating in future exchanges to be involved in this investigation. Therefore, after I had concluded my Master in TESOL at the University of Edinburgh in 2009 (Table 1.2), and with the aim of digging deeper into what SL teachers actually do as they exploit the potential of eTandem videoconferencing in their SL classrooms, I carried out this research study at PhD level which I refer to as the Youngcast Research Project.

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Phase</th>
<th>Chapter</th>
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</thead>
<tbody>
<tr>
<td>2008 - 2009</td>
<td>Master in TESOL</td>
<td></td>
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<tr>
<td>2009 - 2010</td>
<td>Proposal to apply: linguistic approach</td>
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<tr>
<td>2010 - 2011</td>
<td>Planning phase</td>
<td>3.3.1</td>
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<tr>
<td>2010 - 2013</td>
<td>Collection, analysis &amp; interpretation phase</td>
<td>3.3.2</td>
</tr>
<tr>
<td>2010 - 2011</td>
<td>Stage 1 - Background</td>
<td>3.3.2.1</td>
</tr>
<tr>
<td>2011 - 2012</td>
<td>Stage 2 - Teachers' accounts</td>
<td>3.3.2.2</td>
</tr>
<tr>
<td>2012 - 2013</td>
<td>Stage 3 - Set of critical findings</td>
<td>3.3.2.3</td>
</tr>
<tr>
<td>2010 - 2013</td>
<td>Presentation phase</td>
<td></td>
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</tbody>
</table>

Table 1.2: Youngcast Research Project overall timeframe

My first proposal for the investigation (Academic Year 2009 - 2010) started as a relatively straightforward study focused on exploring students’ second language acquisition (SLA) when participating in eTandem videoconference exchanges. The planning phase of the research (Academic Year 2010 – 2011) involved a first contact with the real context. This
allowed me to define and redefine the aim of the study. Initial observations and analysis of several pilot experiences showed me the necessity of widening the focus of the investigation to the whole videoconference-integrated experience in the context of the eTandem SL exchanges. Consequently, a broader exploration of what was occurring in these SL classrooms became essential to understand the circumstances that could help or hinder teachers’ participation in this kind of exchanges.

During this preparatory year I also started recruiting teachers wishing to participate in both the eTandem exchanges -as part of the Youngcast Project- and as participants in the investigation -as part of what I termed the Youngcast Research Project-. I also started to design the online research environment.

*From the Youngcast Project to an eTandem exchange*

My research was initially and opportunistically located within the Youngcast Project. Nonetheless, the research did not pretend to impose a specific theoretical framework upon the teachers or to focus on an eTandem link-up previously designed - in this case, the Youngcast project. Once the Youngcast Research Project started and once teachers started planning their eTandem exchanges (Academic Year 2010 - 2011), the investigation took its own development and it could be applied to any eTandem exchange between classrooms.

ETandem partners determined both the pace and direction of their videoconference-integration; in other words, they made their own individual choices regarding how, when and how often they wanted to integrate the videoconference exchanges in their classrooms to support the SL learning processes of their students. I simply encourage SL teachers in the study to apply videoconference technology within their eTandem context and to exploit it for their own pedagogical purposes and to become critical users of this integration.
Nonetheless, one of the main challenges of this preparatory year was how these teachers could collaborate with each other and share with me as a researcher the data I requested from them. As most of these teachers were from different demographic areas in different countries, I encountered many difficulties when trying to gather data from the different eTandem partnerships involved in an online and international research project like this. The creation of an online platform (3.3.1) that could promote this collaborative process and facilitate both the communication between the eTandem partners and the collection of data for the research study proved to be essential.

Through this online platform I continued gathering data following the programme of teachers’ and students’ activities around the Youngcast project that the Learning Circle structure offered; this allowed me as an online researcher to inform and guide SL teachers in a structured way on the data I wanted to gather from them. After gathering background data from the recruited SL teachers (3.3.2.1 - Stage 1), I decided to follow such a structured approach throughout Stage 2 (3.3.2.2) and Stage 3 (3.3.2.3) of my study.

In doing so, I divided the range of data-collection instruments and techniques implemented across the different phases of the Learning Circle structure into two parts. During Academic Year 2011 - 2012, I collected teachers’ accounts when I followed phases 1 to 5 of the Learning Circle structure (3.3.2.2.1 - Collection stage 2: collecting teachers’ accounts). During Academic Year 2012 - 2013, I collected in-depth data from experts and the few teachers who wished to continue with the exchanges (3.3.2.3.1 - the Collection stage 3: collecting in-depth data) with the aim of discovering which were the set of critical findings that SL teachers encountered.
Allowing teachers to determine the pace of their videoconference-integrated eTandem exchanges generated a dual approach. Some participant-teachers, for example, regarded the organisation, sharing and documentation of the videoconference design processes in a structured way and in an online format as a helpful aid. Some of these teachers used the platform filling in the lesson plan sheet with the information requested or sharing their videopodcasts (Tandem 1 and Tandem 6), and recording and uploading their videoconferences (Tandem 1, Tandem 3, Tandem 4 and Tandem 6).

Other teachers decided not to use the online platform designed for the study as they considered it as an additional impediment and they just focused their eTandem experience to a synchronous experience. Other teachers generated their own initiatives, to the progress of the exchanges and they transferred the control of the virtual classroom to technicians.

1.2 Research gaps and questions

The study addresses the important gap in the existing research associated with the need for current in-depth knowledge on SL teachers’ integration of eTandem videoconferencing in their classrooms. Therefore, the research problem involves determining how SL teachers integrate eTandem videoconferencing in their classrooms.

Based on what these SL teachers were doing in classrooms where these eTandem videoconference exchanges occurred and on what these teachers said about it, data gathered throughout the whole process allowed me to follow the SL teachers’ developmental paths in order to answer the main question of the study:
How do SL teachers develop throughout the process of eTandem videoconference integration in their classrooms?

This main research question encapsulates three key elements of the study, which are: the participants (SL teachers), the tool (videoconference technology) and the experience under investigation (the process of eTandem videoconference integration).

Regarding the participants, previous studies on videoconferencing have already focused on the role of videoconference coordinators (Lim, 2009) or on generalist teachers - in contrast to subject specialists - arranging exchanges with other generalist teachers from the same country and in the same language (Anastasiades et al., 2010). Surprisingly, I have only read so far one article that considers the influence of generalist teachers in the context of a videoconferencing project for SL classrooms (White, 2011).

Regarding the tool, Sweeney (2007) had already showed her surprise on the few studies around the implementation of videoconferencing in primary and secondary schools and had recommended future in-depth investigations at the lesson plans that teachers use and the value added to the curriculum as seen through the SL teachers’ perspectives. Keohane (2010:iv) focused on “gaining understanding into the perceptions and experiences influencing the decisions of virtual team members to use desktop, room-based, and dedicated videoconferencing technology”.

While the teaching context for this investigation is classrooms using videoconference technology, the study does not focus on technology skills. The underpinning research problem is to identify how these SL teachers integrate eTandem videoconferencing in their classrooms. When there is technology integration, there is reorganization or recreation of the
learning environment and it becomes part of a process rather than an approach (Becker, 1994).

The research question’s interrogative *how* and the active verb *develop*, all imply a wide-ranging exploration of the SL teachers’ active engagement with the process under investigation. While a single research question was central to the study, two subquestions were included to narrow the focus of the investigation. To do so, I first centred on the emerging roles that teachers developed in the process of eTandem videoconference integration in their classrooms:

*What teacher roles emerge in the process of eTandem videoconference integration in their classrooms?*

This first subquestion addresses a second gap in the literature associated with the need for current in-depth knowledge on the SL teachers’ roles emerging from integrating eTandem videoconferencing in their classrooms. Rather than seeking for new roles emerging from the data gathered, Hartnell-Young’s extensive research (2003, 2005, 2006, 2009) on the teachers’ roles in classrooms where teachers use technology guided me on discovering how teachers’ roles developed through the process.

A considerable body of research on videoconferencing has also been published taking into account how it supports a social constructivist perspective. Most of these studies aim at identifying quantitatively the characteristics of constructivist learning in videoconferencing (Hayden, 1999; Sweeney, 2007) or the benefits of combining videoconferencing technology with other tools (e.g. interactive whiteboard) in order to support the teaching of English towards a more social constructivist approach to the use of these tools (Williams and Chang, 2009). Few studies have followed a more qualitative approach (Keefe, 2003) to show the
links between videoconferencing and social constructivism. Complementing the above subquestion, I also sought in-depth understanding on how eTandem videoconferencing can be pedagogically exploited in accordance with a social constructivist approach to CALL.

How do these SL teachers exploit eTandem videoconferencing in accordance with a social constructivist approach to CALL?

This second subquestion addresses another gap associated with the need for developing an evidence base on how eTandem videoconferencing is actually used in these SL classrooms in relation to CALL theoretical perspectives, particularly considering current influences around the social constructivist approach.

1.3 Significance of the study

If globalization is to have any direct impact in the classroom, technology and the Internet would surely be part of this educational change (Carnoy, 1999). The demands of the technologically globalised context we are immersed in, and with it the importance of acquiring a second or third language, make an eTandem SL exchange such as the Youngcast Project and an investigation around it such as the Youngcast Research Project particularly relevant. From the perspective of this global context, the findings are significant, as these should facilitate the integration of schools, in general, and SL classrooms, in particular, into this global and changing society.

From the perspective of SL classrooms, the findings are significant, given the high proportion of SL teachers interested in communicating with their partners through videoconferencing (e.g. Skype in the classroom, 2014; TWICE, 2014). The study’s findings are
intended to assist all these SL teachers interested in opening up their classroom to native speakers and to other teachers or school managers wishing to integrate videoconference technology in their schools.

From the perspective of SL teachers, the findings are significant, as these extend previous theory on teachers’ roles in classrooms where computers are used (Hartnell-Young, 2003) to the context of SL classrooms where eTandem videoconference-integrated exchanges are experienced. In doing so, it reveals a complex endeavour of teacher-designers of the physical, social setting and virtual eTandem setting. Three roles that interconnected with each other prepare the ground for a fourth role of teacher-mediators on the interactions of their students' eTandem videoconference experiences.

From the perspective of eTandem videoconferencing, the findings are significant, as these might give SL teachers the possibility of overcoming the limitations of SLA in a typical classroom setting with more informal environments with native speakers of the language while also fostering student autonomy.

From the perspective of videoconference technology, the findings are significant, as these might give some hints as to how to exploit social learning technologies such as videoconference technology in their formal classrooms. These findings offer new knowledge on challenges that SL teachers might encounter when trying to integrate this technology as part of eTandem exchanges with the aim of supporting cooperative work and mediating communication.

From the methodological perspective, the online format of the interviews did not facilitate in-depth reflections regarding the teachers different experiences as the extended critical incident approach (Hugues, 2009) I followed requested to do. The investigation also
contributes to online research by presenting an innovative way of doing the online video-stimulated recall interviews that I developed in the course of the investigation.

1.4 Conceptual framework

The investigation did not pretend to impose a specific theoretical framework upon the teachers, but to encourage them to apply videoconference technology within an eTandem context, to exploit it for their own pedagogical purposes and to become critical users of this integration.

1.4.1 Theoretical framework: Hartnell-Young’s model

In reviewing key research, I identified a useful theoretical framework that guided me throughout my investigation: Hartnell-Young’s model on teachers’ roles in classrooms where technology is used. As noted in Chapter 2, her conceptual framework, based on a constructivist approach, identified four broad categories from which I developed my initial framework, namely, designing learning environments, managing people and resources, mediating student learning and improving practice.

My investigation is situated within a social constructivist approach and Hartnell-Young (2003) specifically considers a social constructivist approach to teacher learning. It also provided my research with a framework to look at the way in which SL teachers participating in the exchanges apply eTandem videoconferencing in accordance with a more social constructivist approach.
The studies outlined in the literature review chapter have made an important contribution to the integration of videoconference technology in the educational context from different perspectives and through different methodologies and data collection methods. But a multiple qualitative study on the developmental paths experienced by SL teachers in the process of eTandem videoconference integration in their classrooms towards a social constructivist approach reinforces previous investigations.

1.4.2 Methodological framework: Hugues’ expanded critical incident technique

This thesis has been underpinned by the need to focus in detail on classroom practices so as to understand the complex process of integration of eTandem videoconferencing into the SL classroom. I have thus conducted an online classroom-based investigation, in which I have adopted the role of coordinator-researcher.

The research focused on the teachers’ development throughout the different phases of the Learning Circle structure, taking into account the pedagogical design of the project, as stated above. Research data were collected throughout these phases via a variety of online ethnographic research sources (e.g. emails, videoconference recordings, video-stimulated recall interviews, among others). The possibility of recording the online videoconference sessions from home and receiving all the information by email and using this information to do video-stimulated recall interviews opened the possibility of digging deeper into what these SL teachers actually did as they exploited the potential of eTandem videoconferencing in their SL classrooms.
This joint enterprise of investigating the multiple eTandem partners was not based on an intervention per se, and the act of reflecting was chosen to be the means of achieving further insights. Considering the socially constructed nature of the study and the importance of generating in-depth relationships with the SL teachers, I explored the potential of Hugues’ (2009) expanded critical incident technique (ECIT) as the methodology chosen for my investigation. Flanagan (1954) was the first to describe the critical incident technique (CIT) as an occurrence or condition that interrupts normal procedure. The emphasis of both CIT and ECIT on finding out what users feel are the critical features encountered, and which aimed at getting a subjective report while minimizing interference from stereotypical reactions, allowed me to focus more on specific incidents that SL teachers participating in the exchanges had experienced personally.

Hugues’ adaptation of CIT incorporated several elements that I considered essential for my study: a thematic categorisation and a critical and cyclical element of reflection. The investigation called for a qualitative research approach and the "quilt-like nature" of Hugues’ expanded critical incident approach (2009:28) I followed allowed me to focus on significant incidents linked to their experiences.

Through inductive data analysis and interpretation I identified a set of inter-connected critical findings from the SL teachers’ experiences on the eTandem-videoconference exchanges. Some of these elements are flexibility, individuality, experience or familiarity, among others. These findings create a multifaceted word picture of SL teachers that indicates their needs as identified by the study. In this study, the critical incidents related to the four main interconnected sections into which I have divided the findings chapter.
1.5 Limitations of the study

This study should be regarded as initial research to pave the way for a future investigation that should enable the creation of communities of practice as a means of supporting the pedagogical development of SL eTandem participants when using videoconference technology. Regarding these communities of practice, the initial aim of the investigation was to study the developmental path of both teachers and students.

Since communication with teachers and their students was almost totally online, the difficulty of gathering data from both groups became a real problem. Students’ developmental paths during the process of eTandem language learning are beyond the scope of my investigation.

I do not attempt to compare here the developmental paths of both groups of teachers, that is, Spanish-based teachers of English as a SL and those teachers of Spanish as a SL geographically located in other countries. Instead, I seek to draw a general overview of the developmental paths of these teachers as a group.

A larger sample may have yielded additional insight into the experiences of these SL teachers. Given the constraints on time and resources to conduct the current research, the size of the sample was intentionally set for approximately 20 participants. When recruiting teachers, I did not use any methodology to select them with the aim of ensuring a sufficient degree of variation in the SL teachers’ individual experiences. This was not a random sample, but rather a 'convenience sample’ based on just which teachers could be persuaded to become involved.

Despite the different types of videoconference technology available, no specific medium was chosen for participants to implement the exchanges. Teachers were offered different
possibilities but they finally decided to use Skype (2014). This means that the investigation does not focus on technical aspects due to different kinds of videoconference technology used in their SL classrooms.

1.6 Thesis Outline

The thesis has five chapters. Chapter 2 presents a review of relevant literature. Chapter 3 describes the methodological approach finally adopted. The findings are presented in Chapter 4, in the form of a 'word picture' of how SL teachers developed on the integration of videoconference technology in their eTandem exchanges. Chapters 4.1, 4.2 and 4.3 focuses on how SL teachers planned the environment to collaborate with each other in relation to the physical space, social environment and virtual setting respectively. Chapter 4.4 draws a picture of how these teachers developed on mediating interaction as part of the exchanges.

Following Hugues (2009), the way of presenting my findings throughout each of the sections of the findings chapter (Chapters 4) is divided in two parts. Firstly, I present the developmental paths of teachers as a word picture using references from data gathered from their emails, interviews and other sources. Secondly, I present a condensed set of critical findings with a brief explanation of each of them with the aim of providing both a list of key features to assist other SL teachers wishing to participate in international exchanges (see Table 1.3. as a brief example from Chapter 4 on how these key features are condensed). Chapter 5 concludes the study with a discussion of the implications of the study’s findings, in the light of previous research. This chapter also outlines contributions to eTandem videoconferencing and offers recommendations for future practice and further research.
### Table 1.3: Sample from Chapter 4 on condensed list of critical findings

<table>
<thead>
<tr>
<th>THEME</th>
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<tbody>
<tr>
<td>Experience</td>
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<thead>
<tr>
<th>DEVELOPMENT</th>
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<td>Unsuccesful developments (due to)</td>
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<td>Novice-expert relationship</td>
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<td></td>
<td>ICT personal experience</td>
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<td></td>
<td>Experience in projects</td>
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**1.7 Conclusion**

This chapter has introduced the study setting the stage (1.1) and identifying the research questions of the study linked to significant research gaps (1.2). It has also considered its significance (1.3), its conceptual framework (1.4) and its limitations (1.5) and indicated that the research aim is to investigate the experiences of SL teachers integrating eTandem videoconferencing in their SL classrooms.

The following chapter establishes the theoretical foundation of this study and identifies current knowledge about the teachers’ roles in classrooms where technology is used. It also reviews previous key research that identifies an array of challenges that teachers have previously experienced on integrating videoconference technology in their classrooms.
2  **ETandem videoconferencing in second language classrooms. A review of literature**

Drawing on key literature, this chapter contextualises the study (2.1). Through a constant reconsideration of the literature (2.2), I first identify significant research gaps built on, first, the emerging roles in classrooms where computers are used (2.3) and secondly, built on emerging roles more in accordance with a constructivist and social constructivist approach (2.4). This leads me to consider teacher development as a process (2.5). I finally identify an array of challenges in the literature associated with the teachers’ roles when using videoconference technology in their classrooms (2.6).

### 2.1 Contextualising the study: an overview

The influence and role of digital computer-mediated communication (CMC) technologies cannot be understood without considering the social and political context in which they are utilised. Sancho (2011) contrasts the larger context of global change and of constant social, political and economic movements – where radical transformations are occurring – and the narrower context of the school as an institution, where, at the heart of the system, changes are not so apparent. It is often the case that technology is used to make an institution – in this case, the school – feel relevant in today’s society, i.e. to give the impression that it is keeping up with the pace of change (Caudill, 2007 in Phillips et al., 2010).

One way to open the bricks-and-mortar classroom to the reality of the world might be the involvement of schools in international projects, allowing their students to communicate via text, audio and/or video with other students from around the world. My study is
opportunistically located within one of the international projects in the non-profit educational organization iEARN (International Education and Resource Network): the Youngcast project, an eTandem link-up between students who are learning each other’s mother tongue (Chapter 1 - 1.1.3). With its motto being "Learning with the world, not just about it", iEARN (2014) defines itself as the world’s largest global network which enables teachers and youth to use the Internet and other technologies to collaborate on projects that enhance learning. Like iEARN, many other educational organizations encourage teachers and their students to connect with other partners around the world and participate in projects that foster cultural understanding or promote collaborative learning (e.g. the Global Virtual Classroom, 2014; Etwinning, 2014), regardless of the technology used.

The potentiality of technology to support cooperative work and mediate communication should also allow a greater integration of schools into this global and changing society. Sweeney (2007) refers to videoconference technology as a key tool for assisting students in becoming comfortable within this global context where work might be accomplished in multiple countries around the world, in time zones resulting in a 24-hour schedule.

Some organizations prepare the ground to help teachers to communicate with their partners through videoconferencing. While Skype in the classroom (Skype in the classroom, 2014), for example, offers the possibility of meeting teachers from around the world, other organisations promote collaboration from a more local perspective. Etwinning (Etwinning, 2014), for example, encourages exchanges between members of the European Union and the Two-Way Interactive Connections in Education (TWICE, 2014) – the Michigan organization for videoconferencing in primary and secondary education – specifies that interactive videoconferencing focuses on the benefit of Michigan students.
Videoconference technology has been used in numerous educational contexts to date. Its use has proved to be a key technological tool for assisting SL teachers in bringing learning experiences into their SL classrooms as it links their students to new communities of native speakers. Macedo-Rouet (2009) notes that the main uses sought in the exploitation of videoconferencing in the foreign language classroom are access to experts, distance teaching and collaboration between SL students.

SLA has traditionally been contextualised in both formal and informal environments. The formal means of acquisition of a second language typically involves a classroom. Informal learning, defined as the “unofficial, unscheduled, impromptu way people learn to do their jobs” (Cross, 2006 in Socket and Toffoli, 2012:139), usually occurs outside the classroom setting as when moving to another country. The potential of social learning technologies within formal settings (Lomicka and Lord, 2009; Thorne and Reinhardt, 2008) seeks to support the limitations of SLA in a typical classroom setting while also fostering student autonomy.

Cziko (2004) refers to tandem language learning as a third environment for SL acquisition, one which combines the best aspects of both formal and natural settings. Defined as two students of different native languages who work together to help each other learn the other language (ibid), the formal aspect provides focus on form and corrective feedback; aspects of the natural setting include extensive exposure to the SL within authentic social contexts of the language, where interaction with peers who are native speakers of the languages in question is facilitated.

Connecting to the online context of my study, Cziko (2004), White (2011) and Priego (2011) refer more specifically to eTandem, tele-tandem or online tandem learning, respectively, to
refer to a form of CMC in which two native speakers of different languages communicate with one another for the purpose of learning the other's native language. I am following Cziko (2004) in the adoption of the term eTandem for the context of my study. This includes practices from a group of SL teachers (and their students) participating in SL eTandem exchanges using videoconference technology.

2.2 Reconsidering literature review

My research started with the aim of doing a straightforward investigation focused on discovering students’ acquisition of a second language through the videoconference-integrated eTandem experience. To do so, during Year 1 of the study (Academic Year 2010–2011), I focused my review on studies that had incorporated videoconferencing in educational contexts and in SL contexts in their research designs. Linked to this SL context, I also gathered data around tandem and eTandem language environments.

From the SLA perspective, participation in eTandem exchanges seemed a right starting point to improve the oral expression of the students, as the "second language socialization" (Roberts, 2001) with members of the eTandem online community seemed especially suitable for the development of oral skills. It could therefore provide speaking practice, the lack of which most distant learners deplore in CALL environments (Felix, 2002; Blake et al., 2008).

From the perspective of technology, Yanguas (2010:73) states that – given the appropriate technological infrastructure – “the effective implementation of video- and audio-conferencing in the SL classroom is not such a complex endeavour”. Despite his statement, participant-teachers had hardly started any of the one-per-month videoconference exchanges I initially requested them to do with their students. Instead, they were still stuck
on planning the environment prior to the synchronous part of the exchanges, which fact already hinted at the complexity of the online investigation I was involved in.

Shifting away from an approach emphasising particular language skills, the development of the different eTandem partnerships during the 1st semester of Year 2 of the study (Academic Year 2011 – 2012) obliged me to redesign the initial linguistic approach of the research and with it the way of approaching the literature review. After completing the first analysis of the initial data gathered from emails and the first teacher-to-teacher (T-to-T) interviews, I had to consider the implementation of a broader exploration of the experience and include what had occurred previous to the synchronous part of the exchanges.

The main question in the study already encompasses this wider ranging exploration of the SL teachers’ engagement with the process under investigation. This main question addresses the main gap in the literature associated with the need for current in-depth knowledge on how to deal with how SL teachers developed when integrating eTandem videoconferencing in their classrooms; this in-depth knowledge should report on single instances of these SL teachers around their eTandem experiences.

Teacher development implied, though, the danger of including a too wide-ranging overview of the use of videoconferencing in educational contexts. Before defining what I meant by the SL development in the study (2.5), I had to reconsider a revision of the literature and include (or exclude) other aspects linked to the implementation of the experience.

I narrowed the focus of my study to concentrate on investigating what SL teachers actually did as they exploited the potential of eTandem videoconferencing in their SL classrooms (Chapter 4: 4.1 - 4.4). To support this process, I refocused my literature review to centre on addressing studies on the potential roles of teachers in the process of computer integration.
in their classrooms. In this way, this first part of the literature review (2.3) leads towards the first subquestion of the study:

- What teacher roles emerge in the process of eTandem videoconference integration in their classrooms?

When reconsidering literature for the study, I traced each of the teacher roles, relating them to research around videoconferencing in school settings and to experiences around tandem and eTandem language learning. I conducted manual searches of several educational journals and electronic searches of online educational databases considering this first subquestion. I also did so linking these studies to how they were pedagogically exploited in relation to CALL theoretical perspectives, particularly considering current influences around constructivism and social constructivist approaches.

A substantial amount of relevant information was still available but, towards the end of the second year in the investigation (Academic Year 2011 - 2012) and after various cyclical analyses of the data, I had a clearer perspective on which parts of the literature were relevant to discussing my findings. I narrowed the scope of my literature review to four primary themes that appeared from linking the theoretical considerations of the teachers’ roles with the analysis of data.

Consequently, together with some theoretical considerations on the emerging roles in classroom with computers (2.3 to 2.4) and on the constituent elements of teacher development (2.5), the literature review centres on the teachers' roles as designers of the physical space (2.6.1), the teachers' roles as designers of the social environment (2.6.2), the
teachers’ roles as designers of the virtual setting (2.6.3) and on the teachers’ roles as mediators (2.6.4).

### 2.3 Emerging roles of teachers in classrooms with computers: Hartnell-Young’s model

In reviewing key research, I identified a useful model that guided me in my review and in elaborating the conceptual framework for the study: Hartnell-Young’s (2003) model on teachers’ roles in classrooms where technology is used.

Hartnell-Young’s model (2003) offers a suitable perspective for contextualising the development of the SL teachers participating in my investigation. While she considers in her literature review emerging roles of teachers in classrooms, it does not extend to all roles teachers might play in a school, but focuses on "those classrooms roles relating to students, and associated knowledge-building roles relating mainly to other teachers" Hartnell-Young (2003:38). She highlights that such interaction with students is "still based upon the social setting of the classroom but also occurs through electronic interaction, while increasingly interaction with other teachers is made possible through technology" (ibid).

**Four broad categories**

Her model classifies teacher’s roles into four broad categories: designing learning environments, managing people and resources, mediating student learning and improving practice. She defines the designing role as a planning role with regard to both the physical space and virtual environment and adds that it also involves the planning of the curriculum, as well as establishing a climate for learning. Teachers’ role in managing people and
resources (Hartnell-Young, 2009) involves managing teaching assistants, relations with external experts, and the management of the increasing amounts of technology.

The process by which a teacher (or peer) helps a student master a task that he is unable to carry out alone, by controlling certain elements of a task until the learner is able to complete the entire task by himself has been termed scaffolding (Bruner, 1978; Vygotsky, 1978). Bruner, like Vygotsky, emphasized the social nature of learning, citing that other people should help a child develop skills through the process of scaffolding. Scaffolding refers to "the steps taken to reduce the degrees of freedom in carrying out some task so that the child can concentrate on the difficult skill she is in the process of acquiring" (Bruner, 1978:19). Scaffolding provides a structure that is gradually dismantled as learners become more independent and create personal systems.

The third role (2003) recognises teachers as mediators in the students’ learning process. In scaffolding learning, Hartnell-Young (ibid) includes as essential aspects of this role demonstrating and coaching, assessing, reflecting on learning and instructing. Moll (1990) and Brown and Campione (1994) had previously added encouraging discovery, taking the practice of teaching forward or guiding participation and engaging in reciprocal teaching.

Findings on these first three roles provide the substance of Hartnell-Young’s fourth role for teachers: improving practice. She bases this role on an understanding that teachers at their workplace are constantly learning and contributing to improvement. As she (2003:204) defines it: "in this role we see how teachers act on the society of the classroom and the school to effect change, while themselves modelling lifelong learning".

In a broad sense, the purpose of adopting Hartnell-Young’s model as the initial framework for my study is to improve practice through investigating the SL teachers’ experiences when
integrating videoconference technology in eTandem exchanges. On the following sections, though, I work on several points that contributed to narrowing down Hartnell-Young's broad approach on teachers' roles in classrooms with technology to the needs of my investigation. I do so considering the two subquestions in the study.

Linked to the first subquestion of the study, Hartnell-Young's model was useful to generate an initial framework to investigate both teachers' roles and classrooms with technology. I contribute to narrow Hartnell-Young's perspective through considering different perspectives (Figure 2.1). I first reviewed several studies by different authors on teachers' roles where videoconference technology is integrated (2.3.1). I also considered for my investigation approaches based on teacher cognition in language teaching (2.3.2). To complement this first part, I have gone a step further by adopting a perspective from the point of view of the role of technology (2.3.3). I therefore also find it relevant to discuss another theoretical framework: critical theory of technology.

Linked to the second subquestion of the study, Hartnell-Young's model was also useful as she explores the tensions between technology and constructivism. After describing different approaches to CALL to the use of videoconference technology (2.4.1), I narrow Hartnell-Young’s model (Figure 2.2) by guiding my literature review to see how videoconference technology can be pedagogically applied in accordance with constructivist approaches (2.4.1.1) and social constructivist approaches (2.4.1.2). I finally refer to Sweeney’s study (2007) to describe a useful model (2.4.2) that looks more specifically at the positive relationship between the teachers’ preference for constructivism and the use of videoconferencing techniques that support constructivism.
What teacher roles emerge in the process of eTandem videoconference integration in their classrooms?

2.3. Hartnell-Young’s model

2.3.1. Teachers’ roles & videoconference technology

   Innovation champion (Owston, 2007)
   Videoconference coordinator (Lim, 2009)
   Teacher characteristics (Bose, 2007)

   Classrooms with technology

2.3.2. Video-stimulated recall

   Teacher cognition (Borg, 2003)

2.3.3. The role of videoconference technology

   Critical theory of technology
   Videoconference technology & teachers’ perceptions (Keohane, 2010)

Figure 2.1: Hartnell-Young’s model and further considerations on teachers’ roles and videoconference technology
Figure 2.2: Hartnell-Young’s model and further considerations in relation to constructivist and social constructivist approaches
2.3.1 Teachers' roles in classrooms with videoconference technology

Having Hartnell-Young’s model was very helpful to start the design of the initial survey (3.3.2.1) during Stage 1 of the study (Academic Year 2010 - 2011). Her model also provided the study with an initial framework for analysing and categorising (3.3.2.2) the data I gathered during Stage 2 of the study (Academic Year 2011 - 2012). An eTandem context such as the one in my investigation, though, seeks to address the perspective of the SL teachers when integrating videoconference technology.

Hartnell-Young’s model still encompassed a too wide overview of the use of technology. In her study, she centres on the role of teachers in classrooms where technology, in general, is used. While her theoretical considerations offered insights into the developmental paths of the SL teachers’ roles as designers, managers and mediators in classrooms where computers are used, her study hardly offers a perspective focused on the role of the teacher when using videoconference technology. I complemented Hartnell-Young’s considerations with other studies in the literature more specifically focused on teachers’ roles when using videoconference technology. These other studies also supported the categorisation and analysis process in my study with an in-depth conceptualisation of the data collected.

Teachers’ roles in classrooms where computers are used are variously defined. Among the contextual factors that sustain innovative instructional technology use, for example, Owston (2007) includes the role of the teacher; and among its contributing conditions, he adds the innovation champion, "a teacher, technology coordinator, or principal who provides direction and leadership to the innovation" (Lim, 2009:7). Together with the role of the teacher, other components in Owston’s model (2007) include as essential conditions for the sustainability of classroom innovation teachers’ professional development, the principal as gatekeeper of the innovation, and the enthusiasm of the students,
among others. He also found contributing conditions: internal and external support for the innovation and an innovation champion or videoconference coordinator.

Lim (2009) sustains on Owston’s model and on the role of the innovation champion and expands this role to a teacher, technology coordinator, or principal and defines him or her as the one who provides leadership of the innovation. Lim centres her investigation on the role of the videoconference coordinator and on how he or she impacts on the way teachers use videoconferencing in their classrooms and as part of their curriculum.

Bose (2007) also influenced part of my investigation when dealing with the role of the teacher when using videoconference technology. Together with professional development characteristics and school characteristics, he specifically investigated teacher characteristics such as confidence and proficiency with educational technology, knowledge of technology tools, teacher beliefs, teaching strategies, years in education and subject area.

### 2.3.2 Teacher Cognition

In reviewing key research on the teachers' roles in classrooms with videoconference technology, I also considered for my investigation approaches based on teacher cognition in language teaching. Borg (2003 in Cutrim Schmid, 2010:163) defines studies of teacher cognition as "those which examine what second-language and FL teachers think, know and believe and the relationships of these mental constructs to what teachers do in the language teaching classroom".

Cutrim Schmid (2011:254) comments that "a general concern among CALL researchers has been the use of data collection methods that would not only provide rich data on teachers’ perspectives and developmental paths, but that would also work as a professional development tool, by encouraging and supporting reflective practice in CALL". The use of video-stimulated recall (VSR)
interviews, for instance, has been advocated as an appropriate data collection method to investigate the values, beliefs, assumptions, theories and strategies that underlie teachers’ behaviour and their decisions (Borg, 2006). In addition, literature has emphasized the potential of this method to be used as a professional development tool, since it helps teachers to gain a clear insight into their practices and their students’ learning (Guichon, 2009; Cutrim Schmid, 2010).

What I like of this theory is that this highlights the importance of contextual factors and what this kind of research might reveal about influences on teacher behaviour. Borg (2006 in White, 2011:273), for example, identifies a gap in the literature: "the surge in interest in teaching languages to young learners in recent years has not been matched by studies of cognitions and practices in this area".

From the teacher cognition approach, I specially adopt their qualitative research methods (3.3.2.2.1.5), which compare classroom observations with participants’ verbal report data, often obtained through VSR interviews. In doing so, I went a step further than Hartnell-Young’s (2003:77). She followed an ethnographic approach based particularly on observation and reflective conversation with teacher participants in what she refers to as conversational constructivism (3.2).

### 2.3.3 The role of technology

Throughout the above lines, I have considered a useful model that guided me on elaborating the conceptual framework for the study: Hartnell-Young’s (2003) model on teachers’ roles in classroom with computers (2.3). As Hartnell-Young offered a broad perspective on the integration of computers into the classroom, I narrowed this approach considering other studies in the literature (2.3.1) linked to the teachers’ roles when integrating videoconference technology, in particular. To complement this first part, I have also referred to teacher cognition (2.3.2) that, as Borg (1999:22) defines, explores the perspectives that teachers have about all aspects of their work through their beliefs, knowledge, theories, assumptions,
and attitudes. This theory offered to my study its qualitative research method to gather data obtained through stimulated recall interviews.

Hartnell-Young’s model and its subsequent considerations are based in the context of computer-users but it takes the view that it is people, not computers, who create change. My study also seeks to complement the above perspectives linked to the role of teachers by adopting a view linked to the role of technology. In reviewing literature on the role of technology and in particular, of videoconference technology, I also discover a critical theory of technology (2.3.3.1) that also influenced my investigation and complemented Hartnell-Young’s perspective. Specific studies (2.3.3.2) linked to the role of videoconference technology also complement the following section.

2.3.3.1 A critical theory of technology

Cutrim Schmid’s studies (2007; 2008; 2010; 2011) guided me on several aspects of my investigation as, for example, her study (2011) on video-stimulated reflection as a professional development tool in interactive whiteboard research. Her extensive research also opened the door for me to critical theory of technology (Feenberg, 1991). What I found really interesting about this theory is the possibility of regarding the social aspect of technology, that is, regarding technology as socially constructed. Cutrim-Schmid (2007:51) clarifies this by explaining that “it is impossible to evaluate technology use in a social vacuum”; she adds that “from this perspective, each piece of technology is ‘constructed’ by the interaction between its design and how it is appropriated by its users”.

From the perspective of a critical theory of technology, computers should not be regarded as simply ‘tools’ standing ready to serve the domination and totalitarianism that automatically brings about certain—technological determinism – (Cutrim Schmid, 2007). Such a determinist perspective offers a view of technology "as an all-powerful machine that ... produces certain determined results" and studies based on this approach seek to understand the
overall effect of technology on the language learning process (Cutrim Schmid, 2007:51).

On an instrumentalist approach, technology is also investigated simply as a tool but "the focus is on allowing the researcher to examine its effects on certain aspects of the learning process, such as how specific software helps learners to learn new vocabulary or improve their pronunciation" (ibid). Warschauer (1998) draws attention to the fact that this instrumental view underestimates "the effects that new technologies may have on the language learning environment in a broader sense". He emphasises that from this perspective, "language learning, the teacher and the learner are all seen as unchanged by the introduction of new technologies" (Warschauer, 1998:1).

Studies in the field of CALL have used this theory to focus on the analysis of the development of electronic literacies in college writing classes across various institutions (Warschauer, 1999) and the analysis of educational technological reform in a specific country (Warschauer, 2003). Cutrim Schmid (2007) focuses on the processes of technology integration in the microcosm of the classroom by analysing how Interactive Whiteboard (IWB) technology was taken up and transformed.

2.3.3.2 The role of videoconference technology

In considering a critical theory of technology the above approach, the role of videoconference technology played its part in trying to discover how SL teachers develop throughout the process of eTandem videoconference integration in their classrooms. In doing so, the videoconference technology was thus investigated, using Cutrim Schmid’s (2007:51) words, “neither as an all-powerful machine (the determinist view), nor as simply a tool for teaching/learning (the instrumental view). Rather, the study took into account the social and pedagogical issues which influenced how the technology was adopted, exploited and transformed
by the group by which it was used, the changes the use of the technology helped to create and its effects on pedagogical practices and student learning”.

Together with examining the underlying social power relations of technology, I also liked the possibility of considering technology – in the case of this study videoconference technology – as having inherent characteristics that can facilitate the implementation of certain pedagogical approaches.

Cutrim Schmid (2007) exemplifies it with the characteristics of the Interactive Whiteboard (IWB) ACTIVote system, a voting keypad enabling students to respond to assessment and other questions, which then can be analysed and presented rapidly by the ACTIVstudio software. As this system only supports multiple-choice questions, it “restricts the kind of answers the students can provide and learners are not encouraged to engage discursively with ideas and arguments” (ibid). With such a restriction, this system limits the design of pedagogical activities to ones based on behaviouristic approaches to CALL.

Literature on videoconference technology already indicates some inherent characteristics of videoconference technology such as its capacity to generate social presence (2.6.3.2). In particular, I consider Keohane's study (2010) on the perceptions and experiences influencing the decisions of virtual team members to use existing and available types of videoconferencing technology. His study discusses the implications of using three different videoconferencing technologies for virtual team communication. He concludes that using one of these videoconference technologies directly influences participant expectations of the type of use possible. Dedicated videoconferencing facilities (Hirsh, Sellen and Brokopp, 2005) or a room-based videoconferencing – a multi-user audio and video system added to existing conference rooms – (Lancaster, 2004), are solely for the purpose of videoconferencing communication. Contrary to these two videoconferencing technologies, a desktop videoconferencing system, used primarily for point-to-point communication (Weinberger et al., 2005), is commonly on web-cam equipped computing devices controlled by a single user and more easily to integrate as part of temporary spaces.
In the case of videoconference technology, for instance, one could argue that the inherent characteristics of videoconference technology should facilitate or even encourage the design and implementation of pedagogical activities pointing out towards a more sociocultural perspective.

2.4 Emerging roles of teachers in classrooms with computers: towards a social constructivist approach

Complementing the first subquestion, the study also engages in discovering how eTandem videoconferencing may be pedagogically exploited. Both tandem and eTandem language learning lay a greater emphasis on a more learner-focused, constructivist approach to SL learning and a move away from a drills-format as previous CALL approaches had dealt with. Being not limited by a positivist, purely linguistic, and cognitive research perspective, the study specifically explores the social constructivist approach to CALL and investigates how these SL teachers participating in the eTandem exchanges applied videoconferencing in a manner that supports this construction of knowledge.

In this way, the literature review also leads towards the second research subquestion:

- How do these SL teachers exploit eTandem videoconferencing in accordance with a social constructivist approach to CALL?

The second question addresses another gap associated with the need for developing an evidence base on how eTandem videoconferencing is actually used in these SL classrooms in relation to CALL theoretical perspectives, particularly considering current influences around the social constructivist approach.

With the aim of supporting the conceptual framework for the first subquestion, I have considered a useful model that guided me on elaborating the conceptual framework for the study: Hartnell-Young’s (2003) model on teachers’ roles in
classroom with computers. I have also complemented such a model with other studies that offered a more in-depth perspective on the teachers’ roles where videoconference technology is integrated. When developing her conceptual model, Hartnell-Young explores “the links and tensions between technology and constructivism” (2003:18). She believes that a constructivist approach requires and allows for greater flexibility in learning than more traditional learning methods with more emphasis on the transmission of information from a tutor to a learner.

On the following lines, I first describe different approaches to CALL to the use of videoconference technology (2.4.1). These different approaches will guide the reader to how videoconference technology can be pedagogically applied in accordance with constructivist (2.4.1.1) and social constructivist (2.4.1.2) approaches. This will lead me to another useful model that also supported Hartnell-Young’s initial conceptual framework more in accordance with a constructivist and social constructivist approach: Sweeney’s model (2.4.2). This looks at the use of videoconferencing techniques that support constructivism.

### 2.4.1 Approaches to CALL to the use of videoconference technology towards a social constructivist perspective

Behaviouristic, cognitive and constructivist approaches to CALL indicate different views of applying technology in the classroom. Cutrim Schmid (2005) indicates that the three trends in CALL practice have all assumed different forms throughout its history, depending on the level of technology and pedagogical approaches to language teaching in vogue at the time. Approaches to CALL linked to videoconference use in the classroom have been described from these three different theoretical perspectives.

The first computer-based activities for CALL relied very much on Skinner’s (1957) behaviourist theories of language learning and teaching. These programmes focus mainly on repetitive language exercises with a ‘true or false’
type of feedback. The computer is viewed as a mechanical tutor where imitation and repetition are the main patterns followed for learning. As Sweeney (2007) specifies, the principles of behavioural learning theory can be used during videoconferences to extinguish undesirable behaviour and elicit desirable behaviour. However, the uses of videoconference technology are more linked to social cognitive learning theories and constructivism.

Through the influence of cognitive learning theory, computers are still used for skills practice, but in a non-drill format and with a greater degree of student choice, control and interaction.

On cognitive CALL, the teachers transmit the information to the students and these are “cognitively involved, learning the material because they are using language and higher level thinking skills” (Sweeney, 2007:6). Cutrim Schmid (2005:2) refers to CALL software based on cognitive approaches to communicative language teaching as “allowing learners maximum opportunity to be exposed to the target language in a meaningful context”. She includes some examples such as simulations and text reconstruction programs.

My study covers a gap associated with the need for developing an evidence base on how eTandem videoconferencing is actually used in SL classrooms in relation to CALL theoretical perspectives. My investigation is not limited by a positivist, purely linguistic, and cognitive research perspective. I will particularly consider current influences around a constructivist and a social constructivist approach.

2.4.2 The importance of constructivism and videoconference technology

Barr, Leakey and Ranchoux (2005) state that much established pedagogical and CALL research advocates an integrated constructivist approach to the use of technology in language learning. In contrast to previous approaches that saw the teacher as the transmitter of knowledge, learning, for constructivists, is seen as an individual actively creating his own meaning, using information from his own
experiences and not just learning the right answers or memorising someone else’s ideas. Several studies have contributed to the integration of videoconference technology by taking a constructivist approach.

Hayden’s (1999 in Sweeney, 2007:33) interviewed a panel of experts from three different areas over a four-month period: stakeholders (teachers with prior use of technology in primary and secondary classrooms), facilitators (educational consultants) and videoconference experts (experienced users of videoconferencing). A Delphi study (Robertson et al., 2000) was used to identify characteristics of constructivist learning in videoconferencing. In three rounds of surveys, each building on the previous one, the participants were not required to have knowledge in constructivism, but were given a list of terms and experiences to work from. The results identified 20 characteristics of videoconferencing that support constructivist learning and that could be qualified along four themes: connections, questioning, learning, and interaction.

Interviews with teachers and observation of students during videoconferences with content providers are the data collection methods used in Keefe’s qualitative case study (2003) of the integration of a video learning centre at an elementary school. He claims positive effects on improving teacher objectivity and curriculum enrichment, with the lack of constructivist learning experiences being the major noted concern.

Williams and Chang (2009) discuss the benefits of combining videoconferencing technology and interactive whiteboard (IWB) equipment in order to support the teaching of English with a more constructivist approach to IWB. She adds that using this technology in conjunction with Web 2.0 tools also supports constructivist practice in the language classroom and enhances learners’ active participation.

Sandholtz, Ringstaff and Dwyer (1997) comment, though, that “teachers often face a dilemma on the use of technology based on what they consider as their teaching roles”. Bose (2007:42) refers to Woodfridge (2004) who found "a strong relationship between having a teaching philosophy that reflected using
constructivist teaching strategies and subsequent integrating technology in the classroom”. He also cites Schmidt et al. (2002) who considered such a perspective as "primordial for the integration of technology within the classroom”. Complementing these views, he (2007:42) also refers to several authors (Becker, 2000; Hooper and Rieber, 1995) who state that both "a constructivist teaching approach and technical skills appear to influence simultaneously, technology integration”. Bose (2007) also mentions other researchers (Schmidt et al., 2002) who consider a constructivist teaching philosophy as primordial for the integration of technology within the classroom.

2.4.3 The importance of social constructivism and videoconference technology

Social constructivism is an extension of constructivism, and is attributed to Vygotsky (1968 in Sweeney, 2007:39), according to whom learning is a collaborative process of students actively constructing their knowledge through interaction with their peers and teachers while engaging with the learning tasks: “first the learner interacts with others and then internalizes the learning”.

Several studies (Kao, 2010:114) support the use of social constructivism as both “a theory of knowledge to investigate language learning“ and “to engage language teachers in promoting students' meaningful learning and intrinsic motivation”. Rather than simply considering language learning as a cognitive process to acquire linguistic rules or knowledge, Oldfather et al. (1999:8 in Kao, 2010:114) also refer to the importance of taking a social constructivist stance by bringing a social turn that allows "language teachers and researchers to view language learning as a co-construction through interaction with others, which takes place within a social-cultural context".

Social constructivism perceives learning as a process that happens through mediation. This Vygotskian notion of mediation (Karpov, 2014) states that learners’ cognitive processes have their origins in social processes that are
mediated by tools (objects and symbolic means such as language) collaboratively constructed by members of a culture.

In addition to language, later researchers extend Vygotsky's idea (Haas, 1996 in Kao, 2010:116) by proposing "the use of technologies as one of the psychological tools and sign systems to mediate interaction between humans and the environment". Haas (ibid) also cites Levy and Stockwell (2006:116) to assert that "Vygotsky's theory of mediation helps us see tools, signs, and technologies as ... systems that function to augment human psychological processing".

The possibility of mediating communication with others, independent of time and space, through the increase in computer-mediated communication (CMC) – videoconference technology in the case of this study – and the advent of the Internet have paved the way for more social constructivist approaches, changing the pedagogical landscape of the SL classroom. Adopting a social constructivist approach offers researchers a theoretical perspective with which “to examine language learning as a social practice, consider students as active participants in constructing learning processes, and investigate the interaction between different factors involved” (Kao, 2010:115).

Distance educators have developed sophisticated taxonomies for characterising and understanding mediated interaction. Moore and Kearsley (2004), for instance, distinguish between learner-content, learner-teacher, and learner-learner interaction. While the first generation of CALL materials encouraged students to interact with the computer, learner-interface or learner-content interactions provided by CALL materials gave way to other approaches that encouraged students to interact with other learners. Wang (2004:92) refers to this interaction as “technologised social interaction” where technology is regarded as “a tool to be used by the human to achieve communicative goals”.

Videoconferencing is a powerful tool whose potential to transform education has not yet been fully realised. According to Sweeney (2007:39), its power lies in its ability to connect students and teachers that, in theory, should allow students to perform at a higher level than they would independently (Vygotsky, 1978). This
should “promote the construction of new knowledge through social interaction” (Imison and Taylor, 2001; Leafe, 2001; Scardamalia and Bereiter, 1999; Sproull and Kiesler, 1991; Wiegand, 1998 in Hartnell-Young, 2003:146).

Many studies have shown that negotiation of meaning in these learner-to-learner interactions through CMC occurs. Yanguas (2010), for example, notes that “the bulk of research investigating CMC in the context of SLA has done so under an interactionist perspective (Pellettieri, 2000; Toyoda and Harrison, 2002; Warner, 2004, among others)” and emphasises its attempt to link CALL with the SLA field.

Videoconferencing is often incorporated into educational environments because it affords rich interaction between participants. People form their own understandings and constructs through multiple interactions (Abbot, 1997). Videoconferencing multiplies the possibilities between the classroom and the outside world. Videoconferencing enriches remote dialogue by "providing an opportunity for students to see the other participants, while they interact with the remote students, experts or mentors” (Sweeney, 2007:46).

Anastasiades et al. (2010:321) refer to Interactive Videoconference (IVC) as "an effective tool for the contemporary instructor, as it can contribute to the opening up of the class to new communities and the familiarization of students with new learning and cultural experiences and alternative–innovative learning approaches (Anastasiades, 2009)”. They identify seven types of IVC frequently found in primary and secondary instruction: experts and lecturers, virtual field trips, connecting schools, instructional activities at distance, virtual collaborative classrooms and administration collaborative activities at a distance.

Ramirez (1998:3) had already used the term interactive videoconferencing to refer to the kind of exchange using videoconference technology that “can help students gain insight into the target culture when they are using conversational skills learned in the classroom to have authentic dialogue with native English speakers”.

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Anderson (2005) adds that through videoconferencing two or more classrooms have the opportunity to communicate so that teachers and students share educational techniques, innovative ideas and instructional methodology, among others (Yost, 2001; Gage, Nickson, and Beardon, 2002; Anastasiades, 2003). Akers and Reed (2013) refer to parent-child videoconferencing to foster better home–school partnerships in education and for reading support as part of a prolonged geographically separated parent and son relationship.

Anderson (2005) distinguishes between virtual field trips and virtual collaborative classrooms. Virtual field trips videoconferencing aims at generating communication and cultural bridges for schools regardless of their geographical location (Stainfield et al., 2000; Ashton, 2002; Woodin, 2010; Scovotti and Spiller, 2011; Ferry, Kydd and Boyles, 2012; Wu, Marek and Chen, 2013). One such example (Duygu, 2012) examines Canadian and Turkish primary school students’ ways of expressing their perception of cultural understanding. Schenker (2013) investigates two groups of students from Germany and United States participating in a semester-long cross-cultural, cross-lingual exchange on students’ interest in learning about the target culture. Similarly, Camardese et al. (2014) describe a qualitative study around paired middle school students from two very different cultures, Israel and the United States.

Virtual collaborative classrooms is a term descriptive of an approach which consists in the co-organisation of events by two or more schools. This approach aims at the consolidation and exchange of cultural and social relationships (King and Kullman, 2007; Drescher et al., 2005). Virtual collaborative classrooms offer two or more schools the opportunity to create a pedagogical environment and follow a cross-curricular thematic approach (Howland and Wedman, 2003; Anastasiades, 2003, 2007, 2009; Shea and Bidjerano, 2008; King and Macklam, 2007). Lim’s extensive research on the use of videoconference technology in schools (2003, 2007a, 2007b) puts a special focus on curriculum videoconferencing.
2.4.4 Further conceptualisation: Sweeney's model

Based on a constructivist approach to learning and teaching, the purpose of Hartnell-Young’s investigation was to identify teachers’ professional practices that enhance knowledge building and that “in conjunction with the spread of learning technologies, is said to have greatly changed the role of the teacher in the classroom” (Hartnell-Young, 2003:ii).


In order to measure how the development of teachers when integrating the videoconferences in the SL classroom supported more constructivist approaches, she examined four constructivist notions (Table 2.1) based on: how learning is based on prior knowledge, how students change mental models based on their own experience, how learning is socially mediated, requiring language and interaction and finally, how meaningful learning occurs through the learners directed action.

Based on these four notions, Sweeney developed a twenty-item survey in order to investigate whether teachers use videoconferencing techniques that support constructivism as part of their videoconferencing process with primary and secondary students. The survey built on three other research studies (Sweeney, 2007:ii): a constructivism preference tool by Taylor and Fraser (1991), a survey by Hayden (1999) to find links between constructivism and videoconferencing and a survey by Ravitz, Becker and Wong (2000) to see if distance learning educators used constructivism. She found out “a strong positive correlation between videoconferencing techniques and the respondents’ preference for constructivism” (Sweeney, 2007:iii).
On developing my own conceptual framework during the different phases of the analysis process (3.3.2.1.2; 3.3.2.2.2; 3.3.2.3.2), I consider some of these concepts. In general, these proved to be really helpful when trying to label the different categories and subcategories created, defining some of my own concepts and specially to theoretically conceptualise my study linking it to previous investigations.

Not all the items in the survey play a role in the SL teachers’ experience in the same degree. Fourteen points (Table 2.1) were finally integrated, or at least considered, when generating my own conceptual model. I initially worked on the concepts from Sweeney’s survey linking them to Hartnell-Young’s initial conceptualisation (2.3). Some of the items in Sweeney’s survey echoed those from Hartnell-Young’s conceptualisation. Others emerged as new ones and where integrated as part of my own conceptual framework.

<table>
<thead>
<tr>
<th>Prior knowledge</th>
<th>Mental models</th>
<th>Interactivity</th>
<th>Learner directed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Point 1:</strong> videoconferencing is preceded by classroom work on the topic.</td>
<td><strong>Point 3:</strong> Brainstorming</td>
<td><strong>Point 11:</strong> Ask questions to the remote end.</td>
<td><strong>Point 8:</strong> Take notes or fill in an activity sheet</td>
</tr>
<tr>
<td><strong>Point 4:</strong> Complete readings.</td>
<td><strong>Point 5:</strong> Write</td>
<td><strong>Point 12:</strong> Students receive feedback from remote expert, mentor.</td>
<td><strong>Point 16:</strong> Planning the videoconferencing</td>
</tr>
<tr>
<td><strong>Point 10:</strong> Create/Modify a picture/graphic organizer of concepts</td>
<td><strong>Point 13:</strong> Students discuss, debate or exchange multiple viewpoints</td>
<td><strong>Point 17:</strong> Project lasting more than one day</td>
<td><strong>Point 18:</strong> Real world problem solving experience</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Point 19:</strong> Higher order thinking skills.</td>
<td><strong>Point 20:</strong> Part of assessing</td>
</tr>
</tbody>
</table>

*Table 2.1: Sweeney’s categorisation on four constructivist constructs*
2.5 From developmental teacher to teacher development

On the previous section, I have described different approaches to CALL to the use of videoconference technology (2.4.1) with the aim of guiding the reader to how videoconference technology can be pedagogically exploited in accordance to constructivist and social constructivist approaches (2.4.2).

The advantage of employing a constructivist and a social constructivist perspective as alternative paradigms is that they "deliberately discard the notion that knowledge is, or should be, a world-in-itself" (Keiny, 1994:157); by this, Keiny (ibid) means that "knowledge is a construction of the individual's subjective reality". Considering such a perspective also means that "language as an instrument of communication does not automatically convey ideas or knowledge"; this knowledge, actively constructed subjectively by the learner, stands in contrast with "the instrumental model of the teacher as a transferer of knowledge" (ibid:158).

Keiny (1987:159) uses the term developmental teacher to refer to a teacher whose role is "to develop his or her students as learners, learners who are able to construct their own conceptual structures". A different perspective is that defined as “the process whereby teachers’ professionality and/or professionalism may be considered to be enhanced and that it may improve teachers’ knowledge, skills and practice” (Evans, 2002:131) referred to as teacher development. This process – development of teachers rather than by teachers - will be the focus of the remainder of this section. Firstly, I refer to the constituent elements of teacher development (2.5.1). Secondly, I link teacher development to an internally applied process that should lead teachers to construct their own personal theories-of-action (2.5.2). I finally consider how this process on teacher development should be reinforced by an externally applied process through engaging teachers in co-exploration with the researcher (2.5.3); this will lead to consider how I, in my role as a researcher, refer to development in my study.
2.5.1 **Constituent elements of teacher development**

In relation to the constituent elements of teacher development, its applicability might be narrow or wide in range. This might extend from an individual to a profession-wide level and refers to "variously formed professional groups or units, such as: individual teachers; the staff of an institution, or a department in an institution; teachers who hold a common role (e.g. primary headteachers, mathematics teachers, further education (FE) teachers) and the profession as a whole" (Evans, 2002:131).

In the context of this study, the underpinning research involves SL teachers participating in the investigation. Based on observation and reflecting with them around what they were doing in classrooms where these eTandem videoconference exchanges occurred and on what they said about it, data gathered throughout the whole process should allow me to follow their developmental paths in the process of videoconference technology integration in the eTandem exchanges and with it to answer the main question of the study:

\[ \text{How do SL teachers develop throughout the process of eTandem videoconference integration in their classrooms?} \]

Investigating these SL teachers’ development implies a wide-ranging exploration on which are the constituent elements of teacher development identified when integrating eTandem videoconferencing in their classrooms. Evans (2002:131) identifies attitudinal development, defined as “the process whereby teachers’ attitudes to their work are modified” and functional development defined as “the process whereby teachers’ professional performance may be improved”. She (ibid) adds that “the foci of change that relate to each of them, must—if they are to constitute teacher development—effect what may be considered to be the enhancement of teachers’ professionalism and/or professionality".
2.5.2 Generating theories-of-action: an internally applied process

Such a teacher development is not an event, but a process that can become “a mechanism of continuous school improvement” (Hilton, Flores and Niklasson, 2013:436). By teacher development, Keiny (1994) refers to the process by which those teachers investigate their practice to construct their own theories of teaching. Similarly, Schön (1987) and Stenhouse (1975) have also described it as a continuous open-ended process of generating personal theories-of-action.

Linked with this, Sachs (2011 in Hilton, Flores and Niklasson, 2013:433) advocates "a shift for teaching standards moving from imposed by government to developed by teachers; moving from regulation to development; ... moving from government directed and controlled to profession developed; ... moving from external to self-regulation; and moving from compliance to activism".

According to Schön (1987 in Keiny, 1994:158), “teachers, like other practitioners, do not apply theories, but construct them from their practice, through an active dialogue with the materials which constitute their field of action”. In line with this, the aim of this present study was not to impose a specific theoretical framework upon the SL teachers, but to encourage them to apply videoconference technology within an eTandem context and to exploit this technology for their own pedagogical purposes.

As Cutrim Schmid (2011:268) reminds us, "one way to obtain a more accurate account of classroom context is by including teachers’ voices, observations and concerns. Keiny (1994) states that this kind of conversation with the situation translates into two teaching principles: a multi-dimensional conception of reality and reflection-in-action. Lange (1994:618) focuses on “the importance of the voice of teachers in understanding professional learning” and adds teachers’ stories as “a major source of research data”.

He (ibid) regards these forms of representation of teacher knowledge "as a new kind of data ... compatible with the trend to establish teachers themselves in a
much more focal and powerful position in the research process”. He refers to writers such as Shulman (1986) who also sees “considerable potential for the improvement of teacher education and professional development through the building of case literature for the profession.

As Hilton, Flores and Niklasson (2013:436) observe, such a development also “plays a part in the implementation stage of school reform” and with it, they add that “implementation challenges often involve teacher learning challenges”. Together with fostering collaboration, discussion and reflection opportunities, a professional development learning environment is optimal “when followed by teachers’ opportunity to observe a positive impact on student learning” (Putman and Borko, 2000 in Bose, 2007:9). “The assumption is generally made that particular experiences are used by teachers at all stages of their development, as vehicles for remembering significant educational knowledge and responding to teaching and learning incidents” (Lange, 1994:617).

Evans (2002:135) reflects on the fact that identifying the change that may constitute teacher development, that is, the teacher development process—as far as it is possible to do so—, ”will contribute much towards understanding what works with one kind of teacher and what works with another, and why”. In this same line, Lange (1994:617) refers to Feiman-Nemser and Floden (1986) who add that it is important to understand what makes particular experiences salient and memorable for particular teachers at different stages of development and the role this plays in the processes of professional learning”.

2.5.3 Engaging in co-exploration with the researcher: an externally applied process

Evans (2002) also refers to this process of teacher development, as an internally applied process on the part of teachers; but she adds that it may also be ”an external process, directed at teachers, but effected by external agencies” (ibid). Hilton, Flores and Niklasson (2013:434) advocate a view of teaching "as a
profession that requires extended and interactive professionalism” with the aim of being involved in decisions influencing practice within schools.

This individual "reflective conversation with the situation" (Schön, 1983 in Hilton, Flores and Niklasson, 2013:435) needs to be combined with reflection with the professional group in what Keiny (1994:159) refers to as "the dialectic process of reflection in the group", used as "a strategy and as a means to encouraging teachers to investigate their own professional behaviour".

Teachers also need to involve in interactive processes with researchers "in developing understanding of the teaching/learning process", that is, "in helping them ‘name what they know’" (Hilton, Flores and Niklasson, 2013:434) – in the case of my study – in engaging them in discussions around how to integrate eTandem videoconferencing in the SL classroom.

### 2.5.4 Teacher development in the study

In interpreting it as a process rather than a product, Evans (2002:131) details that the development "may not necessarily be successful" but that unsuccessful, or partially successful efforts should also be categorised as teacher development processes that “failed, or partially failed, to be completed” (ibid).

The enterprise in investigating the multiple eTandem partners is based on the act of reflecting with teachers as the means of achieving further insights. In my role as a researcher, I encouraged them to reflect on their experience when integrating videoconference technology as part of the eTandem exchange.

In exploring the potential of Flanagan’s (1954) critical incident technique (CIT) and adopting Hugues’ (2009) expanded critical incident technique (ECIT) as the methodology chosen for my study (Chapter 3), I incorporated a critical and cyclical element of reflection with the idea of obtaining an understanding of the processes investigated from the teachers’ perspectives.
Flanagan’s (1954:338) notion of an incident as being significant bases on whether or not it contributes either positively or negatively to the general aim of the activity. A set of critical findings on the last part of each section aims at summarising key aspects of their SL teachers’ experiences when integrating eTandem videoconferencing in their classrooms. These represent the conceptual outcomes of the study and aim at drawing a picture of the teachers’ successful or unsuccessful developments when trying to integrate eTandem videoconferencing in their classrooms.

Considering the teacher development, I distinguish between two developments in their process: unsuccessful developments, that is, efforts or behaviours that did not bring development as they failed, or partially failed, to be completed and those efforts or suggestions from teachers who brought development in the process of integrating eTandem videoconference exchanges in their classrooms, that is, successful development.

As discussed in Chapter 4, teacher development in my study centres on how SL teachers participating in the exchanges, together with the researcher, found specific answers to critical incidents detected with regard to how they planned the physical (Chapter 4.1.3), virtual (Chapter 4.2.3) and social environment (Chapter 4.3.3) for the videoconference-integrated eTandem experience and how these teachers mediated their students’ towards more interactive approaches (Chapter 4.4.2).

The above paragraphs have started contextualising the study (2.1). Reconsidering a review of literature (2.2) has led me to focus on emerging roles of teachers in classrooms with computers in relation to Hartnell-Young's model (2.3) and in relation to a social constructivist approach (2.4). After reflecting on the concept of teacher development and contextualising it in the study (2.5), the last section (2.6) reviews literature issues on the teachers’ roles in classrooms with videoconference technology: the planning of the learning environment in terms of the physical space (2.6.1), the social environment (2.6.2) and the virtual environment (2.6.3) and the role of teacher-mediator (2.6.4).
2.6 Teachers' roles in classrooms with videoconference technology

Drawing on key literature, this chapter contextualises the study (2.1). Through a constant reconsideration of the literature (2.2), I first identify significant research gaps built on, first, the emerging roles in classrooms where computers are used (2.3) and secondly, built on emerging roles more in accordance with a constructivist and social constructivist approach (2.4). I first establish the theoretical foundation (2.3.1) of the first period of the study where I consider Hartnell-Young’s model on teachers' roles in classrooms where technology is used (2.3.1.1).

Built on such a model, I reinforced this framework with other theoretical considerations that Hartnell-Young’s model did not offer. In doing so, this chapter also outlines current approaches to CALL to the use of videoconference technology (2.3), specifically considering a social constructivist approach to teacher learning and putting a special focus on the teacher as mediator. I have also identified an array of challenges that teachers experience in their videoconference technology use, associated with the teachers’ roles as designers of the physical environment (2.4), of the social construction of space (2.5) and of the virtual environment (2.6).

When reconsidering literature for the study, I traced each of the teacher roles, relating them to research around videoconferencing in school settings and to experiences around tandem and eTandem language learning. I conducted manual searches of several educational journals and electronic searches of online educational databases considering this first subquestion. I also did so linking these studies to how they were pedagogically exploited in relation to CALL theoretical perspectives, particularly considering current influences around constructivism and social constructivist approaches.

A substantial amount of relevant information was still available but, towards the end of the second year in the investigation (Academic Year 2011 - 2012) and after various cyclical analyses of the data, I had a clearer perspective on which parts of the literature were relevant to discussing my findings. I narrowed the scope of my literature review to four primary themes that appeared from linking the theoretical considerations of the teachers’ roles with the analysis of data.
Consequently, together with some theoretical considerations on the emerging roles in classroom with computers (2.3 to 2.4) and on the constituent elements of teacher development (2.5), the literature review centres on the teachers’ roles as designers of the physical space (2.6.1), the teachers’ roles as designers of the social environment (2.6.2), the teachers’ roles as designers of the virtual setting (2.6.3) and on the teachers’ roles as mediators (2.6.4).

2.6.1 Teacher-designers of the physical environment

The pedagogical design of the exchanges is based on the five phases (1.4.1) of the Learning Circle structure (Riel, 1997). The first phase of the learning circle (Getting ready) focused on planning the layout of the physical spaces and managing relationships with the other eTandem teachers as well as students, staff, parents, experts in the community and other contributors to the learning process. To do this, teachers participated in several teacher-to-teacher online meetings with their eTandem partners and me as a researcher.

Hartnell-Young’s model (2003) suggests several issues to consider with regard to teachers’ role in planning the physical environment in classrooms where technology is used. According to her (2003:243), it includes planning the physical environment at the scale of both the classroom and the school “including the use of horizontal and vertical space, layout of furniture (fixed and movable)”. In Teachers as Designers in Computer-supported Communities of Practice, she (2006) insists on the importance of the physical context in which teaching and learning takes place.

The environment of a videoconference classroom is clearly inhabited by technology that should be strategically placed by the teacher as part of the classroom layout (Lönglund, 2010). In doing so, teacher-designers of their physical environment should also draw special attention to access to computers in and outside their classrooms (Hartnell-Young, 2006). Planning should also include adapting the learning space to incorporate digital technologies and
electronic communication, through “clarifying a purpose for these resources, establishing appropriate access” and checking “the extent and site of fixed computer cabling and network points” (Hartnell-Young, 2003:243).

2.6.1.1 The videoconference classroom

School characteristics (Bose, 2007:20) encompass "variables related to assessing available resources and support for technology utilisation in school" such as the level of the school when it comes to adoption of technology, size, location and expenditure per pupil”. However, though one of the factors that may influence the utilisation of videoconference technology, Bose (ibid) concludes that school characteristics might not predict utilisation of these videoconference spaces.

The school sets many of the parameters on the design and management of available spaces but the physical environment in which teaching and learning takes place at the scale of the classroom and the school is frequently ignored in much of the literature. Teachers may play an active role in adjusting these parameters to their needs and include more constructivist principles of flexibility and openness, collaborative practices, and student participation (Hartnell-Young, 2003).

More specifically, Bose (2007) emphasises the teachers' active influence on the architectural design of the videoconference classroom when implementing interactive videoconferencing for collaborative learning at a distance. Jamieson et al. (2000:235) add the importance of encouraging staff and students "to shape their places of teaching and learning, in much the same way as they shape the curriculum".

In the case of eTandem videoconferencing, the videoconference space might be adjustable depending on the school possibilities. The videoconference classroom might not necessarily be allocated a special place within the school. The study enquires into teachers' role in reorganising the design of different spaces in the school to fit the demands of their eTandem videoconference experiences.
Particularly interesting for the purpose of my study – evaluating teachers’ role – Bose (2007) refers to an investigation conducted by Kim and Bagaka (2005) on school characteristics and their influence on the digital divide, where teachers’ beliefs with regards to technology are considered as a significant predictor of technology usage. Bose (2007:46) also presents a report by Kleiner and Farris (2002) where they show that “in affluent schools technology usage was for higher order cognitive skills”, contrary to “schools for undeserved students where it was limited to teaching basic skills”.

Hartnell-Young (2003) refers to emerging designs of physical spaces in the literature that embrace concepts of openness and flexibility more in accordance with a social constructivist pedagogical approach sought for the eTandem videoconferencing exchanges in the study. A list of such physical spaces includes (Hartnell-Young, 2003:45-47):

- **loose-fit buildings** (Jamieson et al., 2000:235) “where the physical environment allowed for adaptation and experimentation with a range of teaching and learning approaches” through a teaching and learning workshop,

- **open-plan offices** (Heppel, 1993) “where schools resemble open-plan offices for flexible work groups and self-paced study”,

- **labs** (Salisbury, 1996) designed for discipline-oriented learning similar to mobile units,

- **technology support areas** (Fisher, 1994) “serving the physical and the virtual environment”.

- **purpose-built (secondary) schools** (Lake, 2003; van Dieten, 2003) incorporating characteristics such as flexibility, just-in-time learning, learner-autonomy and self-management.
Hartnell-Young (2003:47) contextualises such characteristics in the following manner:

"The concept of flexibility extends to capturing the pedagogical moment (van Manen, 1991) where the teacher must act on the spur of the moment to do something pedagogically appropriate for the learner(s). Similarly, just-in-time learning (Ausubel, 1968) and learner autonomy and self-management are characteristics that are logically supported by facilities available on a just-in-time basis (Jamieson et al., 2000)."

The concept of just-in-time facilities brings me to the distinction between temporary and stationary spaces. In his exploration of videoconferencing in the context of local learning spaces, Lönglund (2010) differentiates between temporary sites and stationary classrooms. He describes the former as not following the requirements of videoconference technology with regard to issues of light and audibility. Contrary to that, a description of the stationary setting shows, for example, that light issues are solved, with the use of “a dark curtain and a special kind of electrical fitting that lights up the classroom in order to enhance the contrasting effects” (Lönglund, 2010:186).

Regarding the use of the classroom as a temporary site for holding the videoconferences, Anastasiades et al. (2010) point out at the classroom layout as one fundamental condition for a successful implementation of videoconferencing in schools. They (2010:325) specify that the layout “should be adjustable according to the videoconference needs”. They identify two different formats of classroom layout: the theatre and the conference. The theatre set-up, comprised of rows facing the focal point of the room, prevents physical movements in the classroom and students cannot easily leave class or change seats unnoticed during the videoconference session. The conference-like design allows students to sit around elliptically shaped or at round tables facing one another; this requires smaller classes.
2.6.1.2 *Multi-functionalities of spaces*

Fraser (2013:4) refers to Lee, Tan and Tout’s (2011:3) review of more than 100 articles, reports and books that emphasised that "the need for more flexible, technology embedded, student-centred spaces". They (ibid) stressed, though, “the little empirical evidence on the evaluation of learning spaces" (ibid).

Jamieson et al. (2000)'s proposal of a more student-centred, flexible approach to the use of facilities and occupation of specific on-campus locations is highly relevant to this study. Their new learning environment focuses on augmenting rather than replacing existing locations through a set of principals based on the multi-functionality of spaces and the use of the vertical dimension in facilities. They advocate designing with an intent to maximise the inherent flexibility of each space, allow for teacher and student control and alignment of different curricula activities, permit student access to communal spaces as well as student access to and use and ownership of the learning environment. Some important considerations from this set of principles are developed along the following lines.

- *Multi-functionality within a facility*

Tandem language learning (Cziko, 2004) combines both formal (e.g., focus on form and corrective feedback) and informal aspects (e.g., extensive exposure to the SL within authentic social contexts of the language) of the SL learning contexts. The multi-functionality of learning environments (Jamieson et al.’s principle 1) seeks to increase the variation in student activity in formal classrooms (e.g. teacher-centred and student-centred, collaborative approaches; formal, scheduled classes and informal student use) in contrast to a more traditional approach to facility design that focuses on single functions within a facility (e.g. transcription in lecture theatres, computer-based activity in computer laboratories, non-CIT use in tutorial or small group areas). Jamieson et al. (2000:228) add that "formal locations increasingly need to accommodate informal requirements, when facilities are accessed by students outside of scheduled classes".
This investigation seeks to find out how teachers in the study adjust their classroom spaces and other spaces in the school to the requirements of the eTandem videoconferencing experience. In doing so, teachers should also consider that the multi-functionality of one single space to hold eTandem videoconferences should allow the students to collaborate with other students of the remote class (intergroup) and with those collaborating with each other in the local class (intragroup) (Anastasiades et al., 2010). Lönglund (2010) also refers to a form of secondary communication established between members of the intragroup audience that he describes as a hidden ‘secondary plot’ that depends on microphones being not in use. This possibility would restrict, at least, audio communication with the intergroup audience.

- **Use of the vertical dimension in facilities**

Teacher-designers should also consider the use of the vertical dimension in the classroom (Jamieson et al.’s principle 3). Jamieson et al. (2000) exemplify it with the use of walls that could “display areas for subject material or products of research activity, thereby generating a sense of a disciplinary community” or that could "provide students with whiteboard space for planning, recording and other collaborative activities".

- **Maximise the inherent flexibility within each space**

The principle of designing in a way that allows for maximisation of the inherent flexibility (Jamieson et al.’s principle 2) of each space may require teachers – and in the case of the study, eTandem partners – to quickly reorganise the available site for a particular activity(s). Jamieson et al. (2000) warn that this approach, however, restricts certain activities such as the need to use certain technology in an area where there are no appropriate facilities.

The present investigation examines how SL teachers reorganise the temporary classroom or other spaces in the school and investigate whether the use of these spaces and the technology available in these spaces restrict their students' participation in the exchanges. Teachers, for example, may manage access to
areas that impede group work, discussions and interactions between them or access to spaces without the videoconference technology required to participate in a videoconference-integrated exchange.

- **Communal areas**

The principle behind a flexible and open approach of the physical environment requires the use of public spaces and sharing these spaces with other people. Teacher-designers of the environment should also consider access to communal areas outside the classroom (Jamieson et al.’s principle 4). Such available spaces (e.g., facilities that provide access to food and drink with comfortable furnishing) "would help to merge social interaction and individual activity for students and others who prefer such an environment" (Jamieson et al., 2000:229). With the term pods, Hartnell-Young (2003) describes the spaces closely associated with teaching areas in an attempt to provide regular access to computers for students. Technical issues such as broadband required for videoconferencing is one of the greatest challenges faced when using these kinds of spaces. Teachers should also consider that videoconferencing requires privacy to talk, even more so if used to practice a SL.

- **Minimising learning settings**

Jamieson et al. (2000) also refer to the need of minimising learning settings that might be more discipline-specific (e.g. special-purpose laboratories) and of designing to maximise alignment of different curricula activities. They (2000:229) specify that "all disciplines need to be separately 'interrogated' to determine how the learning objectives are currently achieved; what new approaches are currently under consideration; and what other developments and trends are evident elsewhere and might be influential in time". The present study looks at how eTandem teachers manage access to other public or social spaces and the challenges associated with these spaces.
Technical control of the technological environment

Regarding the technical environment, communications technology is a significant and inseparable part of videoconference practice. However, introducing videoconference technology into schools requires high-stakes decisions to be made about management structures (e.g. timetables, allocation of teachers to classes). Hartnell-Young (2003) adds the location of computers in labs, pods or classrooms — due in part to the major investment made in the technology.

Currie (2007) mentions that the success of videoconferencing might be affected by the availability of a videoconferencing system within the school and by the cost of and funding for programming. Anastasiades et al. (2010) also refer to the financial planning as one of the issues faced when designing for videoconferencing and mention the high cost of the technological infrastructure.

Hartnell-Young (2006:1) warns of the danger of undertaking the design of the learning spaces centrally as it might not be conducive to an open approach to learning but, on the contrary, might reinforce control and surveillance. She (2006) describes the tension generated between teachers and school committees as the latter "converted hallways and storerooms into pods (in the belief that their students deserved the computer resources) often with little consideration of, and little design support for, their particular space or learning needs".

One-computer-per-child programmes, for example, offer promising environments to support individual and small group learning as they equip each child with a computing device that provides personalised learning tools. Valiente (2011) highlights, though, some doubts about the cost, effectiveness and impact of such educational programmes. In a review of 30 studies on one-computer-per-child initiatives, Penuel (2006) showed consistent and positive impact on the writing and digital skills of students but few quantitative studies that could show other evidence of academic achievement in these programmes.
A technical environment

In a materialist interpretation, as Lönglund (2010) puts it, the videoconference classroom becomes a socio-technical environment. Jamieson et al. (2000:229) state that "technical support is typically prioritised to formal, teacher-led activities" but they add that "reliance on centrally provided technical support, as in the case of technical support for video conferencing or computer laboratories, can be a costly and intrusive aspect of formal classes in those locations" (ibid).

Lim (2009) refers to Keefe (2003) who points at the technology infrastructure as an essential condition for the successful implementation of videoconferencing. Lim also cites Currie (2007) who includes the location of the equipment, the reasons for the location of the equipment, and the level of satisfaction with the current location of the equipment.

Videoconferencing with video, sound and images of people in different locations over existing lines of bandwidth has been in existence since 1964 (Bekkering and Shim, 2006). Despite synchronous eLearning tools such as voice stream or videoconferencing broadcasts, real-time video usually require excellent Internet quality; technological hurdles encountered in experiments with videoconferencing have been overcome and with it the application of videoconferencing in schools is increasing.

In theory, teachers should only ensure that there is the necessary communication infrastructure (e.g. connection speeds, available bandwidth) and that the necessary technical requirements are satisfied (e.g. audio, image, data sharing, additional equipment) (Anastasiades, 2009). Flacke (2010) reminds us, though, that technical aspects such as the Internet speeds required for videoconferencing is not yet a given everywhere and could be “a bottleneck for students in developing countries”. Lönglund (2010) also insists that the main obstacle to considering videoconferencing as a spontaneous way of communication seems to be the handling of technology.
If teachers do not feel adequately equipped (Wells, Lewis and Green, 2007 in Bose, 2007), during the initial phases of implementing technology, the teacher might either not use technology or, he or she might use it in an inconsequential role in instruction (Sandholtz and Reily, 2004).

Bose (2007) states that "utilizing a constructive approach, while integrating technology into the classroom is not an easy task for the teachers". Jamieson et al. (2000) adds that "student-directed informal work undertaken without direct teacher involvement" underpins the necessity to maximise teachers' and students' control of the facilities' functions as technical support for them is reduced (Jamieson et al.'s principle 5). Bose (2007:20) uses the term 'teacher characteristics' to refer to a construct that includes "attributes of teachers on technology and non-technology related items" such as: confidence and proficiency with educational technology, knowledge of different technology tools, teaching strategies and beliefs on impact of videoconferencing.

Jamieson et al. (2000:230) conclude that "the atmosphere of control" that is pervasive in many schools is not only conducive but actually antithetical to real learning, as it does not encourage students to be self-taught and take responsibility over their own learning". According to their principle 7, this requires "facilities (libraries, CIT equipped areas, classrooms) which are available to students at times which presently may be thought of as out of hours" (ibid) and calls against "the propensity for institutional and standardised architecture".

Paechter et al. (2001 in Lönglund, 2010:184) focus on the relationship between learning, space and identity where "identity is formed through the appropriation of space (Mulcahy, 2007; Massey, 2005)". Jamieson et al. (2000) refer to the importance of students establishing a sense of ownership and responsibility for the facilities and their maintenance in spaces that they use regularly (e.g. department-specific or faculty-specific).


2.6.2 Teachers and the social construction of space

The influence of the physical environment will vary from teacher to teacher but this physical environment is bound to play a "significant role in how teachers approach their teaching and how they view what is possible within a particular place" (Jamieson et al., 2000:222). The educational setting of videoconferencing becomes a learning space that exists not only in substantial forms and an awareness of the interaction between people and space should also be considered when designing the learning environment (Hartnell-Young, 2006).

The classroom layout, influenced by teachers and students to varying extents (Fisher, 2001; Nias, 1987; PricewaterhouseCoopers, 2001), becomes a set of relations between members at the micro level of the classroom and members at the macro level of the school and of the community. Hartnell-Young (2003:262) underlines the importance of teachers understanding the potential of technology, stressing that "from a constructivist viewpoint, technology has created openings for teachers to take up new roles and new combinations of roles [...] but it cannot create new information without the involvement of people". The human element, especially at the designing and planning stage, is essential.

Hartnell-Young also (2003) points out that both the school and the classroom layout can affect not only the interactions of teachers and students but also determine opportunities for collaboration between teachers. Planning of the physical environment for videoconferences usually involves ad hoc assistance offered to teachers by other teachers, language assistants, parents or work-placement students at the local school. Among the salient features that contribute to a successful integration of videoconferences, Anderson (2008) also includes the support provided from and to teachers and other school personnel.
2.6.2.1 *Behind closed doors*

Donato (1994:287) emphasises that collaborative work involves "a meaningful core activity and the social relations that develop as a result of jointly constructed goals for the common endeavour". The nature of the teaching profession is centrally based on a practice that takes place *behind closed doors* and that can obstruct the transition to what Hartnell-Young (2003:46) calls "school-based collaborative teacher development". As a first step towards addressing that, Hartnell-Young (2003:60) refers to Boyle (1998) who argues that "a teacher as a colleague should be willing to open the classroom door in order to mentor others or to invite a mentor in".

Hartnell-Young (2003:46) adds that "this is a challenge to the cultural norms of many schools, for neither their structure, the discourse of practice, nor the individualism of performance management procedures naturally encourages collaboration in daily work". She (2003:60) calls for significant structural changes, with the goal of "replacing the traditional isolation of the teacher by teachers working together".

However, she (ibid) warns that in order for this to be accomplished, fundamental changes are required in the way teachers relate to and respond to each other; an issue here being that, due perhaps to the individualist nature of the profession, teachers are often reluctant to engage in an honest critique of each other’s work, avoiding disagreement and dissent and thus making it difficult to openly and constructively discuss existing problems. In order to create an environment of open debate and collaboration, Fullan (1993) stresses that a radical re-culturing of educational institutions is necessary. Hargreaves (1994 in Hartnell-Young, 2003:58) envisages "a core of full-time, highly trained teachers supported by a range of assistants and part-time teachers who also cross employment boundaries to work in other fields".

Teachers in charge of applying videoconferencing in their schools may be affected by the support they receive. Hartnell-Young (2003), on the other hand, reveals a slight tendency of teachers to decouple their different roles (Beare, 2001;
Cornu, 2001; Levy, 1996). Teachers specialise in designing the learning environment (e.g. expert in designing technology infrastructure or curriculum), in mediating learning (e.g. expert in mediating with thinking tools and others through electronic scaffolding), in managing resources (e.g. managing electronic communication through lists and Intranets and resources) or in managing people (e.g. organising student groups).

Despite connections with other teachers, outside experts or classrooms and a shared attitude of collaboration, Hartnell-Young (2003:263) refers to a clear tension “between this decoupling and the social purpose of connectedness expressed by many teachers”. She (ibid) insists, though, that “given the higher knowledge and skills requirements of each role, and the impending shortage of teachers”, a decoupling of each of these three roles must be considered. Limited time was a factor in many teachers’ decision on separating the various roles; since they felt under time pressure to cover all of the above-mentioned roles – designing the learning environment, mediating learning, managing resources and managing people – each had to select a different function or aspect of the process to allocate more time to.

2.6.2.2 **Teachers as e-leaders**

Though generally educators stated that they emphasised all aspects equally, it was clear that many important decisions had been designated to other specialists (e.g. technical committee, principal, among others). Byron and Bingham (2001 in Bose, 2007) add leadership with a clear vision to the list of factors that can positively influence technology implementation in schools. Hartnell-Young and Vetere (2008:283) also point to “the important role of teachers in leading change in school cultures”. In the case of eTandem planning, this includes to the way in which these teachers encourage eTandem planning through team arrangements with teacher-members linked to the remote eTandem partnership.
Leaders make a critical difference to team performance (Cascio and Shurygailo, 2003 in Hambley, 2005:13) and information technology has also created a new context for leadership (Avolio, Kahai and Dodge, 2001) that has been referred to as e-leadership or virtual leadership. Different leadership styles and communication media on team processes and outcomes – through face-to-face and virtual teams communication (videoconference or text-based chat) – have been identified. Hambley’s (2005) main dimensions on how virtual teams differ from each other have implications for the nature of the virtual teams as well as for their leadership functions: lifecycle, boundary spanning, temporal distribution and member roles.

Lifecycle "ranges from more temporary (e.g. short-term specific project) to more permanent (e.g. long-term team)” (Hambley, 2005:7). Boundary spanning refers to "the degree to which a virtual team spans functional, organizational and cultural boundaries” (Hambley, 2005:7). The ability of virtual teams to cross these types of boundaries allows them to be more adaptive, flexible and responsive, and to access the most qualified individuals for a project” (Hambley, 2005:7).

In the following lines, I specifically reflect on the last two of these dimensions linking them to my study and focusing on the implications for eTandem videoconferencing in particular.

- **Temporal distribution**

Information and communication technologies in particular have been identified as components that affect practice and learning by changing space–time relations (Lönglund, 2010). Temporal distribution is "the degree to which the team transcends the boundaries of space and time” (Hambley, 2005:7). “The practice of videoconferencing gathers students, teachers and technicians in accordance with schedules, timetables and curricula in educational settings” (Lönglund, 2010:185). In line with the focus of my study on teachers, Hambley (ibid) refers to global virtual teams as those virtual team members that work from different geographical locations and time zones.
Hartnell-Young (2003) adds that the roles of teachers as designers, managers and mediators are developed both within particular space and time constraints, which cannot be ignored. This means that planning and construction of school infrastructure and classroom areas should ensure that spaces maintain the maximum amount of flexibility and are multi-functional by design, with an awareness that the limitations imposed by the physical location can have an impact on learning. The same goes for time constraints to do with school hours, timetables and requirements regarding school attendance, which can impact the effectiveness of teachers in fulfilling their roles (Hartnell-Young, 2003:266 - 267).

Hartnell-Young (2003) refers to her study to exemplify the pressure of time when teachers were attempting all three roles as designers, managers and mediators. Managers should also consider the amount of time provided by the school for the videoconference coordinator (Lim, 2009) or teacher (Bose, 2007). These new time arrangements include “release time for teachers, time in class schedule to use computers (Dorman, 2001) and flexible scheduling (Beare, 1998; Heppell, 1993; Salisbury, 1996 in Hartnell-Young, 2003:101). Romiszowski (2004) also refers to the school’s capacity to synchronise class schedules and school timetables. Baber (1996 in Lim, 2009) also mentions “that conference schedules be published regularly to inform end users of meeting times and to sustain ongoing interest in videoconferencing”.

- **Member roles**

Member roles can range from more to less fixed, with the possibility for members of a team to fulfil a multiplicity of roles (where tasks are interchangeable among members) or for members to hold specific, more static positions, where certain members are considered experts in a particular field (Hambley, 2005:7). Pertinent to the above, Hartnell-Young (2003:264) also refers to the role of the teacher as a leader not in terms of dependence or independence but, rather, in a context of interdependence involving the self, others, and the whole school community. This will necessitate flexibility on the part of teachers, who may have to assume different roles at different times over the course of the school year, often with
role-changing occurring very rapidly and being dependent on context; teachers will have to alternate between positioning themselves as both specialists and as tutors and as pupils.

2.6.2.3 Administrative support and professional development

Previously, Hartnell-Young (2003:162) had stated that “leaders model for teachers and teachers for students in a cascading effect” but identified a shared concern among teachers about “how to manage a free and open flow of ideas in a professional context”. Professional collaboration generally includes teachers working together with administrators. Baber (1996 in Lim, 2009) also comments that organizations should ensure that managers at all levels are willing to support the implementation process. Referring to the various issues that may affect the videoconference coordinator’s ability to support videoconferencing, Lim (2009) lists administrative support issues such as the funding for programming and availability of technical support. Freed and Lim (2009) include the principal’s experience and recommendations.

Bose (2007) mentions the role of the principal and the support of higher-level administrators (Guskey, 2000) as important contributors to the implementation of videoconference technology in schools; this support is considered fundamental in effectively dealing with issues such as staffing requirements, curriculum alignment, as well as teachers’ professional development and openness to change with regard to technology. She (2003:117) adds that “where teachers and administrators work together, sharing their knowledge, contributing ideas and developing plans for the purpose of achieving educational and organisational goals, they are engaged in professional collaboration (Leonard, 2002)”. Cornu (2001 in Hartnell-Young, 2003) also stresses the important contribution of administrative support to the development of collective competencies.
In general, the traditional focus of professional development in the area of technology as applied to education has been to show teachers how to operate equipment, rather than how to integrate technology into instruction” (Bose, 2007:9). “Many professional development offerings provided to educators teach the basic technology skills, but the actual application of it into the classroom is left to the teacher’s own initiative (Mayo & Kajs, 2005). A professional development would be considered effective if it helps teachers not only to learn about using hardware and software, but to apply the medium to create a classroom environment that functions at a higher cognitive level of analysis (Hall, 2006).

Bose (2007) studied the teacher, school, and professional developmental factors affecting the utilisation of videoconferencing and found that teacher characteristics and professional development characteristics were useful in predicting utilisation of videoconferencing, but that school characteristics did not predict utilisation. Currie (2007) also pointed towards professional development as a factor affecting the success of videoconferencing implementation in the classroom.

Gage, Nickson and Beardon (2002 in Bose, 2007:54) emphasise the importance of schools in providing their teachers with professional development on videoconferencing "to increase students' motivation, provide opportunities for students to increase their communication skills, and give chance to their students to present their work to an audience outside their immediate peers". However, Bose (2007:49) reminds us that teachers are rarely trained specifically in the use of videoconferencing in their classrooms, but instead "undergo only generic computer use that is often presented as being beneficial to their professional development".

Bose (2007:29) cites Hall (2006) to add that "if teachers are to use technology in their classrooms, their professional development must be based on a constructivist philosophy"; philosophy that should provide a learner-centred
approach to professional development as he (2007:31) contextualises from previous experiences: "it was not until when teachers were presented with theory, demonstration, practice and follow-up over the time that transfer to the classroom significantly increased". Fullan (1992) sees this implementation of what teachers have learnt during professional development as a dynamic system that should be added to other factors that might also influence teachers’ utilisation of videoconferencing technology such as attitudes towards technology and teaching, teaching methods, years of experience or level of experience with technology (Bose, 2007).

Fullan (1992) notes that teachers have to acquire the knowledge about any new strategies to be implemented in the school before incorporating them into their curriculum. According to Sparks and Hirsh (1997) both individual learning and changes in the school, have to be made simultaneously, so that efforts towards implementation are not thwarted by problems in one of the two areas.

Hartnell-Young (2003:265) supports professional development strategies that focus on "providing emptiness — space for reflection, collaboration, conversation and debate — ". These place the focus on creation rather than consumption of knowledge with "implications for those currently responsible for teacher training in schools, as it places the focus clearly on school communities providing for their needs" (ibid). Regarding online support for teacher learning, this needs to be based on "an open-ended, constructivist approach which values teachers’ prior experience and different perspectives. Teachers will use this support where they see a purpose for it and they have access to the required infrastructure" (ibid).

Lim (2009) states that a teacher may use a videoconference room four or five times in an academic year, with 50 events being considered frequent use in a school. However, educators hoping to integrate videoconferencing technology need not be deterred; Lim reminds us that the integration of new technologies within a school is a slow process that can take between three to five years (Byron
and Bingham, 2001), as it is a process that requires a fundamental change in the school culture (Bose, 2007:49).

Pennington (2004:10) clearly describes the process of integrating an innovation within a specific context like this:

"Innovations are introduced into a context, which may favour or disfavour them. If an innovation has features that make it accessible and usable, that is, which give it a ‘niche’ in a specific context of use and users, the context will accept it. If not, the context may reject it, immediately or eventually”.

She also refers to a process of adjustment for the introduction of a new idea or technology that may take place "to fit the innovation better to the context, the context to it, or both, in a mutual adaptation in which innovation and context co-evolve". The adjustment needed occurs over a period of time that usually moves "from a relatively surface level of processing of the innovation, representing a minimal adaptation to and investment in it" (ibid) until it becomes naturalised to the context, as a result of three factors: time for an adjustment to occur between innovation and context; familiarity of more people with the innovation and extension of the innovation to more realms and functions.

Hartnell-Young (2003:265) refers to the teachers’ relationship with the time needed: "some teachers argue that their time is fully used, while other teachers and schools are able to reconfigure their time budget. This is an issue at both the system and school levels. Teachers might in future spend less time in the classroom and more time supporting learning, as Hord (1997) and Hargreaves (2003) argue, or designing new learning environments”.

Some teachers might have the minimal technical skills and experience to use all this technology and create a successful “international distance-learning course” (Little, Titarenko and Bergelson, 2005). Many other teachers still require improvements in several aspects linked to the levels of assistance to teachers and to the levels of access to videoconference technology.
Regarding assistance to teachers, some educational organisations encourage teachers to contact other teachers for collaboration on projects through the use of computer-mediated communication tools (e.g. Skype in the classroom, 2014; TWICE, 2014). This is a perfect example of how Internet and digital technologies can bring educators together. Some of the online platforms of these organisations (Fraser, 2013) offer basic guidelines on how to get started, prepare the lessons, set up the classroom and keep up to date with innovative ways teachers are using videoconference technology in their classrooms. Godwin-Jones (2005) also adds the existence of several sites (e.g. the Mixxer) designed for integrating videoconference technology with other freeware learning management systems such as Moodle, Blackboard or WebCT.

In a research study for the design of a desktop videoconferencing platform for synchronous language teaching (Guichon, 2010), teachers’ online observations and the feedback received from focus group interviews on the pedagogical training sessions for teachers resulted in the identification of specific functionalities to assist language teachers to plan the online session and to communicate more effectively in order to design a system that is usable. Among these are the session assistant, the zone of communication and the tracking zone.

2.6.2.4 The social layout of the classroom

Together with the classroom layout, Anastasiades et al. (2010) also list as a fundamental condition linked to the architectural design of the videoconference classroom the different groups of audience involved. This way spatial effects should also be considered social effects (Castells, 1977 in Pratt, 2010). Hartnell-Young (2006) cites Pouler (1994:175) to describe the performative aspect of space, which is not usually regarded by its inhabitants as neutral; at the micro level of the classroom, “space prohibits, decides what may occur, lays down the law, implies a certain order, commands and locates bodies” (ibid). Reference should also be made here to what Lönglund (2010:184) refers as a materialist interpretation of space that exists "as a set of relations between individuals and
groups”; he cites Soja (1985) who refer to the social construction of space as embracing both physical and cognitive space.

Soja (ibid) uses the concept of ‘actor network’ to define the characteristics of such a multi-nuanced structure of relations within videoconferencing and states that the actor-network theory “may provide a useful perspective on the practice of videoconferencing, premised on the idea that networks are constituted through relations, connections and links between people and things”.

Regarding students, the classroom layout comprises an intragroup and intergroup audience (Anastasiades et al., 2010) and a form of secondary communication (Lönglund, 2010) established between members of the intergroup audience (see page 43 above: ‘multi-functionality within a facility’). The conference layout facilitates this kind of secondary interaction among students within the classroom more than the theatre layout. The latter “hinders spontaneous conversations among students located in non-adjacent positions and students cannot easily make eye contact with one another and discussions instituted by the teacher (to the extent they occur) are restricted to pairs sitting next to each other” (Lönglund, 2010:188).

Hartnell-Young (2003:36) adds a third category of participants, which she terms ‘lurkers’, discussing the level of inclusion of those who rarely participate. She pinpoints to the lack of participation or passive participation of these groups within a community as a potential inhibiting factor preventing them from participating in these communities.

The existing literature appears to offer little help and advice in just how the students should be situated within the videoconference classroom. The gradual removal of teacher control and support as the student gains control of the task, should include "teacher demonstration and modelling which can be imitated, so that as Vygotsky (1962) argues, instruction marches ahead of development, oriented toward the future, not the past”. As for teachers’ positioning within the learning environment, Lönglund (2010:187) provides an accurate description of teachers’ location in the videoconference classroom: they should be seated
behind a desk and in range of the camera, well lit with control over microphones and computers, able to position cameras, microphones and monitors in a way that permits certain movements.

### 2.6.3 Teacher-designers of the virtual environment

Hartnell-Young’ model (2003) suggests several issues to consider in relation to how teachers play their role when planning the virtual environment in classrooms where technology is used. According to her, the role of designer of a virtual setting includes planning the learning space created by digital technologies. She adds that this planning role in relation to the virtual setting also implies planning of the learning space created by electronic communication, by clarifying a purpose for these resources and establishing appropriate access.

The design of the research project (1.4.1), based on the five phases of the Learning Circle structure (Riel, 1997), requires the creation of an online space where groups of teachers and their students could plan the exchanges and engage in online learning. The eTandem exchange project aimed to use videoconference technology as the main platform for interaction but, in the context of the study, teachers were free to incorporate and use any kind of communicative sources to communicate with their eTandem teacher-partners with whom they planned the exchanges. Teachers also encouraged their students to interact with their eTandem peers.

### 2.6.3.1 Virtual communities

Preece (2001) reminds us of the initial concept of 'community': a group delimited by more or less rigid boundaries and identified on the basis of physical features, such as size and location. While learning environments have been traditionally housed in a physical place, the introduction of new communications and
information technologies (CITs) has complicated the nature of the learning environment and students’, as well as teachers’, relationship to, and within, it.

Lönglund (2010) refers to these non-traditional places as virtual spaces and Anastasiades et al. (2010) distinguish between local classrooms versus remote classrooms. Jamieson et al. (2000) refer to physical places and electronic spaces to distinguish between the physical location of students in a physical classroom and that of online participants. To exemplify these two physical locations, they refer to a cross-campus videoconferencing made up of multiple places and groups linked in real-time interaction (Jamieson, 1998).

Worthington (1999) emphasise “the effect the location has on forming a sense of the individual’s identity for other participants”; she describes her requirement for online participants to commence their collaboration by offering a description of the physical location from which they enter the virtual classroom site. In her role as teacher, she also provides on the Internet site: “a new picture each week to show the students the space (my surroundings) of their virtual classroom” (ibid).

With the physical learning environment of the bricks-and-mortar classroom broadening to include both students and their teachers from the remote eTandem schools, the concept of virtual learning communities (Rheingold, 1993) appears. Preece (2001) defines virtual learning communities as “groups of individuals, partly geographically distant from one another, [...] coming together temporarily to work in collaboration towards a common goal or a mutual purpose”. This group of people may or may not meet one another face-to-face and “emerge when enough people bump into each other often enough in cyberspace” (ibid). “A variety of other terms are also used including “community of practice” to connote a group of like-minded people (often professionals) whose purpose is to support each other, to learn and to promote understanding via electronic collaboration in a group (Wenger, 1998)”. Within the context of virtual team leadership, Hambley (2005) refers to 'global virtual teams'.

The literature on virtual environments and intercultural online exchanges in the framework of foreign language teaching is abundant. Ludewig and Vogt
include studies on “the intercultural learning process in terms of outcome (Belz, 2007), failed outcome (Belz, 2003; Ware and Kramsch, 2005) or different applications such as Moodle (Markey, 2007) and tasks (Müller-Hartmann and Schocker-von Ditfurth, 2008)”. Ludewig and Vogt (2010:287) add “the important role that intercultural and interactive elements might play in the forging of virtual learning communities that rely on the telecollaborative co-construction of knowledge”.

More directly linked to this study, literature on virtual environments includes different aspects such as the role of teachers (Belz and Müller-Hartmann, 200; Müller-Hartmann, 2007) or videoconferencing (Lee, 2007). Cross-campus videoconferencing, for example, creates "electronic classroom environments made up of multiple places and groups linked in real-time interaction" (Jamieson, 1998 in Jamieson et al., 2000:225).

A way of designing “online communities adopted by technically oriented people is to describe them in terms of their supporting software” (Preece, 2001). "Constructivist approaches might be possible with both open and closed software programs, and this is where the role of teachers is crucial" (Hartnell-Young, 2003:27). Lönglund (2010) warns that mediating all the technologies available might usurp the pedagogical choices of the teacher and transfer the control of the virtual classroom to technicians, manufacturers, engineers (Waltz, 1998) or videoconference coordinator (Lim, 2009).

Preston (1998, in press) coins the term 'lion-tamers' to refer to teachers "pretending control in classrooms with unpredictable computers, and coming to terms with constantly asking their pupils for assistance". Rather than stepping back to allow computers to take over the role, Moll (1990 in Hartnell-Young, 2003) suggests that teachers should develop new forms of mediation to take the practice of teaching forward. Part of this investigation vindicates the role of SL teachers in taking control of the virtual classroom during the videoconference eTandem experience.
“Social constructivists argue that dialogue with others is the source of mediation and scaffolding” (Hartnell-Young, 2003:27). Nonetheless, a social constructivist approach turns teachers into learners alongside the student and brings them to the role of facilitator of learning instead of content contributor. In doing so, part of this investigation aims at observing how these SL teachers trespass this control to their students and aids them to become self-regulated, autonomous participants in the eTandem videoconference exchanges.

2.6.3.2 **Social presence and videoconferencing**

Beyond focusing on the use of videoconference technology, the current study includes contributions to the available research on SL teachers' preferences when communicating with their eTandem partners (teachers and students). To do so, I explore the SL teachers' tendencies with regard to the online tools used and how these tools help them to establish and maintain social presence as part of the eTandem partnership.

In reviewing the literature on videoconferencing, one significant observation concerns the absence of the teacher in the remote classroom and in online educational environments where the teacher is not confronted face-to-face. Lönglund (2010:193) states that this absence "increases the feeling of remoteness and alienation". He states that students do not see videoconferencing primarily as a natural medium of interaction and describe the virtual appearance of the teacher as 'strange' and 'inconvenient' that takes time to adjust to and prepare for:

"It takes time to ‘get used to it’ and you need ‘courage’ to make yourselves heard and you have to be well ‘prepared’ in order to participate. From the students’ perspective, videoconferencing has to be practised for an extended period of time in order to overcome obstacles to communication" (ibid).

The physical presence of the teacher is generally regarded as stimulating by students and observation shows that the presence of the teacher increases the actual degree of activity in the classroom. The fact that the teacher is not present
in class has been emphasised by students who state that the performance of the teacher is key to successful interaction and learning. In adult education provided by the municipality, the teacher changes location between different adult learning centres mainly as a learning strategy for teaching face to face and developing a personal relationship with the students. Wegerif (2012) emphasizes the importance of interactive contingency, and the relative unimportance of physical presence.

Social presence emerged as a key factor in learning environments and "several researchers have demonstrated that social presence is one of the more important constructs to determine the level of interaction and effectiveness of learning in an online environment" (Garrison et al., 2000; Lobry de Bruyn, 2004 in Mykota and Duncan, 2007:161). Short, Williams and Christie (1976:65) defined social presence as the "degree of salience of the other person in the interaction and the consequence salience of the interpersonal relationships". Attributed to a communication medium, Andres (2006 in Keohane, 2010:39) relates social presence to the manner in which the medium "allows individuals to maintain an awareness of others in a group and the impression that the group is communicating through mutual interaction".

"Social presence theory represents a way of explaining how individuals use media for different forms of communication" (ibid). Individuals who require less social interaction are more likely to use a media requiring lower social presence, whereas individuals who require more interaction that is social are less likely to embrace the media (Verhulsdonck, 2007). Similarly, communication requiring higher social interaction often occurs through higher social presence media (ibid).

Virtual language teachers "need to be aware of the impact of social presence on different learning situations before selecting a communication medium for an online course. Without this knowledge, they will not be able to have their learners and themselves pay attention to the use of strategies to establish and maintain social presence" Ko (2010:81). He (ibid) also refers to Aragon (2003) who proposed "strategies to establish and maintain social presence within online
environments”. Rather than placing the main responsibility of creating social presence on instructors, Aragon (ibid) "divided the responsibility of establishing and maintaining social presence in an online course between three roles: course designers, instructors and participants".

With a higher degree of social presence in a community, learners are "more willing to participate in group and community activities" (Picciano, 2002 in Ko, 2010:80) and are more likely to engage in higher order critical thinking (Rourke et al., 1999; Garrison et al., 2000). According to Keohane (2010:39), studies involving social presence do not include "explicit statements on which types of social interaction would benefit from videoconferencing technology and which types of social interaction may be less compelling to individuals when communicating using videoconferencing”.

Calefato (2007) performed studies on the perception of low social presence by remote teams communicating via videoconferencing. Low social presence resulted "in reluctance for collaboration influenced by a lack of expected reprisals from remote participants" (Calefato, 2007 in Keohane, 2010:37). As part of this process, teachers, as mediators, should develop the capacity to use different technologies help students to function “at a higher cognitive level in terms of Bloom’s taxonomy” (Bose, 2007:54). “Cognition allows the individual to organise his own concepts about the world, rather than to discover an objective reality [...] based upon his own unique collection of experiences” (von Glasersfeld in Sweeney, 2007:42). Sweeney (2007:42) refers to von Glasersfeld (1997) that “we can never know whether our ideas match reality, but to the constructivist ideas need to be viable”.

The combination of different technological sources provides teachers with the possibility of generating virtual environments that have great potential for eTandem language learning, as it might offer teachers and their students multiple channels of communication that can bridge both physical distance and multiple modes of creating meaning.
2.6.3.3 Electronic communication media suitable for eTandem

Online education has transformed many historical models of distance education (e.g. correspondence or broadcast radio), as these had to adapt to the new global and technological times (Moore and Kearsley, 2012 in Roseth, Akcaoglu and Zellner, 2013). This continuous development of technology has influenced teachers’ persistent implementation of new models in order to deal with their educational contexts. Roseth, Akcaoglu and Zellner (2013), for example, refer to a period where online education was “synonymous with asynchronous teaching and learning, with learning management systems (LMSs) used to administer course content (e.g. course materials, recordings of instructor presentations) and to facilitate student-instructor and student-student interaction (e.g. email, discussion forums, etc.)”.

But access to high-bandwidth computer-mediated communication technologies (e.g. Wimba, 2014; Starleaf, 2014; Elluminate, 2014; Google Hangouts, 2014; FlashMeeting, 2014; Skype, 2014) has allowed instructors to combine different forms of media (e.g. text, audio, video) and different time-scales (e.g. asynchronous, synchronous) within the same course, including hybrid approaches (ibid). All these online innovations have influenced the development of teachers when it comes to integrating eTandem language learning in their classrooms.

Tandem language learning started in face-to-face contexts but it has also evolved over the years, through the use of electronic communication media, into online exchanges and what several authors, as indicated above, refer to as eTandem (Cziko, 2004) or online tandem learning (Priego, 2011). Elia (2006) describes face-to-face tandem exchanges and describes its evolution towards asynchronous email tandem. Cziko (2004) provides an overview of electronic communication media suitable for eTandem, both asynchronous (e.g., email, electronic bulletin boards) and synchronous (telephone, amateur radio, business-quality videoconferencing, chat, audio CMC and video CMC).
Different media have been used depending on the different tandem and eTandem language experiences. Etandem contexts usually comprise the use of different tools to communicate and share information between eTandem partners. “Virtual teams tend to increase the amount of communication options available due to the difficulty in communicating with other members not physically co-located” (Verhulsdonck, 2007 in Keohane, 2010:36). Videoconference technology might be just one of other forms of electronic communication media suitable for eTandem exchanges.

Different layers of communication when using several technologies in combination with a videoconferencing application may combine face-to-face communication and/or several other technological resources. Schenker’s study (2013) on students’ interest in learning about the target culture, for example, involves the use of emails between eTandem partners, blogs and class essays as part of a classroom tandem exchange in combination with videoconferencing. A different combination implies the use of a multimodal videoconferencing application where various tools are integrated within the same videoconference technology.

Contextualised within an online language classroom, Hampel and Stickler (2012) indicate their interest in the teachers’ as well as the students’ use of different modes in a multimodal videoconferencing application (e.g., Flashmeeting); the potential of this application in language learning lies in “offering learners multiple modes for making meaning, modes which can be used simultaneously for reinforcement, or to fit in with the learners’ perceived strengths” (Hampel and Stickler, 2012:134). These modes include spoken and written language, visual and graphic systems, spatial systems and body language to create meaning.

With the aim of creating a virtual classroom space where two groups of students involving both face-to-face and hybrid doctoral students might work together in multiple small-groups, Roseth, Akcaoglu and Zellner (2013) design and describe the use of freely available technologies that support synchronous cooperative learning activities. These supportive technologies allowed teachers to create a
virtual classroom space (e.g. Wordpress, 2014) and permitted students multiple, simultaneous, and synchronous small groups meetings (e.g. Google Hangouts, 2014), written collaborations (e.g. Google Docs, 2014; Etherpads, 2014; Piazza, 2014) and peer and instructor feedback (e.g. Google Forms, 2014).

Previous studies on videoconferencing have developed around teachers combining asynchronous and synchronous timescales with text, audio, video forms of media. This study may include contributions to the available research on videoconferencing attributes by exploring the SL teachers’ experiences during their virtual planning of the exchanges.

2.6.3.4 Videoconferencing: replicating physical proximity

The replacement of face-to-face communication with the use of videoconference technology has been defined in several studies as an adjunct (Hartnell-Young, 2003), a supplement (Keohane, 2010) or simply as a simulator (Greenberg, 2004), rather than a replacement for personal contact. On her observations in classrooms where computers are used, for example, Hartnell-Young (2003:201) comments that teachers generally value physical interaction above online interaction but advises of “signs that for some, face-to-face now includes communication through videoconferencing”. She (2003:252) refers to teachers in her study who saw engagement as "physical connectedness, supported but not replaceable by virtual connections, and providing students with a safe and secure environment for learning and constructing identity”.

In his doctoral dissertation on the perceptions and experiences influencing the use of videoconferencing technology, Keohane (2010) refers to a survey (McKinney and Whiteside, 2006) on over 233 individuals’ perceptions of richness for various forms of communication where face-to-face communication rated the highest and videoconferencing ranked second. This way, videoconferencing was regarded as the second best supplementary means for teams separated by time and space. Greenberg (2004 in Lim, 2009) also suggests that the boundaries of the
creation of a virtual classroom might only be limited by the extent of the videoconferencing network.

Contrary to the above contributions, which emphasise that the bricks-and-mortar classroom might be simulated with technology, Anastasiades et al. (2010:322) make it clear: “if one believes that videoconferencing is like a conventional face-to-face instruction, they will be disappointed (Anastasiades, 2009; Hearnshaw, 1998)”. Anastasiades et al. (2010:322) refer to Ferran and Watts (2008) to state that “adult attendees of videoconferences must work harder to interpret information delivered during a conference than they would if they attended face-to-face”. Results from a survey given to university professionals where 55.2% of respondents preferred to meet face-to-face prior to participating in a videoconference reinforce this view (Hol and Lawson, 2003:6 in Keohane, 2010:37).

Keohane (2010:31) refers to several studies where problems with using videoconferencing for supplementing face-to-face communication were considered. He (ibid), for example, cites Hol and Lawson (2003) who consider videoconferencing less effective because of “issues in individual participation”; they add that “individuals tend to defer communication to persons controlling the videoconference technology”. Keohane also refers to Wolfe and Haynes (2003) who conclude that “anything less than face-to-face interaction will restrict spontaneity during collaboration”; they add that “videoconferencing will always narrow the types of communication exchange between participants, despite advances in the application technology and communication infrastructure”.

Considering the above contributions, one clear thing is that "social climates created by CMC are different from those in a traditional face-to-face classroom. Even two-way interactive video and audio media – which can transmit facial expressions, gestures, and tone of voice – create interaction patterns that are different from face-to-face communication patterns” (Gunawardena, 1995 in Ko, 2010:78).
In the case of eTandem language learning, with teams separated by time and distance, the possibility of regarding videoconferencing as a means of increasing the amount of face-to-face interaction might not be contemplated. As face-to-face interaction rates as a richer form of communication (Keohane, 2010), it puts eTandem partners at a disadvantage.

The inability or the difficulty of videoconference technology to replicate physical encounters might be due to several factors already stated in the literature (e.g. lack of paralinguistic cues or difficulty of replicating body language) and teachers should first identify the different purposes of the different media used (Greenberg, 2004) when planning the virtual environment for their eTandem exchanges.

Hampel and Stickler (2012) refer to the importance of teachers (and learners) considering the functionalities of the medium which includes, in the case of videoconferencing, taking into account how many users are allowed to speak at a time, that is, how many people can have the floor (permission to speak) in an electronic meeting. Within networked multimedia applications, floors are “temporary permissions granted dynamically to collaborating users in order to [...] guarantee mutually exclusive resource usage and allow its users to utilise and share resources (e.g. remote devices, distributed data sets, telepointers, or continuous media such as video and audio) without access conflicts” (Dommel and Garcia-Luna-Acebes, 1997:23).

Dustdar and Hofstede (1999:163) point out that “more than one floor can exist at any moment in time in an electronic meeting” such as the audio floor or the whiteboard floor, for example. However, they clarify that “there will almost always be a main speaker at any point in time” (ibid) and emphasise the importance of a social protocol in any meeting and they clarify that part of this social protocol is a floor control mechanism that may be achieve by everybody trying and getting a word in, “using their voice and body posture to indicate the urgency of their contribution”.

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Regarding videoconference technology, they should provide the user with “social activity indicators” (Ackerman and Starr, 1996 in Dustdar and Hofstede, 1999). These indicators become especially relevant if people from various cultural (and professional) backgrounds are involved and should answer to “questions such as who is on the system, what are the others currently doing and in which context they are” (ibid).

Particularly interesting for my study on eTandem learning is the relevance of how differences in culture can affect the floor control mechanism that is chosen. Dustdar and Hofstede (1999:164) suggest that these “are engrained in national culture” and add that “participants from countries with low power distance will expect that anybody can take the floor whenever they want”, unless other arrangements – such as appointing a floor-granting chairperson – have been explicitly made. This chairman should “keep a first-in, first-out queue of people who have indicated a wish to speak” (e.g. raising their hand); a participant with high prestige may also “grant the word and the others will just wait until they are addressed by this high-status person” (ibid).

A tendency of an individual controlling the videoconferencing technology to dominate the conversation, though, is a factor in perceived low social presence (Anderson, 2005; Andres, 2006). Low social presence has been "noted as a factor in ineffective meetings using videoconferencing technology" (Wang, 2004 in Keohane, 2010:37). Hol and Lawson (2003 in Keohane, 2010) did not indicate any relationship between initial face-to-face meetings and a decrease in the phenomenon of speaker dominance during videoconference meetings.

The inability or the difficulty of videoconferencing technology to replicate physical encounters might also be due to the lack of paralinguistic cues or the difficulty of replicating body language. In the case of eTandem videoconferencing, with teams separated by time and distance, the possibility of using their body posture as a floor control mechanism, for example, might also be difficult to contemplate.
On his study on the inclusion of oral and visual interaction in distance language learning through the use of videoconferencing tools, Wang (2004b) cites Bruce (1996) to refer to how lack of paralinguistic cues (e.g. head nods and facial expression) reduces understanding and increase ambiguity in speech. He adds that not having access to nonverbal information reduces social cues and impairs interaction (Sproull and Kiesler, 1986 in Wang, 2004b).

Research in this domain suggests that "paralinguistic and nonverbal channels of communication occur relatively automatically, without conscious contemplation" (Lakin, 2006 in Ethier, 2010:9). On her blog on videoconferencing, Lim (2014) cites Dustdar and Hofstede (1999) to list several actions that a person can do in a face to face meeting that are hard to do in a videoconference multipoint videoconference meeting such as “stand up, pace or gesture menacingly if you want to impress authority on others; fidget to signal that you want to talk; hum or gesture to indicate support or criticism”.

Especially relevant for language learners, in general, and for eTandem language learning exchanges, in the case of this study, Hampel and Stickler (2005) also refer to issues of social presence due to the lack of body language, which may impact on language learners. Hampel and Stickler (2005:318) argue that "in the absence of what we have come to take for granted in face-to-face encounters as ‘social presence’, the tutor will need to take extra care to provide opportunities for disclosure of personal information and feedback”.

Scholars such as Kress and van Leeuwen (2001), and Hampel and Hauck (2004 in Wang, 2004b) have recognised lack of body language in text- and audio-based CMC. In the case of videoconferencing, Hampel and Stickler (2012) indicate that body language cannot be used extensively due to its limited slow refresh rate, reducing the possibilities of creating meaning mainly to the speaker’s facial expression.

Some paralinguistic cues that are transmitted through body language in face-to-face contexts (e.g. smiling or nodding) may be carried out by the text chat tool.
within the videoconference application (ibid). They refer to off-task conversations using the text chat facility that may be used by learners as back-channel.

Walther and Burgoon (1992 in Ko, 2010:73) state that the absence of visual clues can result "in unemotional or under social communication". Garrison et al. (2000 in Ko, 2010:73) consider visual cues as "critical to the establishment of social presence in face-to-face contexts" and add that these are "an essential aspect of establishing social presence in face-to-face learning settings. Providing multiple nonverbal or paralinguistic cues, oral communication in a face-to-face environment is a rich medium". In a study of online collaborative learning, individuals using video communication were able to convey higher social presence resulting in increased social interactions among team members (Zhang and Ge, 2006).

Researchers studied social cues such as eye contact, speaker dominance, and low social presence during conversations in an attempt to understand the phenomenon of conversation dominance in videoconferencing. "The inability for videoconferencing technology to replicate social cues may diminish the social presence felt by an individual" (Keohane, 2010:38). Eye contact is a major factor in relinquishing or requesting control during conversation (Bailenson, 2006). However, there also exists evidence speaker dominance is less likely to occur in face-to-face meetings (Grosse, 2006).

In her investigation on social presence in Desktop Videoconferencing (DVC) interactions of English as Foreign Language (EFL) teacher trainees, Satar (2013) emphasises the importance of eye-contact in online multimodal communication to facilitate the establishment of social presence. Similarly, Keohane (2010:34) comments that “eye contact, or gaze awareness, may be difficult using videoconference technology”. He advises “there may be an association between the social behaviour requirement of eye contact and the development of trust in team communication” (ibid).

Grosse (2006) emphasises the importance of trust among members as a key attribute of a successful team. Trust is particularly critical at the beginning of a
project, when face-to-face contact is also a greater benefit than other forms of communication (ibid). Brewer (2008) also found that effective groups require honesty and trust. According to researchers, team leaders must consider trust as a necessary condition prior to developing a virtual team environment (Ellis et al., 2008). Keohane (2010:39) states that "the issue of trust presents a key barrier to the use of videoconferencing technology". He (2010) cites Bos et al. (2002) to warn that individuals may develop a social avoidance to future collaborations if trust is inhibited.

Dillenbourg (2005) indicates that remote groups change their collaboration habits over time. Virtual teams show a tendency to function independently from their remote group members. Social identity theory may have relevancy to the current study as it includes factors such as culture, values and geographic separation that may lead subgroups to differentiate themselves from other subgroups (Oh, Labianca and Chung, 2006). Tu and Mclsaac (2002 in Ko, 2010:74) "examined social presence in an online learning environment, where the participants were 51 graduate level students". Their findings suggested better trust relationships among the social contexts that positively influence learners' perception of social presence.

Nguyen and Canny (2007) found communication systems with spatial distortions negatively affected the creation of trust among individuals. Spatial distortion involves the perception of how a receiver processes information from the sender. The videoconferencing technology may play a role in the distortion of perceptions (Bekkering and Shim, 2006; Nguyen and Canny, 2007).

The specific positioning of the videoconferencing technology caused distrust of the individual speaking and created a barrier to future use of videoconferencing among individuals (Bekkering and Shim, 2006). The perception of the physical setting regarded from the virtual classroom site will also depend on the technology used. Videoconferencing distortions such as lack of high enough resolution necessary for full visual communication and proper eye contact may influence the perceived trust of students and subsequent use of this technology.
(Keohane, 2010:50) and may affect the utilisation of videoconferencing (Bekkering and Shim, 2006).

Lim (2009) also states that technical aspects of videoconferencing might help or limit the videoconference coordinator in supporting videoconferencing in the school. She (ibid) cites Wegge (2006) to refer to the importance of the quality of sound (e.g. audio hard to understand) and video (e.g. picture freezing) among the technical aspects that may explain the resistance to the adoption of videoconferencing technology and that can affect the students’ satisfaction with the experience.

Anastasiades et al. (2010) list the position of the camera among the fundamental conditions linked to the architectural design of the classroom when implementing interactive videoconferencing for collaborative learning at a distance. They agree with Lönglund (2010) that the camera should be placed above the monitor, as it is easier for the teacher and students to be actively engaged in the videoconference. Fixed camera arrangements (Phillips et al., 2010) might also have implications for synchronous interactions. Develotte, Guichon, and Kern (2010) identify five degrees of utilisation of the webcam medium.

To solve situations like this, Lönglund’s study (2010) on videoconferencing with a group of students in different locations implies the use of several monitors. The main monitor, placed in the centre in front of the students, is described as “continuously displaying the on-going action of the videoconference session”. Additional monitors, used for feedback, show the local students in the classroom, “gives the students a visual check before going on air and allows the technician to adjust lighting and camera angles beforehand”. He advises that students may feel that a large television screen is replacing the teacher, since the greater part of the telecast is focused on the teacher.

Together with trust, Tu and McIsaac (2002 in Ko, 2010:74) also listed "familiarity with recipients, informal relationships, personal informative relationships, positive attitude towards technology and more private locations". They add (ibid) that "when users perceive less privacy in a setting where they access CMC,
their perception of social presence decreases (Tu, 2001). Tu (2002 in Ko, 2010:76) also indicates that "CMC users who have a better knowledge of computer systems will perceive low privacy because of insecurity of the systems."

2.6.3.5 Functionalities of other tools

- Email

The previous section has specifically analysed the applications of videoconference technology as a form of online communication. Keohane (2010:36) refers to Grice’s theory of collaboration (1975) to advise that “some videoconferencing technologies may exceed the level of effort team members are willing to accept given the availability of other technologies by which to communicate”. Grice (1975) stated that “the medium requiring the least effort in collaboration would be the one used by individuals”. Next, I briefly centre on the email medium to enhance the communication process and the delivery of material, as this medium became the main form of communication between eTandem teachers in the study.

Technology to engage in videoconferencing might not be a problem anymore but, under certain circumstances, investigators have observed preferences towards email over communication by voice. Phillips et al. (2010 in Ragusa, 2010:258) emphasised "the impact and the influence of email technology on social interactions" and Ragusa and Groves (2010:39) highlighted “the rise of email as a tool for professional and personal communication” as evident in our daily life.

Electronic email is an interactive communication technology widely used today, which enables communication between global citizens located in different time zones and pertaining to different cultures and societies. "Email becomes particularly attractive due to a long list of advantages surrounding cost, comfort and convenience" (Ragusa and Groves, 2010:50). It provides "an effective way to overcome geographically distance and limited economic resources". It is now considered a "core part of managing everyday life" (Tsai, 2009:web).
Ragusa and Groves (2010:40) argue "against the capacity of email to effectively replace other forms of communication". The main challenge faced was the "transitory nature of email use" (Ragusa and Groves, 2010:52). They add that "the more people rely on a false interpretation of the purpose and effectiveness of email, the more email becomes an impotent tool for information and communication technologies". They (ibid) consider the lack of audio-visual cues as a key shortcoming to assist understanding and shared meaning - elementary components of social interaction.

A single interaction is not enough to build sufficient rapport with participants (Ragusa and Groves, 2010). If the goal is to generate "in-depth responses to sensitive questions, then the convenience and geographical convenience of email technology must be considered alongside the time and commitment involved in developing a rapport and trust between researcher and researched" (Ragusa and Groves, 2010:51).

Previous research has demonstrated that long exchanges of emails (McAuliffe, 2003) can encourage disclosure and limit miscommunication and misunderstandings. On the other hand, if answers of a paragraph long or less are sought, then the single distribution of an email interview should suffice, provided questions are adequately clear to all participants. Written expression is as diverse as verbal expression. The importance of written expression and clarity cannot be overemphasised, but one should consider that a simple alteration of question-wording might create discrepancies when communicating by email. With audio-visual cues lacking, it may be difficult to delineate between an insult, a frank account of the truth, exaggeration, irritation, or complete misunderstanding (Ayers, 2004). Ragusa and Groves (2010:50) categorise the email as an impersonal, temporary form of communication as summarised below:

"If email is used to replace other forms of communication, such as face-to-face interaction, the impersonal nature of the medium appears to encourage unprecedented levels of frankness [...] the lack of personal
contact in a virtual environment such as email heightens potential for the miscommunication of attitudes and expression. This may negatively impact social relationships. [...] Until email is not simply used as a convenient, albeit temporary, substitute for other forms of social interaction, its use as a tool for research, professional and private communication, remains precarious”.

• **Web 2.0 tools**

Seufert, Back and Häusler (2001) identified that at a time of increasing globalisation and mobility there was a need for a simultaneous improvement of flexibility in learning arrangements, due to challenges brought by the pace at which knowledge is created and becomes outdated. For e-learning to be successful, flexible, student-centred learning must be prioritized (Lee et al., 2008).

The introduction to web 2.0 has "radically changed the capacity of virtual environments, transforming passive dialogue into interactive communicative events through a range of new digital technologies" (Crampton and Ragusa, 2010:271). The key difference between traditional Web technology and Web 2.0 technology is the inclusion of tools that facilitate social interaction, which explains why Web 2.0 has been labelled the ‘social web’ (Boulos and Wheelert, 2007).

The use of these Web 2.0 tools allowed these teachers and their students to become ‘prosumers’ (producers + consumers), as Garcia (2011:62) labels it, that is, ‘active, multi-dimensional content contributors’ (Crampton and Ragusa, 2010:271). Web 2.0 applications have changed the function and role of users from passive receptors to active, multi-dimensional content contributors. Previously, users passively took in static data. Today, users not only receive information, but they also act as information developers and producers, leading to widespread growth in the popularity of user-modifiable sites such as Myspace and Facebook (Alexander, 2006).
Constructionist approaches tend to use tools that engage students in collaborative activities, such as wikis, blogs, etc. In a study from Web-based discussions, Persell (2004:73) concluded that designing “creative ways of structuring their interactions” could help students learn a great deal from their peers. Little, Titarenko and Bergelson (2005) mention the potential of asynchronous distance learning in making student thinking highly visible and shows how this use of digital technology aids the creation of a global virtual classroom that can benefit both learners and teachers.

A study comparing synchronous and asynchronous interactions with scientists found that “while student learning was equal in both interactions, the students who interacted asynchronously were more thoughtful and reflective in their questions” (Kubasko et al., 2007 in Lim, 2009:24). The students who participated in synchronous interactions, on the other hand, had "more interest in the scientist as an individual" (ibid).

**2.6.4 Teacher-mediators and social constructivism**

As mediators, part of the teachers’ role is to facilitate communication between all stakeholders participating in the learning process, through both face-to-face dialogue and electronic communication (Hartnell-Young, 2003:244). William and Burden (2009:40 in Kao, 2010:117) indicate that "mediators can also be people who play an important role in enhancing a child's learning 'by selecting and shaping the learning experiences presented to them'". They (ibid) add that "interaction with people, usually parents, teachers or peers, with different levels of skills or knowledge often leads to effective learning, which then encourages learners to move on to the next stage of learning or understanding".

The functions of mediation and scaffolding (Wood, Bruner and Ross, 1976), including coaching and providing feedback, are fundamental to teachers’ work in a social constructivist approach. Teachers as mediators help students become self-directed learners through empowering them "with the necessary abilities and
knowledge” (Kao, 2010:117) and making them “active learners in co-constructing knowledge” (ibid). To be good mediators, teachers must make every effort to know and understand the learners. When mediating student learning, teachers constantly adjust the level of information and support according to students’ needs, scaffolding the task with structures that will be removed as the learner progresses (Mercer and Fisher, 1998; Wood and Middleton, 1975).

Developed from the same line of mediation, the concept of Zone of Proximal Development (ZPD) has been enthusiastically and widely researched for its crucial implications in helping learners to learn. The ZPD is defined as "the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978:86 in Kao, 2010:118).

This Vygotskian view places teachers in an important and somewhat difficult role in classroom interaction, "whether using technology or not" (Hartnell-Young, 2003:52). Such a difficulty lies in trying to identify the ZPD for individual students, and taking action to guide the student and provide opportunities for learning, "before reaching a state of being capable and self-regulated” (Kao, 2010:118-119).

Rather than limiting the ZPD to an individual student, some authors (Lerman, 2001; Mercer and Fisher, 1998) have preferred to suggest that the extension of the ZPD on any task should be established "by reference to past or current events, language or experiences, and through interactions between teachers and students or between peers" (Hartnell-Young, 2003:53).

Internalisation (Donato, 1994; Wertsch, 1985; Lantolf and Thorne, 2006; Lantolf and Poehner, 2014) refers to the process of gradually moving from guided support from more capable individuals to more self-regulated and independent activity. Through internalisation, "learning appears to lead to development" (Kao, 2010:119). As Vygotsky (1968 in Kao, 2010:120) emphasises, "the interaction between people and their environments, and peers, helps activate students’
learning in the ZPD, internalises the learning process and then eventually constructs development". For Vygotsky (1968 in Lantolf and Thorne, 2006:266), these processes of internalisation entail two crucial stages of developmental learning: "the stage related to the social level and the stage related to the individual level". Vygotsky’s ZPD recognises the part that both teachers and students in the social context have to play in mediating learning. Leo van Lier (1996:193 in Kao, 2010:121) argues that, "in certain circumstances, conversational interaction among language learners of similar or lower proficiency might be more beneficial than interaction with more capable peers or with native speakers, as it might 'encourage the creation of different kinds of contingencies and discourse management strategies'.

In the context of this study, interactions refer to specific instances of exchanges between eTandem teachers and between eTandem students; these are not only understood as instances of the students’ active learning-related involvement in trying to establish more message-oriented communication with their eTandem partners but also as instances of the teachers’ developmental paths in trying to support students’ towards their aims as eTandem partners.

2.7 Conclusion

The literature reviewed in this chapter has contextualised the investigation throughout a background overview of the study. This has led me to reconsider the literature review (2.1) in relation to the research questions of the study.

Theoretical considerations to support my investigation have also been discussed. In particular, Hartnell-Young’s model on the roles of teachers in classrooms where computers are used (2.2). This has led me to review several aspects linked to the role of the teacher as mediator on pedagogically exploiting videoconferencing within a social constructivist approach to CALL (2.3). Along with these, I have reviewed different approaches to computer-assisted language learning (CALL) in relation to the use of videoconference technology. This has
led me to consider literature on aspects linked to the role of teachers as designers of the physical environment (2.4), the social setting (2.5) and the virtual environment (2.6). In this way, the chapter has elaborated the underlying purpose of the study and its theoretical foundation. The following chapter outlines the research design and explains how the study responds to the research gaps identified in Chapter 1.

3 Research design and methodology

Chapter 3 discusses, first, the choice of a qualitative methodology, which builds on Hugues’ (2009) expanded critical incident approach (ECIT). Second, it describes the research design of the study, driven by a desire to offer practical research-based policy advice both to SL teachers, in particular, and to schools with an international perspective, in general.

3.1 Aim of the study

I initially focused the study on investigating the students’ use and acquisition of a second language (SL). A first definition of the study aimed at investigating SL teachers’ and students’ linguistic challenges (strengths and difficulties) when participating in videoconference-integrated eTandem exchanges. From the SLA perspective, the participation in the eTandem exchanges seemed a right starting point to improve the oral expression of the students as the ‘second language socialization’ (Roberts, 2001) with members of the eTandem online community seemed especially suitable for the development of oral skills. It could therefore provide speaking practice, the lack of which most distant learners deplore in CALL environments (Felix, 2002; Blake et al., 2008).

From a technological perspective, Godwin-Jones (2005:9) referred to the intriguing opportunities for language professionals and SL learners of
synchronous CMC tools as they provide “additional channels for oral communication”. Hartnell-Young and Vetere (2008:284) emphasise that these tools “expand the well-known literacies of reading and writing to include the ability to communicate in multiple modes: written, visual, audio and gestural”. Guichon (2010) reinforces this view stating that, through the latest improvements in technology, synchronous pedagogical interaction and communication is now easier and thus provides new opportunities for language learning.

In this sense, Thorne and Payne (2005), in a review of the history of synchronous computer-mediated communication (SCMC) in SL research and its pedagogical possibilities in supporting language learning, points out that one type of CMC tool can only support the development of one or two specific language skills. They concluded that videoconferencing could contribute to the development of listening and speaking skills.

The dynamics of the preparatory year -when trying to recruit teachers, having the first conversations with them and doing the first videoconferences- suggested a shift of emphasis from the students’ to the teachers’ experiences. I soon found out that teachers were not able to follow one of the prerequisites of the research, which was to prepare and give videoconferences regularly (approximately once a month). Contrary to that, teachers were continuously postponing the videoconferences scheduled. I also realised that the geographical diversification of the research project would make it really difficult to gather data from students, and that I should really work hard to keep teachers motivated to collaborate with me in the study.

A first redefinition of the study did not include students’ personal accounts, although it included recordings of their videoconferences and teachers’ personal accounts of how their students were doing. Although the study was based on eTandem exchanges between English and Spanish SL classrooms, I soon noticed that teachers’ main concerns centred on how to deal with the whole process of videoconference-integration into their SL classrooms and not on how their students were using their SL. Initial teacher-to-teacher videoconference meetings
and observations and analysis of the first videoconferences showed that other more ‘pre-linguistic’ challenges had to be solved. I finally redefined the aim of the study and focused on the investigation of SL teachers’ development when participating in videoconference-integrated eTandem exchanges.

This wider ranging overview of the SL teachers’ engagement with the process under investigation provide a voice to the perspectives of SL teachers with the aim of finding answers to the main question of the study:

- How do SL teachers develop throughout the process of eTandem videoconference integration in their classrooms?

In order to answer this broad research question, the following two subquestions are fundamental to the study. The first one focused on the teachers’ roles:

- What teacher roles emerge in the process of eTandem videoconference integration in their classrooms?

The second one on discovering how eTandem videoconferencing may be pedagogically exploited in accordance to a social constructivist approach to CALL:

- How do these SL teachers exploit eTandem videoconferencing in accordance with a social constructivist approach to CALL?

I reflected with twenty teachers from US, UK, Switzerland and Spain over a period of three years to find answers to these questions. As discussed on the following lines, the methodology chosen for my research explores the potential of Flanagan’s (1954) critical incident technique and Hugues’ (2009) expanded critical incident technique (ECIT).

This allowed me to focus more on specific incidents that SL teachers participating in the exchanges had experienced personally. Yet, in terms of methodology, the study draws on a variety of other research approaches, as listed below. Next, I
draw an overall picture on the qualitative approach of my study where I discuss some methodological alternatives I initially considered for my study (3.2.1) and I justify my choice of ECIT as the most appropriate choice (3.2.2).

3.2 Overall approach and rationale: a qualitative attempt

This study represents a qualitative attempt to record SL teachers’ views of what they do and why they do it when integrating eTandem videoconferencing in their classrooms. My concern with understanding and enhancing aspects of SL teachers’ experiences with videoconference-integration of eTandem learning determined the qualitative approach of this study.

Previous studies outlined in the literature review have made important contributions to the integration of videoconference technology in the educational context from different perspectives and through different methodologies and data collection methods. But this multiple qualitative study on the developmental paths experienced by SL teachers in the process of eTandem videoconference integration in their classrooms towards a social constructivist approach reinforces previous investigations.

"Qualitative research is endlessly creative and interpretive" (Denzin and Lincoln, 2005:14). The preferred approach for this research falls within the interpretive paradigm, which itself reflects, as Hartnell-Young (2003:74) states, “the constructivist approach of today’s classrooms, with a belief in a socially constructed, subjectively based reality”. This interpretive stance of the study also acknowledges, “the intimate relationship between the researcher and what is being explored” (Klein and Myers, 1999 in Rowlands, 2005:81).

"The writer-as-interpreter moves from the field text to a research text: notes and interpretations based on the field text. This text is then re-created as a working interpretive document that contains the writer's initial attempts to make sense out of what he or she has learned. Finally, the writer produces the public text that comes to the reader" (Denzin and Lincoln, 2005:14-15). There is no single
interpretive truth. There are multiple interpretive communities, each having its own criteria for evaluating an interpretation (ibid). Next, I detail the initially established research strategies that I considered to finally produce the final text.

3.2.1 Methodological alternatives: case-study, grounded theory and action research

Multiple-case study

Qualitative interpretations are constructed but "the researcher first creates a field text consisting of field notes and documents from the field (Denzin and Lincoln, 1999:24), what Sanjek (1990) calls 'indexing' and Plath (1990) calls 'filework'. The initially-established research strategy that I considered focused on the description and interpretation of the development of a case that included the study of just one eTandem group (formed by two teachers).

Soon I decided to enlarge the number of eTandems, and I added participants from multiple eTandem sites. The nature of a multiple case study method (Robson, 2002) seemed to meet the need to compile and combine information from the different eTandem sites involved. According to him (ibid), in a multiple case study, the first case study would provide evidence that would support a theoretical view as to what is going on; and this theory would guide the choice of subsequent cases.

However, as Robson (2002:183) warns, “the danger in using a well-worn term like 'case study’” is that it often carries “excess baggage”. It would not have been possible to link the requirements of the multiple-case-study structure around an initial proposition to the open-ended exploratory approach of my investigation. My investigation, as Hugues (2009:78) states, “seeks new understandings based on individual experiences” from each of the individual eTandem partners.
Grounded theory

Grounded theory and action research are two other approaches I considered for my investigation and their influence is evident in the nature of this investigation. Grounded theory offers the potential to generate a theory that relates to the particular experience forming the focus of the research based on the “actions, interactions and processes of the people involved” (Robson, 2002:191).

Action research

Denzin and Lincoln (2005:15) state that qualitative researchers can "isolate target populations, show the immediate effects of certain programs on such groups, and isolate the constraints that operate against policy changes in such settings". Action-oriented qualitative researchers can also create spaces for those who are studied. "The researcher becomes the conduit for making such voices heard" (ibid). As Robson (2002:215) clarifies, action research “adds the promotion of change to the traditional research purposes of description, understanding and explanation”.

The influence of action research is evident in the nature of this investigation since it offers a qualitative research method where improvement and involvement of teachers are central with the idea of influencing or changing aspects of the focus of the investigation, that is, SL teachers’ roles when integrating videoconference technology as part of eTandem exchanges.

Moreover, collaboration between researchers and those who are the focus of the research is typically seen as central to participatory action research. It also supports the cyclical nature that I sought for my study (3.3.2.3.2), as a widely adopted version of action research views this as a cyclical process (Kemmis and Wilkinson, 1998).
3.2.2 Towards Expanded Critical Incident Technique

Methodologically, the study is supported by principles of grounded theory (Glaser, 1998), case study methodology and action research (Carr and Kemmis, 1986; Zuber-Skerritt, 1992, 1996). It builds, as described on the following lines, on critical incident technique (Flanagan, 1954). Hugues (2009:84) lists a group of researchers who find "useful compatibilities between CIT and other research methods, such as case study (MacIntosh-Murray, 2003; Thomas, 1996) and grounded theory (Chell,1998). She (ibid) adds that Ellinger (Ellinger and Watkins, 1998) incorporated “a constructivist approach into her CIT study, enabling her to look at beliefs, attributions, filters and contexts that shaped managers’ roles as learning facilitators”.

The enterprise in investigating the multiple eTandem partners was not based on an intervention per se, and the act of reflecting was chosen to be the means of achieving further insights. To do so, I encouraged SL teachers in the study to apply videoconference technology within an eTandem context, to exploit this technology for their own pedagogical purposes and to become critical users of this integration.

Considering the importance of generating in-depth relationships with the participants, underlying the reflection on the first stages of the study was the notion of ‘conversational constructivism’ (Baker, Jensen, and Kolb, 2002) where reflection on experience was seen as a learning opportunity, and conversation itself as a learning space.

But I soon realised that there appeared common problems with discussions after the teachers’ experiences. The first conversations with teachers showed that they often had difficulties getting started on reflecting about their experience. Gradually, I became aware of a number of limitations in the method I was using.

Some of these problems, which were already stated in the literature (Hugues, 2009), included superficial descriptions of what happened without adequate reflection or analysis, as teachers were often in a hurry and the time ‘to converse’
was often limited to between-classes breaks. Similarly, it was often the case that, after several conversations with them, teachers returned to the same descriptive issues associated with the experience instead of considering implications and action plans; they sometimes regarded me as ‘the expert’ and not as ‘the researcher’ and they often expected me to give them ‘the answers’. Eventually, I decided to abandon the conversational format of my investigation and to explore the potential of CIT and ECIT as the methodology chosen for my investigation as I detail below.

### 3.3 Implementing the research design

The project was initially and opportunistically located within the *Youngcast Project* (Roura, 2010c) that encompasses several groups of Spanish and English SL teachers and their students who participate in various eTandem exchanges. With the aim of digging deeper into what these teachers actually do as they exploit the potential of eTandem videoconferencing in their SL classrooms, the different phases of the investigation developed around what I called the Youngcast Research Project.

Considering Hugues’ ECIT process (2007), the different phases of the research include the planning phase, as well as detailed specifications for data collection, analysis and interpretation. In this study, these detailed specifications for data collection, analysis and interpretation have been divided into three differentiated but interconnected phases, as detailed on the following sections of the study. The study’s overall timeframe (Table 3.1) comprises five academic years.

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Phase</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010 - 2011</td>
<td>Planning phase</td>
<td>3.3.1</td>
</tr>
<tr>
<td>2010 - 2013</td>
<td>Collection, analysis and interpretation phases</td>
<td>3.3.2</td>
</tr>
<tr>
<td>2013 - 2015</td>
<td>Presentation phase</td>
<td></td>
</tr>
</tbody>
</table>

*Table 3.1: Study’s overall timeframe*
3.3.1 **Planning phase**

The preparatory year of the research (Academic Year 2010 – 2011) involved a first encounter with the real context and potential participants of the study. This helped to start defining and redefining the aim of the study, to contact and recruit teachers wishing to participate in both the eTandem exchanges -as part of the Youngcast Project- and as participants in the investigation -as part of what I termed the Youngcast Research Project-. I also started to design the online research environment.

Some preliminary videoconferences were also carried out during this preparatory year with two eTandem teachers from Catalonia and Switzerland who had already participated in previous editions of the Youngcast Project with their students. The teacher from Switzerland visited the school in Catalonia from time to time, which enabled me to meet both eTandem partners and exchange information with them face-to-face. It is worth noting that the commitment and enthusiasm that these visits speak of might not be something that you would find in many eTandem settings as I had the opportunity as a researcher to establish a friendship relationship with these two teachers. These first encounters allowed me to get ready for the mainly online format of my investigation. I also had some online interviews with them with the aim of starting to deal with the complexity of doing online research.

*Designing the research environment: the online platform*

An essential feature of the research approach is its collaborative research orientation through the involvement of the teachers in the investigation. Sharing the view of several researchers (Wallace, 1998; Mcniff and Whitehead, 2006; Cutrim Schmid, 2010), this collaborative approach has the potential to encourage teacher development and professional growth; an approach that should enable the creation of communities of practice as a means to support the pedagogical development of SL eTandem videoconference participants.
But one of the main concerns of the planning phase was how these SL teachers could collaborate with each other and with me as a researcher. The fact that most of the teachers participating in the study were from different demographic areas in different countries meant that I encountered many difficulties when sharing information and gathering data from the different eTandem partnerships involved in an online and international research project like this.

The first step was trying to spend time developing trust with participants through several synchronous encounters and regular communication by email. But it did not ensure that the different eTandem partners worked collaboratively with me, and I did not always and regularly receive all the data requested. To solve this situation, one of the main aims in the preparatory year of the study was to design an online environment where teachers could easily collaborate and share their information with one another and with me. The creation of an online platform that could promote this collaborative process and facilitate both the communication between the eTandem partners and the collection of data for the research study proved to be essential.

One of the requirements of the project was that technological resources used for the design and implementation of the exchanges had to be free. An initial design of the online space was developed around a social networking site (Roura, 2010b). But before its use could be piloted with the participant groups, the terms of use were changed, and a fee was required. Two updated versions were developed for primary and secondary students; these two versions were based on a blog platform and were presented and shared with other members of the educational multimedia community in three different congresses in Morocco (Roura, 2009b) and Canada (Roura, 2010c, 2010e).

This design was built on three different blogs, translated both into English and Spanish. The main blog introduced the outline of the project, the pedagogical framework to be followed, the phases and timelines and information about the registration process. On this same page, one could also find links to other sections of the project, such as the events and tutorials section. Together with this
main blog, three more blogs were created for teachers and primary and secondary students to upload their activities. The design of the online platform using blogs offered teachers and students the possibility of sharing and collaborating with each other, as a blog can easily be “exploited for group work” (Bloch, 2007 in Murray and Hourigan, 2008:85).

A third design using google sites (Roura, 2012) facilitated the creation of individualised sites more focused on promoting collaboration with each eTandem partnership and not just with the whole group of the twenty teachers participating in the Youngcast Research Project. After a main page with information about the project, the registration process and a teachers’ guide, as well as tutorials, each eTandem paired was assigned an individual online site. This generated a community of practitioners who could share their experiences with each other (but only when the eTandem partners of that site allowed it), as teachers in each eTandem group could decide whether or not they shared their material with the other eTandem partners.

Recruitment of teachers

Although Hugues (2009) states that there are no set rules for appropriate sample size in the case of CIT, I determined that the optimum participant group for the first part of the investigation would include a minimum of ten eTandem partners. This number of eTandems would allow me both to effectively conduct the in-depth interviews I planned to have with each individual eTandem partner, and to carry out a full analysis of the resulting data. I had to consider, though, the possibility that some of these teachers would possibly quit from the research sooner or later, which is what finally occurred. Without restrictions on the age and SL level of the students as recruitment criteria, I only specified that the participants should be English or Spanish SL teachers wishing to participate in an eTandem videoconference exchange where their students practice each other language. I did not restrict the geographical distribution of teachers to any specific place. As the research involved the participation of teachers from
different countries, the initial recruitment of teachers did not prove to be an easy task and lasted throughout Year 1 of the study (2010 - 2011).

Such a long year for the recruitment of teachers started with the development of a formal online invitation (Appendix B) sent by email to SL teachers from different countries, and finished with the recruitment of twenty SL teachers (Table 3.2) who wished to participate in Year 2 of the research project. Four teachers (Luca, Cathy, Ari and Jerry) drew some kind of support from other SL teachers (Sara, Mari, Car and Martha, Cris, Seli and Esther) throughout the different phases of the project. Experts on ICT (Iu) and experts on coordinating international projects (Jose and Jerry) encouraged and collaborated with the new SL teachers so that they continued with the exchanges.

As the exchanges were initially conducted within the Youngcast project coordinated by the International Education and Resources Network in Catalonia (iEARN-Pangea) and UK (iEARN-UK), a first formal email invitation was sent to more than 600 teachers who were part of the iEARN-UK database — to which I obtained formal access.

<table>
<thead>
<tr>
<th>Tandem</th>
<th>Participant-teachers</th>
<th>Other SL teachers</th>
<th>Collaborators</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hill</td>
<td></td>
<td></td>
<td>Father</td>
</tr>
<tr>
<td></td>
<td>Alex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Jude</td>
<td></td>
<td>Sara</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Luca</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Anna</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Mary</td>
<td></td>
<td>Iu</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gina</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Glory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eva</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Cathy</td>
<td>Mari</td>
<td>Jose</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Ari</td>
<td>Car</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Jerry</td>
<td>Martha, Cris, Seli, Esther</td>
<td>[Jerry]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tere</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Maria</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leti</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Elna</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Reb</td>
<td></td>
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</tbody>
</table>

Table 3.2: Participant-teachers and their collaborators
My role as a member-coordinator of iEARN-Pangea also enabled me to contact other teachers interested in participating in the research project. As a coordinator in the Youngcast project, I contacted more than 100 teachers from Catalonia who had participated in previous training sessions linked to the project (Table 3.3). All these two groups of teachers received an email invitation to participate in the investigation.

My participation in the annual iEARN international conferences in Morocco (2009), Canada (2010) and Taiwan (2011) allowed me to do several presentations on the projects for the iEARN community. It provided me with another opportunity to meet teachers interested in participating in the eTandem exchanges. In addition to all these contacts, an invitation to participate in the study was also posted on several online platforms such as Skype in the classroom (2014), TWICE (2014) and E-twinning (2014), as these platforms offered the possibility of meeting teachers from around the world interested in connecting their classes.

<table>
<thead>
<tr>
<th>Teachers’ Code (T - teacher)</th>
<th>Courses</th>
<th>School Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1 - T10</td>
<td>PELE Course 1</td>
<td>2010 - 11</td>
</tr>
<tr>
<td>T11 - T23</td>
<td>PELE Course 2</td>
<td>2010 - 11</td>
</tr>
<tr>
<td>T24 - T54</td>
<td>Summer Course - iEARN 1</td>
<td>2010</td>
</tr>
<tr>
<td>T55 - T86</td>
<td>Summer Course - iEARN 2</td>
<td>2010</td>
</tr>
<tr>
<td>T87 - T116</td>
<td>PELE Course 3</td>
<td>2009 - 10</td>
</tr>
</tbody>
</table>

Table 3.3: Professional development courses

An important aspect of this study was the desire not only to draw information from teachers, but also to participate with them in professional learning. While teachers usually focus on action (experiencing and implementing) in their practice, they have been less frequently involved in researching (reflecting on and theorising) on their practice. My initial role as one of the coordinators in the Youngcast project, where I experienced many of the first videoconference exchanges, easily interfered with my role as a researcher. Taking ethical considerations into account, an initial solution to solve this issue for the large-
scale research was to ‘only’ take the role of researcher and allow another staff members of iEARN to be in charge of coordination.

But considering Hartnell-Young’s (2003:79) statement that “the usefulness of the data is likely to be affected by the quality of relationships”, I felt it was essential to spend time building up trust among participants. To reinforce this, I finally followed all of the eTandem partnerships as a coordinator-researcher throughout the project, from the preliminary teacher-to-teacher online meetings and through the almost two years of videoconference sessions. This made it easier to manage the triangular relationship between the eTandem partners and me. In situations where a technical problem occurred, I acted as a technological resource as teachers approached me and asked for my help to solve such problem. In order to avoid too many issues related to technological problems, I arranged an online training course together with the design of an online research platform, which I shall refer to in the second part of this chapter.

### 3.3.2 Collection, analysis and interpretation of findings: an overview

I carried out data collection, analysis and interpretation concurrently. These extended over three academic years of the research project. During each of these years, I collected, analysed and interpreted data for differentiated but interrelated purposes and I did so into three different stages (Table 3.4).

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Phase</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-2013</td>
<td>Collection, analysis &amp; interpretation phase</td>
<td>3.3.2</td>
</tr>
<tr>
<td>2010-2011</td>
<td>Stage 1 - Background</td>
<td>3.3.2.1</td>
</tr>
<tr>
<td>2011-2012</td>
<td>Stage 2 - Teachers’ accounts</td>
<td>3.3.2.2</td>
</tr>
<tr>
<td>2012-2013</td>
<td>Stage 3 - Set of critical findings</td>
<td>3.3.2.3</td>
</tr>
</tbody>
</table>

**Table 3.4**: Timeframe and stages for the collection, analysis and interpretation phases
During Stage 1 (2010-2011), an initial survey allowed me to collect background data from teachers participating in the research. During Stage 2 (2011-2012), I collected data from teachers while preparing for the videoconferences (emails from teachers, teacher-to teacher videoconference meetings with them, lesson plans). During the implementation of the students’ videoconferences, I also recorded the sessions and I took some field notes. I used all these data to do text and video-stimulated recall interviews with the eTandem teachers. All these data allowed me to present a descriptive account of these teachers’ experiences.

During Stage 3 (2012 - 2013), I did some in-depth interviews with the SL teachers who continued with the exchanges and some group interviews with experts who had been involved in the eTandem experience. This concurrent data collection, analysis and interpretation yielded an array of critical findings about SL teachers’ eTandem challenges that I presented as a set of critical incidents.

As detailed on Table 3.5, I have distributed this section considering these three stages and considering the collection, analysis and interpretation phases for each of them. With the aim of showing the workings of this process in detail, I support the description of these three stages with an example of its practical application to my study (3.3.2.4). The aim of using this example is to illustrate the process I followed throughout each of these stages from the initial collection and categorisation of background data to how I finally identified data as critical showing the impact of the teachers’ contexts on their integration of videoconferencing into their teaching.
<table>
<thead>
<tr>
<th>Stage 1 – 2010 – 2011</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Collection phase</td>
<td>Analysis phase</td>
<td>Interpretation phase</td>
<td>Presentation phase (Chapter 4)</td>
</tr>
<tr>
<td>3.3.2.1 – Collection stage 1: collecting background data</td>
<td>3.3.2.1.2 – Analysis stage 1: a qualitative background analysis</td>
<td>3.3.2.1.3 – Interpretation stage 1: a background framework</td>
<td>4.1.1 Teachers' background on planning the physical space</td>
</tr>
<tr>
<td>3.3.2.4.1 Example Stage 1</td>
<td></td>
<td></td>
<td>4.2.1 Teachers' background on planning the social environment</td>
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<td>4.3.1 Teachers' background on planning the virtual setting</td>
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<tr>
<td>Stage 2 – 2011 – 2012</td>
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<td>3.3.2.2 – A descriptive eTandem experience</td>
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</tr>
<tr>
<td></td>
<td>3.3.2.2.1 – Collection stage 2: collecting teachers' accounts</td>
<td>3.3.2.2.2 – Analysis stage 2: teachers' descriptive accounts</td>
<td>4.1.2 Teachers' accounts on planning the physical space</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.3.2.2.3 – Interpretation stage 2: a vivid quilt-like word picture</td>
<td>4.2.2 Teachers' accounts on planning the social environment</td>
</tr>
<tr>
<td></td>
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<td>4.3.2 Teachers' accounts on planning the virtual setting</td>
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<td></td>
<td>4.4.1 Teachers' accounts in mediating students towards message-oriented interaction</td>
</tr>
<tr>
<td>3.3.2.4.2 Example Stage 2</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Stage 3 – 2012 – 2013</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3.3.2.3 – A set of critical findings</td>
<td></td>
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<tr>
<td></td>
<td>3.3.2.3.1 – Collection stage 3: collecting in-depth data</td>
<td>3.3.2.3.2 – Analysis stage 3: specific incidents</td>
<td>4.1.3 Critical findings on planning the physical space</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.3.2.3.3 – Interpretation stage 3: a set of critical findings</td>
<td>4.2.3 Critical findings on planning the social environment</td>
</tr>
<tr>
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<td>4.3.3 Critical findings on planning the virtual setting</td>
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<td></td>
<td></td>
<td></td>
<td>4.4.2 Critical findings on mediating towards interaction</td>
</tr>
<tr>
<td>3.3.2.4.3 Example Stage 3</td>
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</tbody>
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Table 3.5: Overview of the Collection, Analysis and Interpretation phases and presentation of findings in Chapter 4.
3.3.2.1 **SL teachers’ background**

3.3.2.1.1 **Collection phase 1: collecting background data - an initial survey**

The preparatory year of the research (Academic Year 2010 – 2011) involved a first encounter with the real context and potential participants of the study. I also started to design the online research environment. Some preliminary videoconferences were also carried out during this year with two eTandem teachers from Catalonia and Switzerland who had already participated in previous editions of the Youngcast Project with their students. These first encounters allowed me to get ready for the mainly online format of my investigation. I also had some online interviews with them with the aim of starting to deal with the complexity of doing online research.

I also started the design of an initial survey aimed at obtaining information on the preliminary factors that could inhibit or facilitate the participation in international projects where synchronous communication is sought. The development of the different sections of the survey was based both on data gathered from two focus group interviews (Roura, 2011b) and on Hartnell-Young’s (2003) considerations on the teachers’ roles in classrooms where computers are used.

*Designing the survey - considerations from two focus group interviews*

Regarding the two focus group interviews, these were carried out with ten teachers (TFG1 – TFG10 in Table 3.6) and thirteen teachers (TFG11 – TFG23 in Table 3.6) participating in two hybrid professional development courses. As part of the hybrid format, I combined face-to-face instructions with different time-scales (e.g. asynchronous and synchronous) and different forms of media (e.g. text and video). Roseth, Akcaoglu and Zellner (2013:54) refer to Mishra and Koehler (2006) to comment that “under ideal circumstances, hybrid approaches allow practitioners to match technology, pedagogy, and content to the specific needs of different learners and to the specific demands of different contexts”.

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These courses were part of a Foreign Languages Experimental Plan in Catalonia (PELE: Pla Experimental de Llengües Estrangeres) and were based on a simulation of the different activities of the Youncast project. The sessions delivered in these courses aimed at informing teachers about the project. The courses also sought to reinforce their mastering of the technological skills needed, providing a foundation towards growth of computer competency to improve teaching and learning.

Seeing that teachers most often showed had little experience either in participating in this kind of projects or in using the different technological tools needed, I decided that the best training for the activities suggested in the project was having teachers try out the activities from the perspective of the learners and apply them in their classrooms, if possible. After the hands-on experience, I changed my role from teacher trainer to researcher. They spent the last session out of the six face-to-face encounters we had:

.- sharing their personal views on potential difficulties they thought they would encounter during their participation in the activities arranged for the exchanges.

.- evaluating their experience with the online tools used in the project, and

.- discussing the technological and pedagogical implications of participating in these projects.

This shift of role from trainer to researcher aimed at obtaining initial feedback on several issues that could influence the SL teachers’ participation in synchronous online
partnerships with other schools from other countries. The feedback received from these focus group interviews was used as the starting point for developing the survey.

*Designing the survey - Hartnell-Young’s considerations*

Regarding Hartnell-Young’s considerations, the development of the survey also considered aspects of teachers’ roles when using computers in classrooms (Hartnell-Young, 2003). These are broadly categorised as designing the learning environments, managing people, resources and technology, mediating learning and improving practice. In particular, the survey covered aspects linked to the teachers as designers of the learning environment and to the role of teachers as managers of people and resources.

*Piloting the survey*

Once the survey was developed, seven educators working in primary and secondary schools and researchers in the field of SL and/or computer-mediated communication (CMC) from Catalonia and other parts of Europe (Table 3.7) piloted it and sent in their feedback in relation to several issues such as language use, technological aspects or content, among others and I made some changes accordingly.

<table>
<thead>
<tr>
<th>Teachers’ code</th>
<th>Role</th>
<th>Level</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>TP1</em></td>
<td>Teacher</td>
<td>Primary</td>
<td>English as a Second language &amp; Music</td>
</tr>
<tr>
<td>TP2</td>
<td>Head of ESL Department</td>
<td>Secondary</td>
<td>English as a Second language</td>
</tr>
<tr>
<td>TP3</td>
<td>Teacher</td>
<td>Primary</td>
<td>Tutor</td>
</tr>
<tr>
<td>TP4</td>
<td>School Director - Teacher</td>
<td>Secondary</td>
<td>English as a Second language</td>
</tr>
<tr>
<td>TP5</td>
<td>iEARN coordinator Youngcast project developer</td>
<td>Secondary</td>
<td>IT coordinator</td>
</tr>
<tr>
<td>TP6</td>
<td>Researcher</td>
<td>Tertiary</td>
<td>Master in E-learning</td>
</tr>
<tr>
<td>TP7</td>
<td>Researcher</td>
<td>Tertiary</td>
<td>Master in TESOL</td>
</tr>
</tbody>
</table>

*Table 3.7: Teachers and experts participating on piloting the survey*

(*TP = Teacher-Pilot*)
Delivery of the survey

According to Robson (2002:230), “researchers tend to have strong, frequently polarized, views about the place and importance of a survey”. The first intention in delivering the survey was to launch the survey to SL teachers worldwide and focus my investigation on a more quantitative analysis of the data.

Delivery to Spanish as SL teachers

I first delivered the survey to my professional contacts in Spain and UK as an iEARN coordinator in Catalonia and as a coordinator-designer of the Youngcast project. In fact, iEARN-UK coordinators offered me the possibility of using the iEARN-UK database to launch the survey among their 600 members. I contacted all of them by email, offering them the possibility of participating in the research study.

I requested them to answer the survey, but none of them did so. Among the reasons for not answering the survey is the fact that teachers in the UK had never contacted me before and they had never participated in the international project suggested or in any teacher training sessions linked with the project. Moreover, not all of the 600 teachers were Spanish SL teachers in the UK. The fact that a few months after contacting them, iEARN-UK association disappeared due to financial difficulties might not have contributed to the expansion and participation of these teachers in future editions of the project and in answering the survey.

Towards the end of the first academic year, I decided to include Spanish SL teachers from other English speaking countries — especially the US and Canada. One of the main reasons to extend the geographical area to contact teachers interested in answering the survey and in participating in the study was that I was not able to involve enough teachers from the UK.
Regarding teachers in Spain, the initial contacts were much easier. I first contacted ninety-three teachers (Table 3.8) from different geographical areas in Catalonia, who had previously participated in some of the teacher training sessions with me. Distributed into three different groups through a pseudonym (TS plus a listed number), the first two groups of teachers (TS01 – TS31 and TS32 - TS63) participated in two online summer courses organized by iEARN-Pangea in 2010, and the third group contacted (TS64 – TS93) were part of a teacher training course organized by the Department of Education in Catalonia during academic year 2009 - 2010. I was the teacher trainer in all of the courses, but I contacted them again as a researcher.

<table>
<thead>
<tr>
<th>Teachers' code</th>
<th>Professional Development Courses</th>
<th>School Year</th>
<th>Delivery format</th>
</tr>
</thead>
<tbody>
<tr>
<td>*TS01 – TS31</td>
<td>Summer Course 1 (iEARN – Pangea)</td>
<td>2010</td>
<td>Online</td>
</tr>
<tr>
<td>TS32 - TS63</td>
<td>Summer Course 2 (iEARN – Pangea)</td>
<td>2010</td>
<td>Online</td>
</tr>
<tr>
<td>TS64 – TS93</td>
<td>PELE Course 3 (Department of Education)</td>
<td>2009-2010</td>
<td>Hybrid</td>
</tr>
</tbody>
</table>

Table 3.8: Teachers contacted from Spain

*(T = teacher - S = survey)*

These training sessions were arranged to guide these SL teachers through their ‘potential’ participation in videoconference exchanges with their students. Despite being offered daily technological support from the coordinators of the project, they had never participated in the synchronous part of the exchanges and I had never received information from them on how the exchanges worked. Sending them the initial survey offered me the possibility of receiving feedback from teachers who had already participated in some part of the exchanges. All the teachers who received the survey knew
about the project and had worked under my own personal guidance in previous teacher training courses linked to the project, I was able to gather data from sixty-four (out of the ninety-three) teachers who received it.

3.3.2.1.2 Analysis phase 1: a qualitative background analysis

Initial quantitative approach

Initially, my goal in the investigation was to obtain a statistical analysis of the data gathered from the survey delivered to all the teachers contacted. I started analysing the data quantitatively (Roura, 2012). Such statistical analysis was done with the software SPSS (PASW STATISTICS 18.0 for Macintosh) from which I developed a 20-item measure scale that I called the Oral Synchronous Control Scale (OSCS).

While analysing data from these sixty-four teachers who answered the survey and informed by the literature linked to the use of videoconference technology in education, I shifted this initial quantitative approach of my investigation. Following a more qualitative approach, I decided to cover a gap in the literature and focus on a more in depth understanding of SL teachers’ integration of eTandem videoconference in their classrooms.

Not all the teachers contacted or who expressed their desire to participate in the research project could do so, as I had to pair them with other eTandem partners that shared approximately the same characteristics and could adapt to the flexible schedule that the participation in the videoconference exchanges required. Only twenty out of all the teachers who finally answered the survey could finally fit as eTandem partners in the Youngcast Research project.

Qualitative approach

Descriptive rather than predictive in its scope, data gathered from the survey was not used to provide valid and reliable measures of particular variables. This data was not coded as part of the data gathered on the following stages of the study. Rather, it
provided general background data about the characteristics of participant-teachers, the
current context of their schools, their technical possibilities (computer labs, hardware,
software) and potential classroom arrangements (timetables, number of students). Some
of the questions were also intended to obtain information regarding teachers’
methodological approaches in the classroom. These teachers were also asked about daily
routines in their classrooms, physical and virtual settings in their schools, curriculum
constraints, their professional development background and their attitude towards
innovation.

The overall teachers’ survey also functioned as a warm-up activity through which
teachers were supposed to become familiar with the topics to be discussed during the
online stimulated interviews they would go through just after each of the
videoconferences. In my context, and quoting Robson (2002), I also see this initial survey
as the instrument that could give that reassuring scientific ring of confidence to start the
investigation. This information was really useful as a starting point to reinforce the
conceptual framework of the study and follow the development of teachers from the
beginning of the process.

### 3.3.2.1.3 Interpretation phase 1: a background framework

Initially, I considered the possibility of using this initial data gathered from teachers to
write an initial whole chapter as the background framework from these SL teachers. I
finally decided to distribute data gathered from the survey and use it as background data
to each of the sections in Chapter 4. The first three sections in the findings chapter start
with background descriptive information on the topic developed. To do so, I also provide
tables with such a descriptive data. The majority of questions in the survey (Appendix C)
considered aspects linked to the teachers as designers of the learning environment and to
the role of teachers as managers of people and resources.
3.3.2.2 **A descriptive eTandem experience**

This second stage of the investigation (Academic Year 2011 - 2012) considers the whole experience of integrating eTandem videoconference technology in the particular context of this group of teachers and not just the synchronous online encounters between students. Next, I describe the process I followed during this period to collect (3.3.2.2.1) and analyse (3.3.2.2.2) data with the aim of uncovering and gaining insights on particular aspects of the SL teachers' experiences when integrating eTandem videoconferencing in their SL classrooms.

### 3.3.2.2.1 Collection phase 2: collecting teachers' accounts

The study was opportunistically located within the Youngcast project (Chapter 1 - 1.1.3. The Youngcast project), an eTandem exchange designed by iEARN-Pangea and iEARN-UK; the in-service programme for this project incorporated a pedagogical intervention in its design, which followed the different phases (Figure 3.2 - **in bold**) of the Learning Circle structure (Riel, 1995, 1997): getting ready (Phase 1), opening the circle (Phase 2), planning the circle (Phase 3), exchanging students' reports (Phase 4), organizing the circle publication (Phase 5) and closing the circle (Phase 6).

It required an online space where teachers and students could share and publish the material generated from the diversity of activities suggested for the different phases of the Learning Circle. The site provided each eTandem partnership with different sections to build up their own introductory profiles and to provide information on their experiences with the exchanges. This way, members of each eTandem partnership could share information about their schools, their students, teachers; they could also work online on the lesson plan design for each of the videoconferences. Teachers were also requested to record the videoconferences and upload them onto the platform. The online platform also provided teachers with access to a structured programme of teachers’ and students’ activities around the Youngcast project (Figure 3.2 - normal letters). I also created an
online course (Youngcast online course, 2010) with the aim of guiding them on what they had to do in each of these phases.

The collection of data through the different phases of the Youngcast Project proved to be effective to organise the data gathered temporally as it allowed me to draw a picture of the development of teachers as it occurred. Figure 3.1 provides details of the different research activities (highlighted) I initially scheduled for each phase in order to keep track of the teachers’ involvement in the project and in the investigation. Together with a brief description of the pedagogical activities suggested for each of the phases, more detailed information on how and when these instruments were used is provided below. The round chart indicates the idea that the gathering of data throughout these different phases could follow the open-ended cyclical process I sought for my study.

Figure 3.1: Different phases of the Learning Circle structure (in bold), teachers’ and students’ activities and research activities (highlighted).
3.3.2.1.1 Phase 1: Getting ready - emails, forum posts and T-T meetings

During phase 1, all the teachers in each eTandem partnership, with the researcher as observer, communicated with each other online either by email or via videoconference in order to elaborate the lesson plan for the eTandem videoconferences with their students. All the teacher-to-teacher videoconferences (Table 3.9) were captured online, thanks to different screen data capture software (e.g. screen-video recorder). Teachers were also encouraged to share and amplify the issues discussed during the different phases of the project using a forum on the platform prepared for the research; this forum was intended to function as a kind of reflective journal where teachers could have the opportunity of sharing their experiences with all the different teachers.

Matters of permission needed attention (Appendix D). It is during this phase that teachers allowed the researcher to collect empirical data from their classrooms and, subject to the approval of their school principals, expressed their commitment to the research project. As many contacts occurred online and directly with the teachers, I sent them an email with the attached files needed in order to have a written consent from the school board administrators and principals of each school. Thus I secured permission and access to do the research.

In addition, as I used students’ visual recordings of the exchanges as part of the analysis, I did not find it ethically feasible to use these without their permission; and the teacher also
had to ask for permission to do so. At the beginning of each interview, I asked them permission to record the online interview and I reminded them about issues of anonymity and confidentiality.

<table>
<thead>
<tr>
<th>Tandem</th>
<th>Participants</th>
<th>Year.Month.Date - Time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hill</td>
<td>2011.11.26 - 11'</td>
</tr>
<tr>
<td></td>
<td>Alex</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Anna</td>
<td>2011.11.17 - 54'</td>
</tr>
<tr>
<td></td>
<td>Elia</td>
<td>2011.12.05 - 28'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2011.12.09 - 38'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2012.02.01 - 20'</td>
</tr>
<tr>
<td>4</td>
<td>Mary</td>
<td>2011.10.07 - 18'</td>
</tr>
<tr>
<td></td>
<td>Gina</td>
<td>2011.11.30 - 17'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2012.02.29 - 30'</td>
</tr>
<tr>
<td>6</td>
<td>Cathy</td>
<td>2011.10.19 - 30'</td>
</tr>
<tr>
<td></td>
<td>Enid</td>
<td>2011.11.16 - 14'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2011.12.01 - 1.07'</td>
</tr>
<tr>
<td>7</td>
<td>Ari</td>
<td>2011.11.25 - 26</td>
</tr>
<tr>
<td></td>
<td>Pat</td>
<td>2011.12.02 - 17'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2012.02.24 - 31'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2012.02.29 - 10'</td>
</tr>
<tr>
<td>8</td>
<td>Jerry</td>
<td>2011.11.10 - 50'</td>
</tr>
<tr>
<td></td>
<td>Tere</td>
<td>2011.11.10 - 14'</td>
</tr>
</tbody>
</table>

Table 3.9: Teacher-to-teacher meetings

3.3.2.2.1.2 Phase 2: Opening the Learning Circle - emails, forum posts and T-T meetings

Figure 3.2: Research data gathered during Phase 2
As Riel (1997:web) states, “working with Learning Circle partners helps students develop important interpersonal skills and it also encourages interactions among teachers providing a very different model of professional development”. Interpersonal interaction was encouraged in phase 2 (Opening the Circle) when teachers and students worked posting a videopodcast on the platform, which is what Hampel and Stickler (2005:321) have called “explicit community forming activities”. Thus, together with the ‘lesson plan tag’, the creation of videopodcasts offered teachers and students the possibility of sharing an online warming-up activity. The teachers and students’ videopodcasts were published on the tandem teachers tag ¹ and the tandem students tag² from the eTandem site. Teachers also organised a first videoconference with the whole eTandem classrooms to introduce each other.

3.3.2.2.1.3 Phase 3: Planning the circle - lesson plan sheet

Figure 3.3: Research data gathered during Phase 3

¹ https://sites.google.com/site/youngcastandems/tandem
² https://sites.google.com/site/youngcastandems/groups
Once pedagogical and communication routines were entirely set, students and teachers started working on the preparation for the first of the videoconferences with their eTandem partners. Students were given their videoconference lesson plan sheet and they had to work on the preparation of the videoconferences. A shift in status – from consumers to creators of written information – occurred when students created their own report in the form of a text-document or slide-presentation. This written-report included what Carpenter and Slater (2000) call the creation and changing of ideas, as well as drafting, re-drafting and structuring of these ideas. An initial pedagogical suggestion was that the students converted their reports into an online magazine through the use of a web 2.0 website that allowed for the integration of different files (text-documents, spreadsheets, presentations...) using the online platform as well as Facebook or Twitter, for example.

The uploading of the report onto an online format nurtures a sense of co-ownership and joint responsibility in the creation of the written product, which is what Ede and Lunsford (1990 in Murray and Hourigan, 2008) have labelled as the singular text/plural authors approach. This reinforces the creation of socially constructed knowledge communities, where peers share their expertise in what Songer (1996) refers to as distributed-expertise learning. It is also during the planning stage that the different groups prepare and pilot for phase 4 (Exchanging Student Work), where they participate in the videoconference exchanges.

The design of the lesson plan was essential for the development of the whole project. Teachers were initially requested to choose and share a curriculum-based theme on which they would like to work during the project. A section on each individual eTandem site offered teachers the possibility of exchanging their preferences on which topics they would like to focus their students’ participation during the videoconferences and share their final decision on the lesson plan tag of their eTandem site.

Along with information on the topic, teachers were also requested to define the time-schedule and select the kind of interaction of the exchange (classroom-to-classroom;
group-to-group; student-to-student (Ss-to-Ss)); they also considered how they could integrate their participation in the exchanges within the curriculum they were supposed to follow as part of their wider teaching agenda. These lesson plans were also used to gather information about how teachers were planning the physical environment (the classroom layout and the technological possibilities of their school) and how they were managing students in groups, as shown in an example of a lesson plan sheet from Tandem 1 (Table 3.10).

<table>
<thead>
<tr>
<th>Lesson plan sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Topic of the lesson</strong></td>
</tr>
</tbody>
</table>
| **Linguistic objectives** | • words for introducing oneself  
• greetings in English  
• talking about likes and interests |
| **Content objectives** | • present simple of the word to be  
• basic information about oneself asking and answering questions |
| **Activities** | Worksheet: I present myself |
| **Ss-to-Ss videoconferences** | |
| **VC format** | Classroom-to-classroom |
| **VC software** | BlackBoard |

**Table 3.10:** Sample lesson plan Tandem 1

The feedback on the teachers’ experiences was continuously collected through the exchanging of emails and online meetings with them and me as a researcher throughout the different phases of the project. Although it was difficult for me as an online researcher to grasp what was happening in the sessions prior to the videoconferences, I intended to get this information directly from teachers through emails and through the teacher-to-teacher meetings before the videoconference exchanges. Together with some teacher-to-
teacher meetings I had with participant-teachers (Table 3.8), Table 3.9 below provides a summary of data gathered before starting the first videoconferences with their students.

<table>
<thead>
<tr>
<th>Tandem</th>
<th>Participants</th>
<th>Survey</th>
<th>Emails</th>
<th>Lesson plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hill</td>
<td>√</td>
<td>60</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>Alex</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Jude</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Luca</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Anna</td>
<td>√</td>
<td>124</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elia</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Mary</td>
<td>√</td>
<td>40</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>Gina</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Glory</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eva</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Cathy</td>
<td>√</td>
<td>43</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>Enid</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Ari</td>
<td>√</td>
<td>66</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>Pat</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Jerry</td>
<td>√</td>
<td>84</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>Tere</td>
<td>√</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 3.11:** Overview of data gathered before starting the students’ videoconferences

### 3.3.2.2.1.4 Phase 4: Exchanging students’ report - recording of videoconferences

**Figure 3.4:** Research data gathered during Phase 1
In phase 4, each class or group of students - depending on how groups were arranged in phase 3 - participated in the synchronous exchanges. The students’ videoconferences were published on the videoconferences tag\(^3\) from the eTandem site. Although I tried to attend all the videoconferences and record as many videoconferences as possible myself, it was not always possible to do so due to time restrictions; sometimes two videoconferences were carried out at the same time, or other times I did not have access to technology when the videoconferences were scheduled.

Again, teachers shared their experience, their feelings and the problems they encountered through the forum or by email. I followed the students’ videoconference sessions mainly online in order to observe and take notes on how teachers and students participated in the exchanges; I also had the possibility of visiting several classrooms during the videoconference sessions. Data obtained during this phase included field notes of these online and/or face-to-face sessions and recordings of the student-to-student videoconferences. These observations and the recorded videoconferences also functioned as a warm-up for topics to be discussed in the stimulated recall interviews organized in the following phase.

For the synchronous exchanges, iEARN signed an agreement to use Elluminate (2014) without cost, but teachers were allowed to use any other software they preferred, such as Skype (2014) or Adobe Connect (2014). I did several pilot videoconferences with teachers with some of their students in order to try the most appropriate software to produce the videoconferences. After trying several videoconference tools and having several conversations with teachers as to how useful these were, the agreement was to use Skype and not other available software. Reasons given were basically that this software was free for two-way exchanges. It was also available to all of them, as well as user-friendly and, above all, most of the students knew about it and had easy access to it.

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\(^3\) https://sites.google.com/site/youngcastandems/videconference/videconference-1
For data collection purposes, I tried different software that could allow me to record both the students’ videoconferences and the online interviews with teachers (Phase 5). Some of the software used for the videoconferences had the recording facility included (Elluminate, 2014); but since the final decision was to use Skype (Skype, 2014), I had to spend several sessions trying different programs available to record the online exchanges. Teachers were also requested to record the videoconferences with an external camera when possible. Moreover, as the files of the recordings were too large to send by email, teachers were requested to upload them on an external server prepared for the project.

3.3.2.2.1.5 Phase 5: Organizing the Circle Publication - text and video stimulated recall interviews

During Phase 5, the videoconferences were published on the eTandem platform as videopodcasts. I used this material to do several text- and video-stimulated recall interviews with the teachers. I tried to interview all the teachers at least two times with the aim of seeking detailed evidence of their experiences. But soon after initiating year 2

4 https://sites.google.com/site/tandemsanche1/
of the academic study, tandems 2, 5, and 9 withdrew from the research without producing any videoconferences with their students. These teachers took no further part in the project due to several reasons analysed in the findings section, and I could not interview them even once. In all, from the twenty SL teachers who initially committed to the research, twelve teachers were interviewed at least once and six of them were interviewed again a second time (Table 3.12).

<table>
<thead>
<tr>
<th>Tandem</th>
<th>Participants</th>
<th>Year.Month.Date - Time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hill</td>
<td>2011.12.09 - 42'</td>
</tr>
<tr>
<td></td>
<td>Alex</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Anna</td>
<td>2012.04.17 - 48'</td>
</tr>
<tr>
<td></td>
<td>Elia</td>
<td>2012.05.03 - 30'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2012.08.07 - 41'</td>
</tr>
<tr>
<td>4</td>
<td>Mary</td>
<td>2012.03.06 - 44'</td>
</tr>
<tr>
<td></td>
<td>Gina</td>
<td>2012.03.22 - 45'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2012.06.02 - 13'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2012.06.02 - 54'</td>
</tr>
<tr>
<td>6</td>
<td>Cathy</td>
<td>2012.03.27 - 40'</td>
</tr>
<tr>
<td></td>
<td>Enid</td>
<td>2012.03.29 - 31'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2012.08.09 - 25'</td>
</tr>
<tr>
<td>7</td>
<td>Ari</td>
<td>2012.03.23 - 41'</td>
</tr>
<tr>
<td></td>
<td>Pat</td>
<td>2012.04.12 - 25'</td>
</tr>
<tr>
<td>8</td>
<td>Jerry</td>
<td>2012.04.02 - 55'</td>
</tr>
<tr>
<td></td>
<td>Tere</td>
<td>2012.04.19 - 38'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2012.08.29 - 25'</td>
</tr>
</tbody>
</table>

Table 3.12: Details of videoconference interviews recorded (Year 2011 - 2012)

Text- and video-stimulated recall interviews: an overview

The interviews took place online using Skype and, with the permission of each teacher, these were video recorded. The interviews generally lasted between 40 and 60 minutes, and involved one or two SL teachers maximum and me. I finally did a total of seventeen interviews during Year 2011 - 2012 (Table 3.12). In some of the interviews, not only did the SL teacher participate, but other staff members of the same school did too. On three occasions, two teachers opted for a joint interview; on two occasions, a SL teacher and her ICT coordinator from the same school who had worked together on the project and collaborated in the research; on another occasion, two eTandem SL partners preferred to be interviewed together as they had also worked in the project as a team of teachers. These were usually done using the native language of the interviewee with the aim of
avoiding misunderstandings. The interviews consisted in three overlapping parts: opening conversations, semi-structured stimulated recall section - commented below - and a final section that consisted on a final open-ended exchange of questions and ideas.

- **Part 1: opening conversations**

After I had asked teachers for consent to record the sessions and informed them about ethical considerations, the first minutes of the interview aimed at creating a relaxed environment to set the teachers at ease with the online format of the interview and give them the first instructions. During this initial stage, I also encouraged them to speak freely and to take the initiative in identifying the aspects of the project (in general) and of recent videoconference experiences (in particular) that they wished to comment on.

In this first part of the interviews, teachers were encouraged to present their general perspectives on the experience with the videoconferences in relation to the different phases of the project. They were also encouraged to comment on how they exploited the technology pedagogically, and how this influenced their teaching and pupils’ learning.

- **Part 2: Semi-structured stimulated recall interviews**

When providing unstructured comments and reflections on their recent experience, they often addressed elements that I was more formally interested in considering during part 2 of the interview. Better than a set of open questions to guide this second part of the interviews, I adopted a dual approach to data collection by preparing a set of semi-structured guides based on the material gathered from previous phases (emails, forum posts, student-to-student videoconference recordings).

This kind of checklist guide aimed at stimulating teachers to reflect on the exchanges and moving the focus of the interviews onto specific critical incidents that occurred during any of phases involving a recent videoconference experience. The use of these potential critical incidents as a guide for an interview recalls Robson’s (2002:278) definition of a non-standardized, open-ended and in-depth “type of unstructured interview”, which he
compares to a “lengthy, intimate conversation”. Lofland and Lofland (1995) prefer the term intensive interviewing, and also stress the importance of an interview guide.

I also supplemented the usual semi-structured questions with references to emails sent by teachers to me or with observations by students carrying out a videoconference. Following Flanagan’s suggestion (1954 in Hugues, 2009), teachers were encouraged to provide contextualized examples of the exchanges studied and their significance, as CIT seeks. To enable full and accurate responses, teachers were requested to focus on critical incidents related to different phases of the project.

As Borg observes (2006), the use of video-stimulated recall interviews has been advocated as an appropriate data collection method to investigate the values, beliefs, assumptions, theories and strategies that underlie teachers’ behaviour and their decisions. It has mostly been used to initiate and facilitate discussion about teachers’ rationales and actions. A recent strand of research into language teaching with new technologies (Cutrim Schmid, 2008; Develotte et al., 2008; Dooly, 2009) explores teachers’ cognitions, examining what SL teachers think, know and believe and the relationships of these mental constructs to what teachers do in the language classroom.

White (2011:273) refers to Borg (2003) to add that through these verbal commentaries researchers can "trace the reasons for classroom practice to teacher cognitions, in particular factors relating to their own FL learning, training, classroom experience, and institutional contexts (Borg, 2003). Cutrim Schmid, 2011:253) refers to Egbert et al. (2009) who discuss "how research can be validated through the integration of teachers’ perspectives". They (ibid) argue that "one way to obtain a more accurate account of classroom context is by including teachers' voices, observations and concerns”

Guichon (2009) is one of the few researchers in CALL that have used this method for data collection and training; he used video-stimulated reflective analysis to investigate the key competencies that language tutors need to develop in order to manage synchronous online teaching. As part of a longitudinal study investigating a model of Interactive Whiteboard technology professional development programme, Cutrim Schmid (2011)
discusses the potential benefits of using video-stimulated reflection in CALL research as both a research method and as a means for teacher professional growth.

The online format of the interviews limited the availability of teachers, as it was difficult to meet them for more than half an hour. The ring of a bell and students entering the classroom often interrupted conversations. Some teachers tried not to mix their professional schedule with their private life, so it was not easy to meet them outside their school hours, although some of them made an effort.

The fact that it takes some time to get used to this kind of formal and online conversations did not facilitate in-depth reflections regarding their different experiences. I tried to solve it with the development of an online mindmap that I devised myself. The diagram format of the mindmap allows to visually organising information. It is often created around a single concept to which associated representations of ideas such as images, words and parts of words are added. Major ideas are connected directly to the central concept, and other ideas branch out from those.

The mindmap allowed me to share with the interviewees’ video-recordings of the sessions or references to previous information received from emails on a single online format. To do so, I divided the online mindmap into three different sections (Appendix E):

**Section 1:**
The ethical consent section allowed me to clearly inform interviewees on these three points: informed consent, anonymity and confidentiality

**Section 2:**
The material section allowed me to have straight access to recordings of teacher-to-teacher videoconferences and students’ videoconferences, emails, and lesson plan sheets from the teachers interviewed. I also prepared a coding graph from a first analysis of data with QSR Nvivo (2014) software done from these initial resources received.
Section 3:

A timeline section of the different phases of the Learning Circle Structure, where I refer to specific information from the material gathered.

Rather than creating the mindmap around a single concept, I divided it into the different phases of the Learning Circle structure. This material was used, when necessary, as a text-stimulated or video-stimulated resource or as a memory refresher for the teachers. As many of the initial reflections on part 1 of the interviews were often linked to aspects related to the online interview guide designed for this second part, these guide prompts were not always addressed in sequence; it all depended on the course of the conversation. Sometimes this material was only used as a guide for me, but not for the interviewee. I usually took notes on aspects that I dealt with later during the conversation, or aspects that linked me to other parts I was interested in dealing with.

One of the difficulties when dealing with this online format was that the preparation of material was quite complex as it involved references to different sources (emails, videoconference recordings) for each interview. Despite its complexity, the guide proved to be really useful when structuring the interview in relation to the different parts of the project. I shared the online mindmap with the interviewees through the share screen facility on Skype.

Technically, the use of the online map proved to be challenging, and sometimes did not facilitate the integration of this material as part of the interviews. Thus, when trying to show different parts of the video-recordings, the interviewees could not hear the audio properly unless they themselves searched for that particular part on their own computer.

Moreover, when using the share screen option, I disappeared from the screen as the channel for sharing the screen was the same as the video channel; to solve this whenever possible, I used two computers with two different Skype accounts which provided three different channels for communication (Figure 3.6): two to see each other, and another one.
to share information from the mindmap. Another issue to consider when sharing text from emails, for example, was that sometimes it was too long; this made reading on the screen more difficult and slowed down the dynamics of the videoconferences.

Whenever eTandem teachers decided to repeat the learning circle and new videoconference sessions were scheduled, the analysis of the previous sessions was also used to prepare the next stimulated interviews. All the interview recordings were fully transcribed and were analysed along with the emails received and the lesson plan sheets.

Figure 3.6 Sample of video stimulated recall online interview

3.3.2.2.2 Analysis phase 2: teachers’ descriptive accounts

For the analysis process of data I gathered during Academic Year 2011 - 2012 (3.3.2.2.1) and Academic Year 2012 - 2013, I followed Flanagan’s (1954 in Hugues, 2007:7) recommendations of dividing it into three steps (Table 3.13): frame of reference, category formulation and specificity.
As the aim during Academic Year 2011 - 2012 of the study was to uncover aspects of the SL teachers’ eTandem experiences, I followed step 1 (3.3.2.2.2.1) and step 2 (3.3.2.2.2.2) of the analysis process. During Academic Year 2012 -2013 of the study and with the need to identify particular incidents, I followed step 3 of the process of analysis referred to as specificity (3.3.2.3.2.1); this aimed at collecting specific data from in-depth interviews with SL teachers who continued with the project and experts who had been previously linked with it.

### 3.3.2.2.2.1 Step 1: Frame of reference

"Most qualitative researchers attempt to avoid prior commitment to theoretical constructs before gathering any data" (Yin, 2003 in Rowlands, 2005:86). However, the main purpose of the investigation was to study the development of SL teachers in never-before-researched project the Youngcast Project, within the bound of already well-established research topics: teachers’ roles in classroom with computers, and videoconference-integration in the classroom.

**Classification around the Learning circle structure**

Considering so, I initially generated a first classification level, which was not exactly a level of analysis but a tool to categorise initial data. This took into account the different phases of the Learning Circle structure that the design of the project was based on. I started gathering data for the Youngcast Research Project, analysing and categorising it considering these different phases.
Initially, the organisation of the data through the different phases of the Learning Circle structure proved to be effective to organise the data from a perspective of time. This allowed me to draw a picture of the development of teachers as it occurred (Figure 3.7). But I soon realised that some of the subcategories were repeated in the different phases. It obliged me to establish another way of coding the information without necessarily following this temporal pre-established classification.

![Figure 3.7: Initial coding of data around the Learning Circle structure pre-established categories](image)

**Classification around Hartnell-Young’s model**

I started working deductively within an explicit conceptual framework built on Hartnell-Young’s model (2003) on teachers’ roles in classroom with computers. In a deductive approach categories are selected before the data is analysed; when using an inductive method, they are developed from the data by means of generalization (Morse, 1991; Fereday and Muir-Cochrane, 2006).

This frame of reference proved to be an effective way to start categorising the developmental paths experienced by these teachers when integrating the videoconferences in the SL classroom (main research question of the study). Considering Hartnell-Young’s model, I classified the different sources gathered considering the teachers’ roles as designers, managers and mediators in classrooms where computers are used and its subsequent subcategorisation as indicated below:

- Designing: planning curriculum, planning physical and virtual environments, establishing a climate for learning (Hartnell-Young, 2003:100).

- Mediating learning: instructing, monitoring, demonstrating, coaching, assessing (Hartnell-Young, 2003:166).

Built on Hartnell-Young’s frame of reference, the analysis process on this second year continued with the formulation of broad categories (Figure 3.8). This procedure is recommended by Flanagan (1954 in Hugues, 2007:7), who indicates that the researcher should develop a frame of reference, defined as “a set of broad categories for classifying the critical incidents”.

![Nodes](image)

**Figure 3.8: Initial coding of data around Hartnell-Young’s broad categorisation**

### 3.3.2.2.2 Step 2: Category formulation

But given that this study was aimed at theory building, not theory testing, the above conceptual framework was used solely as a guide, in accordance with Klein and Myers' (2001 in Rowlands, 2005) recommendation that the empirical research needs to be guided by or at least informed by one or more social theories. On referring to this second step of the analysis process, Flanagan (1954 in Hugues, 2007:7) suggested identifying “critical behaviors and sorts them into categories and sub-categories”. With the help of QSR NVivo (2014) software, I combined data according to themes and continuously recategorised these categories and subcategories again and again.
3.3.2.2.3 **Interpretation phase 2: a vivid quilt-like word picture**

According to Denzin and Lincoln (2005), the multiple methodologies of qualitative research may be viewed as a bricolage, and the researcher as bricoleur. A bricoleur is a "Jack of all trades or a kind of professional do-it-yourself person" (Levi-Strauss, 1966:17). The bricoleur is "adept at performing a large number of diverse tasks, ranging from interviewing to observing, to interpreting personal and historical documents, to intensive self-reflection and introspection" (Denzin and Lincoln, 2005:5).

Following Hugues (2009), the study's bricolage is created through a dual perspective: in the form of a vivid quilt-like word picture of the teachers' accounts, as detailed on the following lines, and in the form of a mini-quilt (ibid), as detailed on the following section (3.3.2.3.3).

*A quilt-like word picture*

The study builds on Hugues' expanded critical incident technique (2009) and the quilt-like nature of her study. This quilt-like nature reflects Denzin and Lincoln’s (2005) notion of qualitative research as bricolage - the product of the bricoleur's labour. The bricolage, a pieced-together, close-knit set of practices, provides a solution to a problem in a concrete situation. This solution (bricolage), which is the result of the bricoleur's method, is "an emergent construction" (Weinstein and Weinstein, 1991:161) that changes and takes new forms as different tools, methods, and techniques are added to the puzzle.

As an interpretive bricoleur, and following Hugues (2009:70-71), "I set out to create a quilt-like word picture". As with quilt-making, my research approach evolved gradually, in an emergent manner (Lincoln and Guba, 1985) with the aim of incorporating many ‘pieces’ in the form of SL teachers’ narratives and researcher's observations and shows these SL teachers actively integrating eTandem videoconferencing in their SL classrooms.
Like a "multi-textural quilt" (Hugues, 2009:69), my investigation reflects the rich diversity of the SL teachers participating in the study. After the background description of the context of the SL teachers participating in the study (3.3.2.1.3.), I used the analysed data to draw a vivid quilt-like word picture of the SL teachers’ accounts on their experiences in the eTandem exchanges with the use of direct quotations from them.

3.3.2.3 A set of critical findings

During Academic Year 2, the study aimed at uncovering aspects of the SL teachers’ eTandem experiences (3.3.2.2). As detailed on the following lines, the collection (3.3.2.3.1) and analysis (3.3.2.3.2) processes during the third year of the investigation (Academic Year 3) built on this previously generated classification of data. This last stage aimed, though, at identifying particular critical incidents in the SL teachers’ development when integrating eTandem exchanges in their SL classrooms.

3.3.2.3.1 Collection phase 3: collecting in-depth data

Regarding the collection of data during this last phase of the study (Figure 3.9), the initial idea was to close the circle with a group interview with all the teachers involved on each of the eTandem partnerships (e.g. SL teachers from each eTandem partnership, ICT coordinators, among others). The intention was to conduct these in-depth interviews when they either decided to quit the study or when I decided to finish gathering data for the investigation. But what happened was that once teachers decided not to continue with the videoconferences, it became almost impossible to contact them again.
With this unexpected outcome, I decided to change the strategy and close the circle during the first semester of the Academic Year 2012-2013 of the study (September, 2012-January, 2013) with six of the SL teachers who showed their willingness to continue collaborating with me. Once Year 2 of the initiative was over, I contacted those six teachers during the school holidays (July-August 2012). I had several videoconference meetings with them to arrange everything and work on the potential critical incidents detected. When the academic year 2012-2013 started, though, three of them justified that they had to quit. As only one of the eTandem partner pairs (two teachers) wished to continue collaborating with the study, I decided to follow only this eTandem group.

With the idea of getting in-depth reflections on the critical findings detected, I finally conducted two in depth interviews both in face-to-face and group format. The face-to-face format allowed me to overcome the challenges encountered during the online interviews in Year 2 of the initiative. The group interview format allowed me to reflect on the critical findings again with the two SL teachers from Spain - one of them still actively involved in an exchange - participating in the exchanges and to share their ideas with two project coordinators and two ICT experts who had been involved actively in the eTandem project (Table 3.14) and who wished to participate in the final group interviews.
<table>
<thead>
<tr>
<th>Group interview</th>
<th>Participants</th>
<th>Year.Month.Date - Time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Interview 1</td>
<td>Iu - ICT expert</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jose - project coordinator</td>
<td>2012.11.14 - 54’</td>
</tr>
<tr>
<td></td>
<td>Elia - SL teacher</td>
<td></td>
</tr>
<tr>
<td>Group Interview 2</td>
<td>Jerry - project coordinator</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jordina - SL teacher</td>
<td>2012.11.06 - 56’</td>
</tr>
<tr>
<td></td>
<td>Tere - ICT expert</td>
<td></td>
</tr>
</tbody>
</table>

Table 3.14: Participant-teachers in the final group interviews

### 3.3.2.3.2 Analysis phase 3: specific incidents

For the analysis process of data I gathered during Academic Year 2 (2011 - 2012) and Academic Year 3 of the study (2012 - 2013), I explored Flanagan's (1954) critical incident technique (CIT) and Hugues’ (2009) expanded critical incident technique (ECIT) as the methodologies chosen. Flanagan (1954) was the first to describe CIT as an occurrence or condition, related to something else, which interrupts normal procedure.

During Academic Year 2 of the study (2011 - 2012), I did not put any delimitation to the SL teachers’ contributions. Instead, I invited them to select and discuss any aspect connected with their experience. They were not directly asked to report on incidents that represented aspects of their experience. For the analysis process of data I gathered during Academic Year 2 of the study (3.3.2.2), I followed Flanagan’s (1954 in Hugues, 2007:7) steps on generating a frame of reference (Step 1) and the formulation of the categories (Step 2). The categorisation of data during this academic year supported the detection of the first critical incidents and their connection with other similar incidents recorded by other teachers.
For the analysis process of data I gathered during Academic Year 3 (2012 - 2013), I followed step 3 of the process of analysis referred to as specificity (Flanagan, 1954 in Hugues, 2007:7). Next, I detail how the process of analysis during year 3 allowed me to finally identify a list of critical findings in the form of relevant themes and its subsequent successful and unsuccessful critical incidents as identified in Chapter 4 (4.1.3; 4.2.3; 4.3.3; 4.4.2). To illustrate this process, I also provide a practical example at the end of this section (3.3.2.4).

3.3.2.3.2.1 Step 3: specificity

More confirmatory in nature, this step aims at arranging categories detected “into a series of well-defined, mutually-exclusive categories and subcategories of decreasing generalizability/increasing specificity” Hugues (2007:8). The emphasis of both CIT and ECIT on finding out what users feel are the critical features encountered allowed me to focus more on specific incidents that SL teachers participating in the exchanges had experienced personally, and which aimed at getting a subjective report while minimizing interference from stereotypical reactions. Next, I illustrate how Flanagan's CIT and Hugues’ ECIT prompted the methodological exploration I lacked, adapting and incorporating several elements that I considered essential for my process of analysis such as a cyclical element of reflection and a binary and thematic categorisation of data.

Cyclical element of reflection

As Hugues (2009:76) explains, “critical incidents can provide a useful reflective tool which implies continuous backwards and forwards reflection”. Contrary to CIT and similar to ECIT, I incorporated a cyclical element of reflection in the form of group interviews with two ICT experts, project coordinators and two SL teachers (3.3.2.3.1) with the idea of obtaining an understanding of the processes investigated.
Feelings and thoughts emerging from these experts’ and the few SL teachers’ reflections upon aspects previously gathered and analysed during Academic Year 2 of the study supported the process of analysis for Academic Year 3. To do so, I classified the data gathered during Academic Year 3 in relation to the previous categorizations, re-examining them again or creating new categories or subcategories that could stand by themselves. This process of analysis confirmed previous critical incidents detected or identified new ones.

*Thematic categorisation - relevant themes*

Flanagan’s CIT limited its categorisation to positive and negative behaviours. Hugues’ ECIT adopted both a binary and thematic categorisation. Contrary to CIT and similar to ECIT, I adopted both a binary and thematic approach when categorising data into mutually-exclusive categories which indicated recurrent and relevant themes in the data. Building on the broader categories and subcategories in the data, I started (re)categorising and analysing each of the categories and subcategories of the data with the idea of ‘decreasing their generalizability’ and ‘increasing their specificity’. Each of these subcategories included references from SL teachers’ accounts that supported and exemplified incidents considered as significant for their development when integrating eTandem videoconferencing in their SL classrooms.

*Binary categorisation - successful and unsuccessful critical incidents*

Flanagan’s CIT (1954:338) notion of an incident as being significant builds on whether or not it contributes either positively or negatively to the general aim of the activity. Hugues’ (2009) study on international students using online information resources to learn also provides useful examples around this binary categorisation such as categorising resources as used or not used or search terms as effective or ineffective. I regarded CIT and ECIT
techniques as potentially suitable for acquiring knowledge on how to improve the performance of the eTandem videoconference exchanges.

Contrary to usual practice in CIT and ECIT, SL teachers throughout Academic Year 2 and Academic Year 3 were not directly asked to report on incidents that represented positive and/or negative aspects of their experience. Similar to both CIT and ECIT binary categorisation, the process of analysis of data gathered aimed at drawing a picture of which aspects SL teachers wishing to integrate eTandem exchanges in their classroom should consider as significant for the SL teachers’ successful or unsuccessful development when trying to integrate videoconference-technology in their classrooms.

In doing so, the selection of a subcategory as critical incident was not based on either the number of references coded on a general basis –that is, subcategories referred to by most of the teachers– or the individual contributions from them. This built on whether or not critical incidents detected supported or inhibited the teacher’s successful or unsuccessful development on a particular relevant theme.

3.3.2.3.3 Interpretation phase 3: presenting critical findings as mini-quilts

Hugues (2009:71) states that critical incidents "represent the threads that draw the pieces together into a whole". She (ibid) considers that "the various pieces are significant in their own right, yet they fit together to form a nuanced view". A list of critical findings in the form of mini-quilts – using Hugues’ (2009) words – are presented with the aim of summarising key aspects of the SL teachers’ experiences when integrating eTandem videoconferencing in their classrooms.

As identified in Chapter 4 (4.1.3; 4.2.3; 4.3.3; 4.4.2), these mini quilts represent the conceptual outcomes of the study. Each of them takes the form of a five-row table (Table 3.15) and it is divided into two parts. Row 1 and 2 provide the name of the relevant theme. Rows 3 to 5 provide the list of critical incidents linked with the theme. Considering the teacher development, these are classified as unsuccessful (Row 4 and illustrated with a red arrow) or successful (Row 5 and illustrated with a green arrow). I support each of these mini-quilts with a brief explanation. Next, I illustrate the process I followed from the
initial categorisation of background data to the final step in the process where I categorise this data as a critical incident.

<table>
<thead>
<tr>
<th>THEME</th>
<th>DEVELOPMENT</th>
<th>CRITICAL INCIDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td></td>
<td>Critical incident 1</td>
</tr>
<tr>
<td></td>
<td>←</td>
<td>Critical incident 2</td>
</tr>
<tr>
<td></td>
<td>Unsuccessful developments (due to)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>→</td>
<td>Critical incident 3</td>
</tr>
<tr>
<td></td>
<td>Successful developments (due to)</td>
<td>Critical incident 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Critical incident 5</td>
</tr>
</tbody>
</table>

Table 3.15: Sample of the five-row table in which I introduced the critical findings

3.3.2.4 A practical example

On implementing the research design, I carried out data collection, analysis and interpretation concurrently. I did so into three differentiated but interrelated stages over a period of three academic years (2010 - 2013) of the research project (Table 3.4):

Academic Year 2010 - 2011 - Background stage (3.3.2.1)
Academic Year 2011 - 2012 - Teachers' accounts stage (3.3.2.2)
Academic Year 2012 - 2103 - Set of critical findings (3.3.2.3)

The aim of using the example that follows is to show the practical application of this process in detail throughout each of these stages. To do so, I illustrate such a process with an example on the role of the second language in relation to the different perspectives of the SL teachers. This encompasses examples from the initial collection and categorisation of background data (3.3.2.1 - Stage 1) to how I dealt with the teachers' accounts (3.3.2.2 - Stage 2) and to how I finally identified such a data as a critical finding (3.3.2.3).
3.3.2.4.1 Example Stage 1: background framework on the SL of the students

Stage 1 (Academic Year 2010 - 2011) of the process (Table 3.16) aimed at collecting (3.3.2.1.1), analysing (3.3.2.1.2), interpreting (3.3.2.1.3) and presenting background data from teachers (4.1.1, 4.2.1 and 4.3.1) through information gathered from an initial survey. Descriptive in its scope, this data provided background data from teachers. It also functioned as a warm-up activity so that SL teachers could become familiar with the topics to be discussed during the online stimulated interviews they would go through just after each of the students’ synchronous encounters.

<table>
<thead>
<tr>
<th>Collection phase</th>
<th>Analysis phase</th>
<th>Interpretation phase</th>
<th>Presentation phase (Chapter 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3.2.1 - SL teachers' background</td>
<td>3.3.2.1.1 - Collection stage 1: collecting background data - Survey</td>
<td>3.3.2.1.2 - Analysis stage 1: a qualitative background analysis</td>
<td>4.1.1 Teachers’ background on planning the physical space</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.3.2.1.3 - Interpretation stage 1: a background framework</td>
<td>4.2.1 Teachers’ background on planning the social environment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4.3.1 Teachers’ background on planning the virtual setting</td>
</tr>
</tbody>
</table>

Table 3.16: Overview of phases from Stage 1

The majority of questions in the survey (Appendix C) covered some aspects of teachers’ roles when using computers in classrooms (Hartnell-Young, 2003). In particular, it considered aspects from the teachers as designers of the learning environment and some considerations on the role of teachers as managers of people and resources such as the characteristics of teachers, the current context of their schools, their technical possibilities, potential classroom arrangements, teachers’ methodological approaches in the classroom, physical and virtual settings in their schools, among others.

The first three sections in the findings chapter (Chapter 4 - presentation phase) start with background descriptive information on the topic developed where I provided a
description of the results supported with percentages from the data. Only two points in the survey, though, covered aspects linked to the second language of the students. Question 23 requested teachers to tick on a list of potential problems that SL teachers might encounter when trying to integrate videoconference-technology as part of an eTandem exchange. Among these potential problems, teachers could select aspects linked to the language level of the students (Table 3.17 - question 23.4) and the potential of technology to practice a SL (Table 3.17 - question 23.8).

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>23.4</td>
<td>The language level of my students is not good enough.</td>
</tr>
<tr>
<td>23.8</td>
<td>It would not be helpful for my students to be able to communicate with students from other countries via a monitor or PC to practice their second language.</td>
</tr>
</tbody>
</table>

*Table 3.17: List of items in the survey linked to the second language of the student*

These first answers from the teachers hinted at a general tendency among them to view their students’ proficiency in the language as an impediment to participate in this kind of exchanges. Through the examples provided on the following pages, I will clearly describe how this initial background data around the role of the second language level of the students evolved.

**3.3.2.4.2 Example Stage 2: a quilt-like picture on the SL of the students**

Stage 2 (Academic Year 2011 - 2012) of the process (Table 3.18) aimed at collecting (3.3.2.2.1), analysing (3.3.2.2.2), interpreting (3.3.2.2.3) and presenting a descriptive and vivid quilt-like word picture from teachers (4.1.2, 4.2.2, 4.3.2 and 4.4.1) through information gathered from emails, teacher-to-teacher meetings and interviews.
As the aim in this second year of the study (Academic Year 2011 - 2012) was to uncover aspects of the SL teachers’ eTandem experiences, I followed step 1 (3.3.2.2.2.1 - Frame of reference) and step 2 (3.3.2.2.2.2 - Category formulation) of the analysis process as Flanagan’s recommends (1954). Step 1 aimed at generating a frame of reference and step 2 allowed the first formulation of categories. With this aim, I started working deductively within an explicit conceptual framework built on Hartnell-Young’s model (2003) on teachers’ roles in classroom with computers. I classified the different sources gathered considering the teachers’ roles as designers, managers and mediators. Built on Hartnell-Young’s frame of reference, the analysis process in this second year continued with the formulation of broad categories.

From the broad category *designing*, for example, I generated several new subcategories describing them accordingly. A first subclassification of data around this broad category (Figure 3.13) generated subcategories that referred to issues such as the initial *enthusiasm* of the teachers, *prior experience* of the students, problems with the *management of groups* or
the feeling of being overworked, among others. I initially included here the subcategory second language (SL) - the example I use throughout this section.

This initial subcategorisation of data within the main category designing built on the fact that my initial tendency in the process of analysis was to classify data from a chronological perspective, that is, taking into account the period teachers transmitted their concerns. The ones above, for example, happened while they were designing their future synchronous encounters. Later in the process, I recategorised them accordingly.

Soon I realised that references initially subcategorised as SL encompassed those reflections from teachers related to the students' proficiency level as a potential requirement to participate more actively in the exchanges and also to how both the use of Spanish and English as a SL should be distributed during the synchronous encounters so that students could practise each other's language. I recategorised the subcategory SL into SL use and SL level accordingly (Figure 3.10):

<table>
<thead>
<tr>
<th>Name</th>
<th>Sources</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designing the learning environment</td>
<td>36</td>
<td>223</td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Aim</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Classroom</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Culture</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Fist videconferences</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Initial enthusiasm</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Management of groups</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td>Overwork</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Permissions</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Planning curriculum</td>
<td>24</td>
<td>114</td>
</tr>
<tr>
<td>Platform</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Previous experience</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Schedule</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>SL level</td>
<td>12</td>
<td>22</td>
</tr>
<tr>
<td>SL use</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>Support</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**Figure 3.10**: Initial subcategorisation of data with QSR software linked to the role of the SL
References to these subcategories, for example, were analysed from an email from one of the SL teachers who had previously shared his reflections on several aspects linked with his experience with me (Table 3.19 - Translation - Original references on Appendix F).

<table>
<thead>
<tr>
<th>Tandem 8</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>References on the subcategory</strong></td>
</tr>
<tr>
<td><strong>SL use</strong></td>
</tr>
<tr>
<td>Here, it was definitely a problem that we sometimes spoke in English and sometimes in Spanish, because if we can understand each other in Spanish, why do we have to speak in English? Well, maybe it’s not important. Maybe there have to be groups that speak Spanish and only understand each other in Spanish, and at a specific point of time, we make contact with other groups where we are the ones who don’t know Spanish and we speak to them in English. Speaking in two languages wasn’t at all meaningful – it wasn’t at all real; it was very contrived.</td>
</tr>
<tr>
<td><strong>References on the subcategory</strong></td>
</tr>
<tr>
<td><strong>SL level</strong></td>
</tr>
<tr>
<td>Talia mentioned that up to then they had been working on topics, like animals and vegetables, and that they had to work hard on new vocabulary and concepts to be able to develop the scenarios that we were preparing. Before each videoconference, we needed to devote some time to predicting those structures so that the children knew what to say and how to say it in their dialogues. In relation to the students’ linguistic skills, we agreed that it’s difficult for them to start talking out of embarrassment. Even though a full-immersion model is used both in Chicago and La Garriga, it’s difficult to get them to use the language naturally. It’s something we have to insist on a lot.</td>
</tr>
</tbody>
</table>

**Table 3.19:** Examples from references subcategorised as SL use and SL level
While advancing within the analysis process and informed by the literature, I observed how these teachers scaffolded their SL students by providing encouragement and trying to design the exchanges adjustable to their level. In testing out their approaches to scaffolding, these teachers played their role as mediators of their students attempting to find the appropriate balance between provided structures and more opened approaches. In line with this, I decided to recategorise references from the subcategory SL level within the broader category mediating.

Theoretical considerations also accompanied this categorisation process. Sweeney’s (2007) model (2.4.4) on the use of videoconferencing techniques that support constructivism in primary and secondary education examines four constructivist constructs with the aim of measuring how the development of teachers when integrating the videoconferences in the SL classroom supported more constructivist approaches. Together with mental models, interaction and directed action, one such element was prior knowledge. A new subcategory prior knowledge, for example, built on theoretical considerations linked to Sweeney’s (2007) model and included references from the subcategory SL level and from a new subcategory I termed prior activities.

The first one, SL level, included references such as the ones in Table 3.19 above on prior knowledge of the language as a scaffolding tool to communicate with their eTandem partners. The second one, prior activities, included references gathered from teachers on prior knowledge of each other as eTandem students through arranged activities prior to the synchronous encounters (Table 3.20 - Translation - Original references on Appendix F).
<table>
<thead>
<tr>
<th>Interview 1 - Mary</th>
<th>We’d had plenty of time; they had also written down what they were going to say and it definitely worked better and they got more out of it.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview 1 - Anna</td>
<td>I’d like to have some guidelines first; something that tells me not that I don’t mind making a video but says – Ok, let’s set up groups and then we’re going to make a presentation video. And I’d like that because then all of my students would take part; all of them would have to do something and they could practise introducing themselves.</td>
</tr>
<tr>
<td>Interview 1 - Pat</td>
<td>Spanish 3 is a bit of a cultural lesson. So we’re learning about countries and what I said to them was ”Write a paragraph about a country we’re learning about” and it was posted on Edmodo to share – I’m learning this about Spain; the food, the culture, the history, etc. And in this way I was able to identify specific sentences that they needed to have, for example, ten sentences – two on climate, two on history, etc. – and that’s how I gave them a mark.</td>
</tr>
<tr>
<td>Interview 1 - Tere</td>
<td>So creating things together like … before the second videoconference, the kids and I did something like using the map, figuring out where they live, … doing some comparison.</td>
</tr>
</tbody>
</table>

Table 3.20: Examples from references subcategorised as prior activities

From analysing to interpreting: a complex process

Figure 3.11 illustrates the range of data coded as prior knowledge from this conglomeration of teachers participating in the study as shown with QSR NVivo (2014) software. Figure 3.12 shows the number of references for each of the resources used. Previously transcribed, these were analysed with QSR NVivo (2014) software as shown on Figure 3.13. This process of transcription and analysis of data brought the first results in the form of graphs (Figure 3.14), among other formats. These included references from teachers on the different categories and subcategories analysed.

Previously analysed references gathered from teachers around the prior knowledge of the language as a scaffolding tool to communicate with their eTandem partners, for example, generated stories like the following one in Chapter 4.4.1.4 (Table 3.21). These stories, together with other direct quotations from other teachers’ accounts, draw the vivid quilt-
like word picture (3.3.2.2.3) of the SL teachers’ experiences in the eTandem exchanges (4.4.2; 4.2.2; 4.3.2; 4.4.1).

Figure 3.11: Range of data coded as prior knowledge from SL teachers

<table>
<thead>
<tr>
<th>Name</th>
<th>In Folder</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview 1 Camila</td>
<td>Internals\Interviews</td>
<td>2</td>
</tr>
<tr>
<td>Interview 1 Elia</td>
<td>Internals\Interviews</td>
<td>1</td>
</tr>
<tr>
<td>Interview 1 Karen</td>
<td>Internals\Interviews</td>
<td>1</td>
</tr>
<tr>
<td>Interview 1 Maila</td>
<td>Internals\Interviews</td>
<td>1</td>
</tr>
<tr>
<td>Interview 1 Petra</td>
<td>Internals\Interviews</td>
<td>2</td>
</tr>
<tr>
<td>Interview 1 Tamara</td>
<td>Internals\Interviews</td>
<td>3</td>
</tr>
<tr>
<td>Tandem 2 Mails</td>
<td>Internals\Mails</td>
<td>1</td>
</tr>
<tr>
<td>Tandem 3 Mails</td>
<td>Internals\Mails</td>
<td>1</td>
</tr>
<tr>
<td>Tandem 7 Mails</td>
<td>Internals\Mails</td>
<td>1</td>
</tr>
<tr>
<td>Tandem 9 Mails</td>
<td>Internals\Mails</td>
<td>1</td>
</tr>
</tbody>
</table>

Figure 3.12: Number of references for each of the resources coded as prior knowledge
Figure 3.13: Analysis of an online interview with QSR Vivo software.

Figure 3.14: Graph on the percentages of each of the resources coded with QSR Vivo software as prior knowledge.
In the context of this study, many teachers appeared to know their individual students well, especially in relation to their role as SL teachers. This allowed some teachers to encourage their students to use their own scaffolding techniques to communicate in their second language, regardless their proficiency level. Anna in Tandem 3 comments on the potential of her students to find strategies to communicate with their eTandem partners in their second language, as she exemplifies:

Then it's like the first thing that if I do not understand this way, I have to find the other [Interviews – Tandem 3 – Anna] [150].

This same teacher, Anna, did not regard the difference in SL level as a reason to stop students from interacting with their eTandem partners. Contrary to that, she pushed them to try with the basic language tools (e.g. certain grammatical structures, vocabulary) they had already acquired:

They can say their name, their likes [...]. At least, they have to ... talk of their town in Spanish so they can practice more Spanish [Interviews – Tandem 3 – Anna] [151].

Table 3.21: Example from story in Chapter 4.4.1.4

3.3.2.4.3 Example Stage 3: a mini-quilt

Stage 3 (Academic Year 2012 - 2013) of the process (Table 3.23) aimed at collecting (3.3.2.3.1), analysing (3.3.2.3.2), interpreting (3.3.2.3.3) and presenting a set of critical findings (4.1.3, 4.2.3, 4.3.3 and 4.4.2) that represent the outcome of the study. I did so in the form of mini-quilts (Hugues, 2009) aimed at summarising key aspects of the SL teachers’ experiences when integrating eTandem videoconferencing in their classrooms.
Stage 3 - 2012 - 2013

<table>
<thead>
<tr>
<th>Collection phase</th>
<th>Analysis phase</th>
<th>Interpretation phase</th>
<th>Presentation phase (Chapter 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3.2.3 - A set of critical findings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3.2.3.1 - Collection stage 3: collecting in-depth data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3.2.3.2 - Analysis stage 3: specific incidents Step 3: Specificity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3.2.3.3 - Interpretation stage 3: a set of critical findings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1.3 Critical findings on planning the physical space</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.2.3 Critical findings on planning the social environment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.3.3 Critical findings on planning the virtual setting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.4.2 Critical findings on mediating towards interaction</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.3.2.4.3 Example Stage 2

Table 3.23: Overview of phases from Stage 3

**Seeking for specificity**

During Academic Year 3 of the study, I followed Flanagan's (1954) step 3 of the process of analysis referred to as specificity (3.3.2.3.2.1) with the idea of decreasing the generalizability and increasing the specificity of each of the previous categories and subcategories (Hugues, 2007) generated during Academic Year 2 of the study. To do so, I collected data from in depth group interviews (3.3.2.3.1) with SL teachers continuing with the exchanges and experts who had also been involved with the eTandem experience.

In part, all this categorisation, recategorisation and definition and redefinition of terms and concepts throughout the whole process of analysis is due to the intent to increase the specificity of these categories and to give theoretical consistency to the complexity of analysing the range of data gathered. Names used during the initial subcategorisation of data aimed to be descriptive and sometimes were used in a quite intuitive way. Through the process of analysis and informed by the literature I started to label the different categories and subcategories taking into account theoretical considerations that I considered essential for my study.
Following the example on SL, I worked on the data again with the aim of being more specific on the categories and subcategories selected and confirm which were the relevant themes and their subsequent critical incidents. From a theoretical perspective, I renamed the main subcategory previously termed SL as SL ZPD (Figure 3.15). This encompassed all the experiences and reflections on how SL teachers encourage their students into developing within their own linguistic zone of proximal development (ZPD) through the use of their SL as a scaffolding resource. This concept has already been defined in Chapter 2 as "the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978:86 in Kao, 2010:118).
Critical incidents around the broader subcategory SL ZPD

Once the categories and subcategories were specifically defined, I built on them to confirm which were the relevant themes and their subsequent critical incidents. Following the example on SL ZPD (Figure 3.16), the main categories referred to the teachers’ roles (e.g. designers, mediators) and the broader subcategories referred to recurrent themes in the data (e.g. SL ZPD). Increasing the specificity of these broader categories and subcategories led me to generate narrower subcategories (e.g. SL level, prior activities). In my investigation, I linked each of the narrower subcategories to a critical incident, that is, an occurrence that interrupts normal procedure (Flanagan, 1954).
In analysing these subcategories from the perspective of teacher development, I sometimes had to do a further subcategorisation of the data to distinguish between successful and unsuccessful incidents. The subcategory SL level included, at least initially, all those references from teachers on prior knowledge of the SL language of the students as a scaffolding tool to communicate with their eTandem partners.

However, teachers’ approaches to using the SL during the exchanges showed diverse views on how the students’ SL proficiency level could provide their students with enough scaffolding resources to afford them with a zone of proximal development. When
recategorising the data from the perspective of successful and unsuccessful development, I subcategorised them as *SL proficiency level* and as *SL low level* respectively. The former refers to some SL teachers who showed confidence that their students' basic skills should be enough for students to remove the scaffold of the teacher. The latter refers to the SL teachers' general view that the SL level acquired in the classrooms did not make students capable of interacting with their eTandem partners. Other critical incidents linked with the SL ZPD such as *collective classification, prior activities, scaffolding resources* and *asynchronous communication* are discussed in Chapter 4.4.2.

The findings are reported fully in the following chapter of the study (Chapter 4), gradually building a multifaceted quilt-like picture of the SL teachers' experiences during the eTandem exchanges (4.1.2; 4.2.2; 4.3.2). A list of critical findings in the form of mini-quilts is also identified on the last part of each section (4.1.3; 4.2.3; 4.3.3; 4.4.2). I support each of these mini-quilts with a brief explanation.
4 Findings on eTandem videoconferencing in SL classrooms

Divided into four differentiated sections, the findings chapter of the study offers a multifaceted word picture of how eTandem teachers developed the integration of videoconference technology in their eTandem exchanges. As mentioned in Chapters 2 and 3, this integration is based on Hartnell-Young’s extensive research (2003, 2006, 2009) on teachers’ roles in classrooms where computers are used. Her model (2003) categorises teachers’ roles into four broad domains, namely: designing learning environments, managing people and resources, mediating student learning and improving practice. The study is basically centred on the designing and mediating of roles.

The first three sections focus on how teachers designed the environment to collaborate with each other on the integration of videoconference technology in their eTandem exchanges; they do this in relation to the virtual and physical space and the social environment. Finally, the last section intends to show how these teachers developed new forms of mediation to scaffold students in the interaction with their eTandem partners. SL teachers usually communicated on their native language. On the following lines, I have used either original references from teachers, if in English or translations from Catalan or Spanish. Original transcriptions of the references used from their accounts are found on Appendix F, if not already in English. Each reference is indicated with a number [01, 02 ...].

At the end of each section, I offer a set of critical findings regarding each point, with the aim to provide an overall picture of the teachers’ involvement in integrating the eTandem exchanges in their second language (SL) classrooms and their response to the study’s research questions. This involves determining developmental path experienced by SL teachers in the process of eTandem videoconference integration in their classrooms (main question of the study). Complementing this main question, the study seeks to determine what teacher roles emerge in the process of eTandem videoconference integration in their
classrooms (1st subquestion) and how SL teachers exploit eTandem videoconferencing in accordance with a social constructivist approach to CALL (2nd subquestion).

4.1 Planning the physical space

This first section provides specific answers with regard to how teachers planned the physical space for the videoconference-integrated eTandem experience. Based on Hartnell-Young’s framework (2003) for teachers’ roles in classrooms where computers are used, teacher-designers of the physical space should pay special attention to the classroom layouts. In this section, the physical spaces where eTandem videoconferencing occurs are contextualised both in the SL teachers’ normal classrooms and outside it, either in computer labs or other spaces within the school. This section also deals with the question of the availability of the technology needed to plan and participate in eTandem videoconference exchanges in these spaces.

Hartnell-Young (2003) underlines that teachers' roles are developed both in new space arrangements and in time arrangements. In this study, the time constraints that the different eTandem teachers experienced also meant a great challenge for the development of the exchanges. By managing access, I am referring to the teachers’ chances of using these physical spaces and of having the technology needed in them; I am also referring to the possibilities of arranging a schedule for doing the videoconferences and how all these factors diminished or encouraged the integration of the exchanges within SL classrooms.

Alternating the background data from the survey with the teachers’ accounts, I identified three relevant themes that complement the overall picture from the other sections of this chapter with the teachers’ involvement when generating the virtual setting for the videoconferences and the social environment: adjustability, interactivity and unpredictability.
4.1.1 Teachers’ background on planning the physical space

Background from Academic Year 1: survey

Some teachers participating in two initial focus group interviews (Chapter 3 - 3.3.2.2) during Academic Year 1 of the study shared their reflections on potential problems that they could emerge when participating in these exchanges. Among these potential obstacles was the issue of managing access to technology and to the Internet. Some of teachers commented that they should have to book the computer lab far in advance; and two of them further suggested that they did not have access to the Internet neither at school, not at home. All the other teachers commented that they could easily connect to the web either from home or at school, but not in the classroom.

Considering this initial information, some questions in the initial survey (Table 4.1.1) aimed at determining the SL teachers’ access to the technology needed for the exchanges. A first set of questions (questions 8a to 8d) focused on investigating the potential access to technology (e.g. computers, projector, digital blackboard and a portable computer lab) in these teachers’ classrooms. A portable lab understood as a collection of machines that can be deployed in any classroom. Question 9 focused on background information on the availability of computers for the students. A second group of questions asked of whether teachers could use computers in the computer lab (question 17a); these also examined the teachers’ previous use of the computer lab (question 17b). Computer lab understood as a fixed space to which the teachers would have to bring his or her students. Finally, questions 3 to 5 focused on issues linked to use of and access to the Internet.
### Table 4.1.1: Questions from the survey on the item managing access

<table>
<thead>
<tr>
<th>Item</th>
<th>Planning the physical space</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>8a</td>
<td>Could you tell us about the use of computers in your classroom?</td>
<td></td>
</tr>
<tr>
<td>8b</td>
<td>Do you have a projector?</td>
<td></td>
</tr>
<tr>
<td>8c</td>
<td>Do you have a digital blackboard?</td>
<td></td>
</tr>
<tr>
<td>8d</td>
<td>Do you have access to a 'portable' computer lab?</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Could you tell us about the availability of computers for your students?</td>
<td></td>
</tr>
<tr>
<td>17a</td>
<td>Is the computer lab available for your classes?</td>
<td></td>
</tr>
<tr>
<td>17b</td>
<td>Have you ever taught some of your classes in the computer lab?</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Could you tell us how often you use the Internet?</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Could you tell us where you usually connect to the Internet?</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Could you tell us about the availability of the Internet in the classroom?</td>
<td></td>
</tr>
</tbody>
</table>

Data from the survey linked to the physical setting (Table 4.1.2) indicated that all teachers had access to one computer (question 8a) with Internet connection (questions 5) and a projector (question 8b). Classrooms were also well equipped with a projector (question 8b) and/or a digital blackboard (question 8c). Some of the teachers indicated that they always (12 teachers) or often (6 teachers) transmitted information through a projector. Only eight of them often or always used a digital blackboard; the other twelve teachers rarely or never used them. The majority of these teachers (15 teachers) also indicated a low level of use of a portable computer lab (question 8d). The level of access to computers within their usual space points to the possibility of doing whole-classroom exchanges.
Planning the physical space

**Questions:**

8a Could you tell us about the use of computers in your classroom?
8b Do you have a projector?
8c Do you have a digital blackboard?
8d Is the portable computer lab available for your classes?

<table>
<thead>
<tr>
<th>Item</th>
<th>Planning the physical space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers out of 20</td>
<td>8a</td>
</tr>
<tr>
<td>1</td>
<td>I do not have one or I have one, but I do not use it</td>
</tr>
<tr>
<td>2</td>
<td>I have one, but I rarely use it</td>
</tr>
<tr>
<td>3</td>
<td>I sometimes use it</td>
</tr>
<tr>
<td>4</td>
<td>I have one and I often use it</td>
</tr>
<tr>
<td>5</td>
<td>I have one and I always use it</td>
</tr>
<tr>
<td>TOTAL</td>
<td>20</td>
</tr>
</tbody>
</table>

*Table 4.1.2: Access to technology for teachers in the classroom*

A total of 12 teachers out of the twenty teachers reported availability of computers for their students within the classroom. A distinct feature observed (Table 4.1.3) is the low computer-per-classroom ratio (less than five computers per classroom) that five of the teachers pointed out (Table 4.1.3 - point 1); this ratio draws a picture of an average of five students crowding around a single screen. This percentage contrasts with the four teachers (Table 4.1.3 - point 6) who had the possibility of working with a one-computer-per-child ratio in their classrooms. Only a small number of these teachers indicated that they allowed their students to work in groups of three or four or even pairs in the classroom (Table 4.1.3 - points 3 to 4).

Working in small groups shows that the eTandem videoconferences should be arranged mainly through spaces outside their own classrooms. Half of the teachers (Table 4.1.3 - point 7) referred to the computer lab as the place where they could have access to computers for their students. It is not clear, though, whether or not some of these teachers also indicated availability of computers within their classrooms (Table 4.1.3 - points 1 to 6).
Table 4.1.3: Computers available for students

Table 4.1.4 (question 17a) shows that computer labs are not always (4 teachers) or often (2 teachers) available. In fact, a high number of teachers reported that they had never (8 teachers) used the computer lab (question 17b); a second group of these teachers specified that moving to the computer lab was not a priority, but something that they did occasionally (6 teachers).

Table 4.1.4: Access and previous use of computer lab
Table 4.1.5 indicates the teachers’ access to Internet in their classroom (question 5). In general, the majority of teachers (14 teachers) stated that using the Internet in the classroom was not a real problem, except one of them. Actually, three of the teachers indicated that Internet was completely available for their students without firewalls; while two of the teachers indicated that Internet was available for the students, but with firewalls.

<table>
<thead>
<tr>
<th>Item:</th>
<th>Planning the physical space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question:</td>
<td>5 Could you tell us about the availability to Internet in the classroom?</td>
</tr>
<tr>
<td>Teachers out of 20</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Not available</td>
</tr>
<tr>
<td>2</td>
<td>Available for the teacher</td>
</tr>
<tr>
<td>3</td>
<td>Available for every child but with firewalls</td>
</tr>
<tr>
<td>4</td>
<td>Available for every student</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.1.5: Internet in the classroom

All the teachers had access the Internet both from home and from school (question 4). Some of them emphasised the possibility of connecting from everywhere thanks to smartphone technology. None of them indicated a need to visit a cybercafé or library to have access to Internet. Of the 20 teachers who answered the survey, all except four (Table 4.1.6) indicated that they connected to the Internet at least once a day (16 teachers).
4.1.2 Teachers’ accounts on planning the physical space

4.1.2.1 Teachers’ planning of the videoconference classroom

Stationary videoconference settings

Data in the literature indicates the availability of a videoconferencing system within the school (Currie, 2007; Anastasiades et al., 2010) as an important aspect to consider linked to the physical space for videoconferencing in the school. The availability of such a system usually means better-equipped stationary videoconferencing classrooms; that is, a special space arranged with the required infrastructure to meet the conditions needed for the videoconferences (Lönglund, 2010).

These stationary videoconference spaces are more technically adjusted to practice than temporary locations. Linked to this, Keohane (2010) distinguishes between three potential uses of videoconference technology: room-based videoconferencing technology, dedicated videoconferencing facilities with enhanced videoconferencing technology and a desktop videoconferencing technology. The first two can be found in more stationary spaces and provide the user with more customisable technology.
Dedicated videoconferencing facilities are "solely for the purpose of videoconferencing communication" (Hirsh, Sellen and Brokopp, 2005 in Keohane, 2010:17), specifically created to emulate face-to-face communication environments (Walker, 2005 in Keohane, 2010:17). None of the eTandem partners in the study reported the possibility of using dedicated videoconferencing facilities in their schools. But other teachers contacted in Year 1 of the study, for example, did not participate in the research exchange in the end because they requested to do so with other eTandem partners at schools that had the same videoconference system. Their schools had previously signed up a contract with the company that provided the technology to do projects with schools with the same technology. In doing so, these companies provided them with the technological support needed to do so.

Room-based videoconferencing technology is defined as "a multi-user audio and video system for the purpose of remote communication" (Lancaster, 2004 in Keohane, 2010:16). This kind of videoconference technology is usually "added to existing conference rooms". Data gathered from the study shows that only one teacher, Mary from Tandem 4, used a stationary videoconference space within her school. Such a location was part of her school’s available facilities and technically, she reports that it allowed participants to improve the quality of the audio and the video:

> We did the first videoconference here in my classroom with a small camera and the truth is it was good but we could not listen and see properly. Then, the second was conducted in our auditorium and the quality of the sound was much better [Interviews – Tandem 4 – Mary] [01].

Videoconference technology added to a conference room might improve technological quality. Hartnell-Young (2003:158) refers to Beare (1998) to remind us that "the spread of technology has led to many predictions that increased flexibility will have an impact on the role of the teacher". The layout of these theatre-like spaces does not provide the flexibility required for adjusting the eTandem videoconference exchanges to the needs of the students. Figure 4.1.1, with three students from Tandem 4 in the centre of the camera,
shows a well-equipped room in terms of audio equipment and lighting. But movement is also common within classrooms, in line with a more student-centred approach (Hartnell-Young, 2003), and the arrangement of seats did not solve issues linked to the physical movement of students and, consequently, issues linked to teamwork.

![Figure 4.1.1: eTandem videoconferencing within a conference room.](image)

*Temporary videoconference spaces*

Jamieson et al. (2000) claim that the videoconference classroom might be adjustable according to the school’s possibilities. The majority of teachers who participated in the synchronous part of the exchanges (Hill, Alex, Anna, Elia, Gina, Cathy, Enid, Ari, Pat and Jerry) adjusted their initial videoconference sessions within the temporary site of their normal classrooms (Table 4.1.7) according to their possibilities and their learning needs.
### Physical spaces in the school used as eTandem videoconference classrooms

<table>
<thead>
<tr>
<th></th>
<th>Tandem</th>
<th>Stationary</th>
<th>Temporary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Inside classroom</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Classroom</td>
</tr>
<tr>
<td>1</td>
<td>Hill</td>
<td>Alex</td>
<td>✔</td>
</tr>
<tr>
<td>2</td>
<td>Jude</td>
<td>Luca</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Anna</td>
<td>Elia</td>
<td>✔</td>
</tr>
<tr>
<td>4</td>
<td>Mary</td>
<td>Gina</td>
<td>✔</td>
</tr>
<tr>
<td>5</td>
<td>Glory</td>
<td>Eva</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Cathy</td>
<td>Enid</td>
<td>✔</td>
</tr>
<tr>
<td>7</td>
<td>Ari</td>
<td>Pat</td>
<td>✔</td>
</tr>
<tr>
<td>8</td>
<td>Jerry</td>
<td>Tere</td>
<td>✔</td>
</tr>
<tr>
<td>9</td>
<td>Maria</td>
<td>Leti</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Brenda</td>
<td>Leo</td>
<td></td>
</tr>
</tbody>
</table>

In doing so, they used a desktop videoconferencing system and they did not allocate the videoconferences to a special place in the school especially designed for them. A desktop videoconferencing system is usually deployed on web-cam equipped computing devices that have audio and video capabilities (Weinberger et al., 2005). It is used primarily for point-to-point communication and controlled by a single user (Keohane, 2010).

As in most classrooms where there were fewer computers than students, teachers managed students' access in different ways, ranging from whole-classroom videoconference sessions using the only computer available in the classroom - the teachers' computer - to students doing the videoconferences at home.

Lönglund (2010:186) warns that such temporary sites (e.g. normal classrooms, rooms for group activities, cafeterias) do not usually meet the requirements with regard to videoconference technology and might be affected by issues of light and audibility,
among others. Within this temporary context, the teacher must play an active role in planning the architectural design of the videoconference classroom. Hartnell-Young (2006) states that to consider the teacher in the design of these spaces reflects a more open approach to learning, which is more in accordance with the students’ learning needs. She (2003:158) quotes Cherednichenko et al. (2001) to add that these "open approaches to the use of time and space are characteristics of a constructivist approach to learning". She (2003:49) specifies, though, that teachers "need to be aware that the way they manage the classroom environment and structure computer activities affects access, and therefore potential learning opportunities".

Initially, SL teachers in the study did not consider the planning of different formats of classroom layout or the number of students. They simply focused on managing access to the technology needed to do the videoconference task. Only after analysing a video recording of a student-to-student videoconference session as part of a videoconference call interview with Gina, did she realise how the position of the camera and the format of the classroom layout impeded student communication. She commented on how her adjustments did not usually contemplate the need of students to move around the classroom or how some students could go completely unnoticed.

Data from the background information available from the survey (Table 4.1.3) indicates an average computer-student ratio of about 1:5 students per computer in the classrooms. This did not allow many of the teachers to divide students into small groups or group them into pairs for use of the computers. As a response to these scarce computer resources, one teacher in Tandem 8, Tere, had the opportunity to use portable computers. However, she did not exploit access to portable technologies outside her classroom that could have allowed her students to overcome the obstacles of school time and space (Hartnell-Young, 2003). Instead, she remained in the classroom, where she described the situation as difficult, due to noise issues when trying to communicate with Jerry’s students, who used their portable computers:
Hard because we were going to use ipads from my class [...] not hear me and I think because it was like all the ipads were ringing at the same time [Interviews – Tandem 8 – Tere] [02].

Contrary to Gina's and Tere's experiences, Figure 4.1.2 shows a learning environment that allows for the multi-functionality of spaces (Jamieson et al., 2000) accompanied by an increase on the variation in the student activity.

In contrast to a more traditional approach to facility use that focuses on single functions within a facility, these eTandem students use the space of their formal, scheduled classes to collaborate with their intragroup partners (Anastasiades et al., 2010), that is, with members of their local classroom: some of them by collaborating with each other in the physical classroom, others by listening to their partners and one of them preparing to engage in the videoconference. This informal approach may become problematic as some were eating while the team was working together - or perhaps lurking or choosing not to participate (Hartnell-Young, 2003).

Far from a classroom layout designed to facilitate a more teacher-centred use, students move around to work with their intergroup partners (Anastasiades et al., 2010), that is, with members of the remote classroom. Accompanied by a gradual removal of teacher control and support, the two pictures at the bottom of Figure 4.1.2 show a complete control of the task by the students. They interact with their eTandem remote partners both individually and in groups, seem to have control over the microphones and computers, and are able to adjust the position of cameras, microphones and monitors. As shown in the pictures, students participating in the synchronous part of the exchanges are situated in different parts of the classroom, which indicates that these arrangements permit certain movements and a certain level of spontaneity.
4.1.2.2 Teachers arrange extra temporary spaces

Some teachers participating in the study were not bound by spatial arrangements and used other spaces in the school, according to their needs. Regarding the use of the computer lab, only two teachers used the computer lab as the temporary site for the exchanges. Pat in Tandem 7 did so but in a whole-classroom format. Jerry, Tere’s partner, went a step further and booked two computer labs located next to each other. He made some structural changes to the initial classroom videoconferences to encourage team responsibility and allow for greater collaboration between students.

To do this, Jerry encouraged cooperation and teamwork between the primary classroom students and their secondary education partners. In total, there were six groups of primary students plus two students from secondary education helping each of them. "Although a broad view of collaboration in education would include links between teachers in primary and secondary schools" (Hartnell-Young, 2003:120), this was the only instance in which an eTandem partnership crossed the boundaries between primary and secondary classrooms. In doing so, the relationship of one teacher per class was being
adapted to the primary school setting, as the teacher involved specialists from different educational cycles and even from different domain areas.

Figure 4.1.3 shows four students in their second videoconference session. One of the primary students revises the transcript and one of the secondary students manages access to the videoconference technology. Despite the fact that the students were in the computer lab, managing access to videoconference technology meant using portable computers, as the devices in the computer lab were not equipped with web-cams. Many of the computers in the computer lab could not be used because audio facilities were not available to the students.

![Students working in the computer lab](image)

Figure 4.1.3: Students from Tandem 8 working in the computer lab.

This time, their adjustments did not contemplate essential issues linked to noise, as students did not wear headphones. As Jerry described and I could observe, the very start of the exchanges meant a room full of deafening ringing noises, and this did not allow students to communicate with their eTandem partners.

Considering the potentially noisy background of the synchronous exchanges, as exemplified above, managing the synchronous part of the exchanges in small groups
meant that students could work neither in the same classroom, nor in the computer lab. Over the course of this study some teachers attempted to arrange external spaces in varying ways. These arrangements attempted to find solutions to the difficulty of managing resources that could allow them to work in smaller groups. This could lead students to participate in more message-oriented interactions with their eTandem partners.

As noted in the teachers’ accounts, teachers who decided to work in small groups outside their classrooms experimented with different models. Two teachers in two different schools made changes to their physical arrangements to maximise access and facilitate working in smaller groups.

Hill, a primary SL teacher, participated in several whole-classroom exchanges during his first year in the project. During his second year in the project, he decided to go a step further and tried to arrange exchanges in smaller groups. Both the lack of computers outside the classroom and the lack of spaces to use them compelled him to seek a compromise. He finally decided to work in groups of ten students at most, using an additional small classroom and one laptop (Figure 4.1.4).

Figure 4.1.4: Exchanges within the extra classroom
This arrangement allowed teachers to participate in the synchronous part of the exchanges with fewer students. It included the reassigning of some of the students to other classes, and it also meant that part of the students had to be with another teacher. This management strategy for access resulted in smaller group size per videoconference session (Figure 4.1.5). While this strategy sought the maximum involvement of each of the students, the more active participation of each of the students followed a similar procedure to the one established in the whole-class exchanges. The protocol meant that each student participated in a one-to-one presentation; the other students waited quietly for their turn to do the same. Everything in the task was still very structured, with students reading to their partners what they had previously prepared and without trying to adopt a more interactive approach.

![Teacher videoconferencing with a group of five students](image)

**Figure 4.1.5:** Teacher videoconferencing with a group of five students

Jamieson et al. (2000:228) state that "formal locations increasingly need to accommodate informal requirements, when facilities are accessed by students outside of scheduled classes". Another management strategy for access included rethinking the allocation of students within different spaces in their schools. In doing so, teachers in the study adapted the requirements of the videoconference experience to informal locations within the school but as part of their scheduled classes. The spaces that teachers from Catalonia in Tandem 6 re-arranged, for example, included the headmaster’s office, other classrooms
that were free at the time of the exchanges, and even a small room where students would usually broadcast their school radio programmes (Figure 4.1.6).

![Figure 4.1.6: Students using a small room where they usually broadcast their school radio programmes](image)

This rearranging of each eTandem group allocated in dispersed and widely diverse spaces within their schools echoes the separate spaces that Hartnell-Young (2003:13) terms pods; she defines them as "small rooms of computers accessed from a number of surrounding classrooms". She (ibid) refers to this innovation as "an attempt to provide regular access to computers for students" and cites Beare (1998), "who predicts that future classrooms will be constructed to provide easy access to libraries, databanks and computer gateways, and to accommodate flexible time for learning".

Despite not having the features of stationary videoconference spaces, the pods and other transitory videoconference spaces used in this study seek to facilitate more regular and easier access to spaces with computers properly adjusted for videoconferencing. Similar to the integration of technology within a classroom, teachers should check whether or not these spaces have features that make them accessible and usable for eTandem videoconferencing.

But this requires a slow process of adjustment (Pennington, 2004) and a change in the school culture (Bose, 2007:49) until these temporary-like spaces become naturalised to the context and more stationary-like ones. Pennington outlines a series of phases of adoption
that start from a relatively surface level of processing of the innovation to and investment in it.

Hannafin and Savenye (1993 in Hartnell-Young, 2003:63) identified several factors influencing teacher resistance to computers including the belief that computers do not improve learning outcomes, fear of losing control of the classroom, and fear of displaying a lack of knowledge or skill with computers. SL teachers had to take into account that such a use of multiple spaces inevitably entailed some risk in terms of lack of control. There were three issues to consider: the booking of these spaces in advance, the students and the technology - all of which were beyond the teachers’ control.

The scarce availability of these spaces requires teachers who want to use them to book them weeks in advance, but the latent demand of most of these spaces obliged teachers to operate on just-in-time access to them. Moreover, the levels of control over what students were doing differed as the location of the computers differed and this became a matter of constant concern for some of the teachers. The use of these extra spaces also meant managing the functioning of computer equipment and checking that they had access to Internet. In fact, the issue of managing access to technology deserves special consideration.

4.1.2.3 Teachers manage the technical environment

Hartnell-Young (2003:146) states that "communication technologies can provide opportunities for collaboration, which allow students to perform at a higher level than they would independently (Vygotsky, 1978)". She adds that "teachers who see the potential and manage access to technology accordingly, promote the construction of new knowledge through social interaction (Imison and Taylor, 2001; Leafe, 2001; Scardamalia and Bereiter, 1999; Sproull and Kiesler, 1991; Wiegand, 1998)".

As a significant and inseparable part of practice, planning the physical setting for the videoconferences also needs to include a consideration of the technical environment of the
classroom (Keefe, 2003; Currie, 2007, Lim, 2009; Lönglund, 2010). As part of the technology infrastructure, teachers should ensure that the necessary technical requirements are met. Anastasiades (2009) lists among these requirements audio, image, data sharing and additional equipment. Currie (2007) includes the location of the equipment, the reasons for the location of the equipment, and the level of satisfaction with the current location of the equipment.

Lönglund (2010) warns that such temporary sites might also be affected by technological challenges and he pinpoints the handling of technology as the main obstacle to considering videoconferencing as a spontaneous means of communication. Hartnell-Young (2003:153) describes the situation clearly when dealing with troubleshooting technology: "In spite of the provision of technicians across the school system, teachers using computers in the classroom frequently lack timely technical support, and are often less skilled in using the technology than the students they teach". She (ibid) refers to Drenoyianni and Selwood (1998) who found that "many teachers spent a great deal of time troubleshooting technology that did not perform as expected"; these two authors added that "there was evidence of an attitude among many which indicated that they see this as a part of the real world, and a consequence of trying new ways of working".

Given that, in other settings, working with more experienced peers is not only a common occurrence but also often desirable, in the teaching environment too this new learning that teachers could acquire from their students with regard to technology should be embraced as a positive. "If teachers are to reach the potential for mediating student learning, it seems that they need to know what is possible with computers and how to ensure that their students can learn the necessary program skills when required" (Hartnell-Young, 2003:201). In the following example (Figure 4.1.7), students from Tandem 6 were communicating asynchronously to try to solve technical problems that affected their fluent synchronous meeting:
When referring to the decision to use a user-friendly application such as Skype (2014) as the videoconference technology, Jerry categorically said it was not such a user-friendly tool when used at school:

But it’s not such an easy tool to use in the school [Group interviews – Jerry with Jordina and Tere] [03].

Iu added that even students in their second year of secondary education did not even know how to use the tool for the videoconferences:

If they were older, if they were more autonomous ... but with students in the second year ... difficult, as they do not even know the tool [Interviews – Tandem 4 – Iu with Gina] [04].

SL teachers’ integration of videoconference technology in temporary videoconference spaces also implied that they regularly had to grapple with technical issues when accessing these spaces. Teachers participating in this study limited themselves to solving technological issues that were within their control, in an attempt to find practical solutions in what Hartnell Young (2003:162) refers to the principle of on demand.

In this context, SL teachers tried to find ways to ensure that the required technical equipment to participate in the exchanges worked properly. They often tried to pilot videoconferences with fewer students or with just other teachers to check the technology.
They reported, though, that it did not often help solve the technological challenges that many of them experienced in working with the whole group or in multiple point encounters.

Jerry commented on a series of drawbacks that did not allow for the use of this technology with guaranteed success, despite relatively well-equipped classrooms. He summarises such a situation:

We have relatively well-equipped classrooms, we have external technicians specialised in free software who provide all the support. Despite all that, we have ended up in having difficulties many times. Why? ... Because you look from a digital screen, then a noise that sounds [...] the volume is fine, the other time we tried and we did not hear it but now we hear a noise. Or suddenly, it jumps because we have the technology but not the telephone lines [Group interviews – Jerry with Teresa and Jordin] [05].

In one of the group interviews, Teresa mentioned how much of the time for the synchronous meetings was usually wasted on trying to establish connection with their eTandem partners:

I would say that what puts us off are the technological problems [...] and people are very excited and they have the technology available. But when you get into it and there are difficulties, the first day they overcome them but eventually, they get discouraged [Group Interview – Tere with Jerry and Jordin] [06].

Ironically, Teresa’s final comment was that, while she was trying to connect, her students had already disconnected from the activity:

People want it but if they encounter many complications, if you have an hour to do the activity and you are half an hour trying to connect because there has been a problem you miss ... and kids also disconnect [Group Interview – Teresa with Jerry and Jordin] [07].

Iu, an ICT coordinator working with Gina, said that before trying to manage the videoconferences with several eTandem groups, he first conducted a pilot to make sure
that technology was working properly. Then, he repeated the process with one group of each eTandem classroom with similar success:

We had prepared six groups of four, we had tested through the two lines in the school that the six groups could speak through Skype, and initially there was no problem [Interviews – Tandem 4 – Iu] [08].

Similarly, Alex in Tandem 1 described how he and his eTandem partner, Hill, decided to arrange a synchronous encounter trying the videoconference tool with just three of their students. Alex’s only concern with technology appeared to be the sound quality, which he solved by buying better headphones. He did not mention any problem with having access to the Internet or with using the videoconference software. However, during the exchanges with the whole group, he commented on his experience as having been rather an embarrassing and stressing one:

The stress that you have to say "it does not work and the waste of time because you know ... and you’ve tried it the day before or with the teacher from Switzerland and it worked and, well, we felt sure about it [Interviews – Tandem 1 – Alex] [09].

During Academic Year 1 of the study, I also tried different videoconference software with some of the teachers to explore different possibilities in an attempt to avoid a merely temporary use of technology resources and convert them into more permanent tools. Hill, Alex’s eTandem partner, added that it was important to be strict in the decision regarding the location of the videoconferences, the technology needed (audio, computers, Wi-Fi connection and a projector) and the software used for the exchanges. He reported that he was studying the videoconference software used and he did not like the idea of trying different ones in order to find the most suitable one for the needs of the eTandem partnerships:

Please, do not change the videoconference tools. I have already studied the tool [Email – Tandem 1 – Hill] [10].
Professional development

In his study on videoconferences in education, Romiszowski (2004) identifies training as one of the most substantial factors determining the quality of synchronous communication. If teachers are to use technology in their classrooms, their professional development must be based on a constructivist philosophy (Hall, 2006). For teachers to be able to implement a constructivist approach while using technology, it is essential to provide a learner-centred approach to professional development. Hartnell-Young (2003:31) paints the following picture: "It was not until when teachers were presented with theory, demonstration, practice and follow-up over time that transfer to the classroom significantly increased [...] Teachers are rarely consulted".

She (2003:63) adds that "fear of technology per se is sometimes raised as an impediment to teachers using computers, but this fear is often grounded in practical concerns". She (ibid) refers to Rosen and Weil (1995) who showed that "lack of experience with computers was among the factors that may lead to resistance to technology".

The majority of SL teachers participating in the study had no familiarity with any technological tools for connecting schools to do videoconferences, and they had never used synchronous online tools before (Table 4.3.2). Only two teachers who had attended previous professional development courses and put the knowledge in real practice with their students knew how to use the tools and were quite open to the idea of participating in the project.

While piloting proved to be insufficient in avoiding troubleshooting issues with videoconference technology, the previous training of the teachers on how to use this technology did not improve the efficiency of the synchronous encounters. Jordina reported familiarity with videoconference technology and described successful personal synchronous encounters but unsuccessful ones when working from her school:

It's what you say because when we did the project at my school with the specialist English teacher, we are both very competent people with computers to use everything we had to use and we always had
problems and I do weekly video conferences with friends and I never have any problems [Group interviews – Jordina with Teresa and Jerry] [11].

Sara also commented on her problems with videoconference technology, once everything was set up. In doing so, she clearly espoused the notion that she also was a learner as she claimed that she learnt from her students that Skype was blocked in her classroom – a technological issue essentially part of the school managerial policy with respect to technology:

I tried to use Skype in my class and I wasn’t able to use it. The students said its use is blocked in the school, so hopefully we’ll be able to use Wimba or other tools [Emails – Tandem 2 – Sara] [12].

Hartnell-Young (2003:63) indicates the importance of giving teachers – I add students – "opportunities for classroom experimentation and tinkering (Hargreaves, 1999) and time to share and discuss classroom events with other people, including researchers and other teachers, on an individual or group basis (Joyce and Showers, 1988)". One of the teachers, Pat, encouraged their eTandem partners to participate in the project with their students telling them that, if they did not try, they would never be able to do that. Elia from Tandem 3 insists on the importance of giving students enough time previous to the videoconferences:

On the other hand, once they start the 1st videoconference and once they know each other and they have done this first meeting, it might be easier that they repeat other ones more often but it is necessary that they are given time to prepare what they have to do [Interviews – Tandem 3 - Elia] [13].

Experimentation and tinkering usually meant to deal with unsuccessful synchronous encounters. With it, SL teachers usually had to improvise an alternative plan. Even my emails offered plan A and plan B when arranging for the first teacher-to-teacher meetings. Thus, Luca in Tandem 2 agreed to implement both:
It's ok for me at 12.30 (Spanish time). I'll try plan A first and then plan B [Email – Tandem 2 – Luca] [14].

Tandem 8 partners decided to try several multi-videoconferences at the same time with small groups; but they also had a plan B, which meant they would probably have to drop small group exchanges and attempt an exchange with the whole class in case of technological drawbacks:

We will have a B plan in place, as agreed. If the multiple videoconferences do not work properly, we will do it all together in one [Email – Tandem 8 – Jerry] [15].

Finally, Jerry’s eTandem partner could not connect and Jerry’s plan B became an improvised synchronous encounter with a teacher from Mexico, who was on Skype at the same time. More than a problem with technological resources, or a problem of teachers not having enough knowledge, or a problem of not doing enough pre-videoconference testing, Jerry had already transmitted to his eTandem partner that for synchronous encounters to succeed, these should be characterised by an approach that extends throughout time to enable a clearer idea of what works and what does not:

All this takes time, it is not easy, and we have to see what we can do. So far, while we experiment with it, we discussed with Tere that the focus should be on the work in the shared blog and preparing other connections for the entire group [Emails – Tandem 8 – Jerry] [16].

Jordina, in the same group interview, identified innovation and exchanges as two complex issues to deal with; she pointed to technology as a further challenge:

For me, innovation projects are already complicated; exchange projects between schools are complex enough; when, in addition to that, you add a technological aspect … [Group interviews – Jordina with Jerry and Teresa] [17].

Added to this complexity, the necessary communication infrastructure for the videoconferencing requires connection speeds and available bandwidth (Anastasiades,
2009) but the excellent Internet quality needed for this is not a given everywhere (Flacke, 2010). As the use of videoconference technology usually requires "telecommunications capacity beyond their control" (Hartnell-Young, 2003:162), teachers sometimes experienced extremely complex challenges associated with accessing the Internet, especially in these pre-arranged spaces.

Jerry insisted that technological problems might not be solved by putting a plan B or plan C in place, such as switching to a whole-class exchange, using different software, changing spaces or piloting technology. Instead, he referred to a technological problem on a national level due to the poor – and expensive – Internet connection in Spain:

Technicians do not give us solutions because the problem is not technical. The problem is the Internet connection in Spain, which is very expensive but very poor. The bandwidth that we have at school is not good enough. Although we will try [doing the videoconferences with] it, that's the main drawback [Emails – Tandem 8 – Jerry] [18].

Gina from Tandem 4, for example, referred to the possibility of using areas where teachers usually meet with parents, when such places were available. She emphasised that these spaces had access to Wi-Fi connection:

We have several available sofas [...] and there is Wi-Fi and children are used to accessing their computers in these spaces [Interviews – Tandem 4 – Gina] [19].

She insisted, though, that working with the Wi-Fi connection meant problems for some of the students. Furthermore, portable computers were not available in these spaces and students had to bring their own computers as part of the procedures followed in the school. Jerry also opined that technology-related challenges were associated mostly with trying to have access to the Internet. He reported problems with Internet access when using a Wi-Fi connection:
The idea was to connect by cable. Technicians have advised us not to do so by Wi-Fi because it is unstable for such kind of connections [Emails – Tandem 8 – Jerry] [20].

On his last interview, this same teacher concluded that:

Working in small groups is technically impossible. We tried, but there is not enough bandwidth. The two connections of the school, with so many people online using Skype, do not allow you to connect [Interviews – Tandem 4 – Iu] [21].

Rather than purely increasing their technical skills, Hartnell-Young (2003:63) lists some other practical ways in the literature that may help teachers to overcome their fears with technology and build up their experience and confidence with it:

- Give teachers time with computers from their students, or encourage them to use computers online at home (Preston, 2001);
- Allow greater familiarity with computers and link them with personal and professional purposes;
- Encourage teachers to learn together (Hunt and Bohlin, 1985);
- Highlight the impact of the perceived ease of use and pedagogical usefulness of computers in the classroom on teachers’ attitudes (Cox, Preston and Cox, 1999).

4.1.2.4 Teachers manage time arrangements

Trying to arrange a time for the videoconferences and overcoming the ‘unavoidable’ organisational constraints of the school was a tremendous challenge and a real worry for the teachers when trying to organise their eTandem exchanges. Some teachers – especially those in eTandem partnerships between countries in different continents – postulated the difference in time between countries as one of the main challenges they faced during the
videoconferences. Tere in Tandem 8, USA, described the situation generated by the time
difference with their Spanish eTandem partners as ‘tough’:

I think that the planning was really tough because we started so late
and it is also difficult because of the time change; we would call at
seven o’clock in the morning in the US and in Spain it was during the
afternoon [Interviews – Tandem 8 – Tere] [22].

Jerry also suggested that it would be easier to arrange a schedule with schools with less of
a time difference.

It is true that a school in London or England for the time change is
much easier for us to coordinate and to contact each other [Interviews
– Tandem 8 – Jerry] [23].

Nonetheless, this same eTandem partnership benefited from this time difference. They
managed to carry out their synchronous exchanges since the school in the USA could call
early in the morning (during the first hour) and the school in Spain could do so during the
last class in the afternoon. Rather than change the school timetable, it usually involved
one extra hour for both partners to avoid further problems with other teachers.

Contrary to Tandem 8, both countries in Tandem 4, UK and Spain, were in similar time
zones and challenges with exchange scheduling were more easily solved. Mary, the
teacher in the UK, also referred to previous experiences with South America, where the
time difference was a problem:

In the past we have made videoconferences with South America and
the problem was the time difference [Interviews – Tandem 4 – Mary]
[24].

Yet, she was worried because the weekly changes in her classroom timetable at her school
might cause foreseeable complications:

The only problem I see […] has to do with organising the
videoconferences, due to the differences in our school timetables […]
Our class schedule, which changes weekly, limits me a lot [Interviews – Tandem 4 – Mary] [25].

Mary said it was necessary to create a schedule for the videoconferences over a three-month period in advance; a certain planning in advance was also needed for booking the spaces where they were supposed to do the videoconferences. In Mary’s case, this was the auditorium:

I need to have dates between now and June, to call and book the auditorium and prepare the children [Interviews – Tandem 4 – Mary] [26].

She compared it to what usually happened in Spanish schools, where schedules do not regularly change:

Gina, for example, has fixed periods; she sees her classes on Mondays at eleven all together [Interviews – Tandem 4 – Mary] [27].

Some eTandems planned fixed times for the videoconferences, but they usually postponed them for several reasons. Anna shared one of her eTandem partners’ excuses for doing so:

I would not have had trouble making one every month but it seems that Elia’s children were travelling [Interviews – Tandem 3 – Anna] [28].

The teachers’ overburdened timetables and the ease with which last-minute changes could be introduced made it necessary to create an ‘untouchable’ videoconference-meeting time. In Sara’s words:

I’m so sorry!!! I had to look after a class when I was supposed to have a free hour. Sorry again. Sara [Email – Tandem 2 – Sara] [29].

The creation of this regular meeting time supports Joyce and Showers’s (1988) view that teachers need "time to share and discuss classroom events with other people, including
researchers and other teachers, on an individual or group basis”. Teachers were requested to stick to the schedule and not to change it again and again. To avoid the latter, each eTandem was supposed to be planned with more than one teacher in order to maintain a kind of regularity in scheduling the videoconferences. Sara, a substitute teacher in her school, was in charge of the exchanges but, as she reported, when the regular teacher got involved, changes were expected:

Luca came back today and everything is a bit of a mess at school this week. Tomorrow I have to update Luca so I will tell her about this project because she’ll be in charge of everything from next Monday on. I’ll let you know how the tandem is affected ASAP [Email – Tandem 2 – Sara] [30].

This continuous postponement of the videoconferences and lack of regularity brought a change in students’ groups, as Anna describes:

In January, we could not do it what with the transition from one semester to another, as with that transition I lost some students and gained others and we had to change groups. […] and until now, we have been able to do this in April and another one in May. At first it postponed too much [Interviews – Tandem 3 – Anna] [31].

She also described the complexity of the management of groups after this change of students throughout the different semesters of the academic year:

It is not a requirement to take Spanish. Some students take it; then I have some semester with a lot of people and in other ones very few people. Once a year I also teach what we call Spanish 3 and 4 and then the level of the students changes and each semester there are new students. I can have the same students as in Spanish 1-2 but this is not necessarily the case [Interviews – Tandem 3 – Anna] [32].

The pressure to work quickly due to scarce computer resources and due to lack of time also led to some tensions between speed and efficiency in practising their second language. Teachers attempted to manage the time spent using computers in order to
balance the number of students, the scarce computer resources and the time constraints affecting the videoconferences.

Participant-teachers showed concern about how to manage the videoconference time allotments that each eTandem group would have to practise their SL. The flexibility needed to do so was constrained by the fragmentation of the normal timetable.

In a constructivist teacher-student relationship, teachers support students "towards autonomy and self-regulated learning" and require students "to take responsibility for making their own meaning" (Hartnell-Young, 2003:19). The teacher's role is to support the learners' confidence to move "among different school situations, both formal and informal" (Hartnell-Young, 2003:63).

Up to this point, many participant-teachers made important structural changes to support the integration of the eTandem videoconference exchanges towards this more constructivist approach, that is, towards more self-regulated experiences. For some teachers, this involved a new openness outside the classroom, challenging the teachers' control over the classroom, managing new time arrangements and managing strategies to involve students more actively in the exchanges.

Despite the efforts, "the time and space geography prevailing in schools is a constraint on major changes in role configurations" (Hartnell-Young, 2003:266) and the design of spaces within schools should "include more focus on flexible use of spaces and the capacity for a range of communication technologies" (ibid). The ultimate goal of the eTandem videoconference exchanges, and more in line with a constructivist approach to learning that demands greater flexibility, was for students to be able to manage language learning relationships with their eTandem partners not only within the school but beyond.

In line with such a constructivist perspective, the teacher's role is to increase their confidence to move between situations such as between home and school. Hartnell-Young (2003:154) states that "creating outward-looking learning communities includes linking between home and school, and with the resources of the wider community (Hill and
Russell, 1999). In this study, the boundaries between home and school were hardly crossed. Only eTandem partners in Tandem 3—a year older than students in Tandem 6 from the same school—were allowed to work in groups at home, going beyond the domain of the school.

However, scheduling from-home videoconferences was not an easy task. Despite the flexibility implied by working at home, the arrangements of the videoconferences also had to be scheduled quite in advance as students could only meet for the videoconferences during the weekends:

Six weeks, considering that you see them two or three times a week, may be a little too much, and it is hard for them to find a day because there are groups of three and three and there are six students who have to find a day that will work for all of them to meet with the thousand stories that they have [Interviews – Tandem 3 – Elia] [33].

4.1.3 Critical findings and SL teachers’ development on planning the physical space

As explained in Chapter 3, the methodology chosen for my research explores the potential of Flanagan’s (1954) critical incident technique (CIT) and Hugues’ (2007) expanded critical incident technique (ECIT). Flanagan’s CIT limited its categorisation to positive and negative behaviours, categorising resources as used or not used. I followed Hugues’ ECIT thematic categorisation and a critical and cyclical element of reflection - elements that I considered essential for my study.

Following this categorisation, I distribute each of the sections in relation to the SL teachers’ roles as designers of the physical space (4.1), designers of the social environment (4.2), designers of the virtual setting (4.3) and mediators:

4.1.3 Critical findings and SL teachers’ development on planning the physical space

4.2.3 Critical findings and SL teachers’ development on planning the social environment
4.3.3 Critical findings and SL teachers’ development on planning the virtual setting

4.4.2 Critical findings and SL teachers’ development on mediating towards interaction

I divide each of these sections on the specific themes as previously categorised through the different steps I followed during the process of analysis. I also detail significant aspects detected that SL teachers encountered around each of these essential themes in the form of critical incidents and I linked it to how these SL teachers’ particular experiences but many times interconnected with those experiences from other teachers were used at all stages of their development as vehicles for responding to each of the incidents.

In doing so, I distinguish between two developments in their process: unsuccessful developments, that is, efforts or behaviours that did not bring development as they failed, or partially failed, to be completed and those efforts or suggestions from teachers who brought development in the process of integrating eTandem videoconference exchanges in their classrooms, that is, successful development. On this first section, I deal with critical findings on planning the physical space to do the eTandem videoconferences.

Teachers need to be aware that the way they manage the videoconference classroom environment and structure its activities affects access, and therefore potential learning opportunities. Critical incidents on the way they planned their physical spaces (e.g. normal classroom, stationary locations and temporary spaces) referred to significant challenges linked to how these SL teachers managed access to these physical spaces in their schools. Summarising this section, the following lines present relevant themes and their subsequent critical incidents linked with how they planned the physical space to do their eTandem exchanges, namely: adjustability (Tables 4.1.3.1) learner-centred layout (Tables 4.1.3.2) and unpredictability (Tables 4.1.3.3).
Adjustability refers to significant challenges and SL teachers’ development (Table 4.1.3.1) when SL teachers tried to adjust different physical spaces in their schools to the needs of eTandem videoconference exchanges.

[← Whole-class experience]

The SL teachers generally viewed their initial experience as a whole-class exchange and the majority of them used their normal classroom in their initial participation in the exchanges.

[→ Use of additional temporary spaces]

The tendency of some of these teachers was to balance their eTandem videoconference needs towards more interactive approaches within the school capabilities. Among some of the teachers’ structural changes, some teachers arranged the exchanges within additional temporary spaces (e.g. normal classroom, stationary locations and temporary spaces).

[← Difficulty of adjusting temporary spaces]

In some of the experiences, the teachers’ development process towards a successful integration of the eTandem videoconferences exchanges failed, at least partially due to important challenges that had to do with issues of adjustability of these spaces to the

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<th>THEME</th>
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<tbody>
<tr>
<td>Adjustability</td>
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<tr>
<th>DEVELOPMENT</th>
<th>CRITICAL INCIDENTS</th>
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<tbody>
<tr>
<td>Unsuccessful developments (due to)</td>
<td>Whole-class experience</td>
</tr>
<tr>
<td>Difficulty of adjusting temporary spaces</td>
<td>Lack of control of students</td>
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<tr>
<td>Successful developments (due to)</td>
<td>Use of additional temporary spaces</td>
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<tr>
<td>Stationary spaces: technologically prepared</td>
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</table>

Table 4.1.3.1: Critical incidents and development on the theme adjustability
eTandem videoconference-integrated needs. Both their normal classroom and the temporary spaces used, at least initially, were not adjusted to the requirements of eTandem videoconferencing due to issues of light, audio or technology, for example.

[⇒ Stationary spaces technologically prepared]

Only one SL teacher in the study could afford arranging the exchanges in more stationary locations with better and more technological choices.

[⇐ Lack of control of students]

Linked with issues of flexibility, SL teachers manage student access to these extra temporary spaces in different ways. These ranged from highly controlled to laissez-faire. While movement is common within classrooms in line with a student-centred approach, the findings linked to the use of external spaces reveal comments from some teachers concerned about the lack of control that the use of these spaces may entail.

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<tr>
<th>THEME</th>
<th>DEVELOPMENT</th>
<th>CRITICAL INCIDENTS</th>
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<tbody>
<tr>
<td>Learner-centred layout</td>
<td>Unsuccessful developments (due to)</td>
<td>Teacher-centred layout of stationary spaces</td>
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<tr>
<td></td>
<td></td>
<td>Difficulty to work in groups in stationary spaces</td>
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<td></td>
<td></td>
<td>Structured format in temporary locations</td>
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<td></td>
<td>Successful developments (due to)</td>
<td>Learner-centred layout of temporary spaces</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flexibility to manage (small) groups in temporary spaces</td>
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</tbody>
</table>

Table 4.1.3.2: Critical incidents and development on the theme learner-centred layout

*Learner-centred layout* refers to those significant challenges encountered and SL teachers’ development (Table 4.1.3.2) around their chances of using physical spaces for more learner-centred and interactive approaches.
Teacher-centred layout of stationary spaces

The layout of the stationary spaces showed a high degree of teacher-centredness. The only SL teacher who could take advantage of the technical possibilities of these spaces did not consider the potential of their technically adjusted possibilities, as the layout of these spaces was still theatre-like.

Difficulty to work in groups

These stationary spaces lacked the flexibility needed to facilitate physical movement within the classroom with the aim of encouraging team work.

Learner-centred layout of temporary spaces

Contrary to stationary spaces, temporary ones allowed for more flexibility to the management of groups. Nonetheless, research findings drawn from the text- and video-triggered reflective dialogues indicate that only few teachers were gradually developing the ability to exploit these temporary spaces to work with smaller groups with the aim of facilitating the implementation of a more learner-centred approach.

Flexibility to manage (small) groups in temporary spaces

In doing so, some of the SL teachers started using the computer lab or improvised spaces in the school (e.g. headmaster’s office, free classrooms). In trying to evolve towards exchanges with smaller groups, these practical strategies resulted on a shift from a transmission model of learning employed on initial encounters to a model seeking students' more active participation and seeking more interactive approaches. Some of these teachers' structural changes also allowed for team responsibility and greater student collaboration.

Structured format of exchanges in temporary locations

In general, though, many of the teachers did not exploit the potential of these temporary spaces towards more flexible approaches. They continued with a structured format of the
synchronous exchanges that implied students passively waiting for their turn, students going unnoticed and/or students reading to their eTandem partners.

<table>
<thead>
<tr>
<th>THEME</th>
<th>CRITICAL INCIDENTS</th>
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<tbody>
<tr>
<td>Unpredictability</td>
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<td>DEVELOPMENT</td>
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<tr>
<td>Unsuccessful developments (due to)</td>
<td>Just-in time access</td>
</tr>
<tr>
<td>Successful developments (due to)</td>
<td>Flexibility to plan B plans</td>
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<tr>
<td></td>
<td>Familiarity with technology</td>
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<td></td>
<td>Regularity on the use of spaces</td>
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</tbody>
</table>

Table 4.1.3.3: Critical incidents and development on the theme unpredictability

I have categorised as unpredictability to those teachers’ experiences that revealed issues linked with the difficulty in predicting potential problems beforehand when trying to use the required videoconference technology. SL teachers shared technological problems that they could not properly predict when using temporary spaces such as the use of spaces with poor connectivity.

[⇒ Flexibility to plan B plans]

The findings reflect the importance of teachers being able to adapt the exchanges to the demands of the situation, space capabilities or time constraints, among others. This translated in some of the SL teachers showing enough flexibility when participating in the exchanges by planning or even improvising more functional B plans, if necessary. This usually means abandoning more risky plans in favour of more dependable ones (e.g. moving from small group to whole-class encounters).

[⇒ Familiarity with technology]

Regarding the technology needed for doing eTandem videoconferencing, SL teachers brought an array of strengths and challenges to their management of computers for their
eTandem videoconference experiences. SL teachers had access to a wide range of videoconference technology but they finally agreed to choose one considering issues of familiarity.

⇒ Regularity on the use of spaces

The findings of this section indicate a need to transform the usually temporary eTandem videoconferencing spaces into more regular settings. In doing so, teachers would facilitate the mutual process of adaptation that an innovation –in this case, eTandem videoconference technology– needs in order to become naturalised within its context, in this case, in the classrooms or external spaces used to do the videoconferences. More regular access to temporary spaces –with the required technology for eTandem exchanges– might help to diminish unpredictable issues.

⇐ Just-in time access

Some teachers exploited the use of external spaces but referred to their chances of booking them or the just-in-time access to these extra-spaces as difficult.
4.2 Planning the social environment

The previous part of the findings chapter describes how teachers planned their physical environment, that is, the planning of the videoconferences in relation to the teachers’ possibilities of using computers either in the classrooms or outside them (in the computer lab or at home) both for teachers and their students. It also referred to time arrangements as an organisational constraint on the process of eTandem videoconferencing.

Someone, though, must manage access to the technology resources whether they are available in the classroom or in a remote location. Since communication technologies can provide opportunities for collaboration, someone must also manage the set of social relations established in and outside the classrooms. This second section of Chapter 4 presents findings on the teachers’ involvement when planning the social environment, that is, when generating what I have termed supportive collaboration. For the purpose of my study, this term –supportive collaboration– refers to the set of relations between members of the classroom (e.g. teachers and students), of the school (e.g. other teachers, administrators) and of the community (e.g. parents).

Included in the salient features that contribute to a successful integration of videoconferences, Anderson (2008) also adds the support of teachers and other school-based personnel. Teachers in charge of integrating eTandem videoconferencing in their schools may be affected by the supportive collaboration they receive.

At the micro-scale of the classroom, Hartnell-Young (2006) distinguishes between the learning space in its substantial form and the space influenced by teachers and students in what Lönglund (2010) refers to as the social construction of space. Hartnell-Young (2003:21) defines the social construction of space within the social context of the classroom as the "attempts of both teachers and students to work together with a common goal or purpose".
In their classrooms, teachers show a high degree of flexibility in adapting to “the types of arrangements for students to learn individually and in groups, and expectations of the level of freedom allowed” (Hartnell-Young, 2003:48). Due to limitations of my study (See 1.1.3), this set of social relations within the classrooms and their implication on the development of the exchanges does not include the students.

At the macro-scale of the school, Hartnell-Young (2003:244) finds that “collaboration between teachers and with their staff and professionals in managing people and resources was important in increasing efficiency, building teamwork and sharing knowledge”. She (ibid) provides two different approaches to the purpose of collaboration: Kaye’s (1992:4) and Scardamalia and Bereiter (1999). Kaye (1992:4) sees collaborative learning as “the acquisition by individuals of knowledge, skills or attitudes occurring as the result of group interaction”. In contrast to Kaye, who regards the purpose for collaboration from an individual perspective, Scardamalia and Bereiter (1999) argue that the purpose for collaboration is aimed at the construction of collective knowledge.

Hartnell-Young (2003) underlines the importance of teachers and administrators working together and engaging in professional collaboration. This section also reflects the social construction of space from the perspective of participant-teachers receiving ad-hoc assistance from managers and other administrative staff. These supportive contributions may be provided by managers at all levels (Lim, 2009), by the principal or by higher-level administrators (Guskey, 2000 in Bose, 2007) collaborating with the SL teachers.

Among a list of supportive issues from these administrative staff one may include funding for programming and availability of technical support (Lim, 2009), the principal’s experience and recommendations (Freed and Lim, 2009) as well as staffing requirements, curriculum alignment, professional development and openness to change on behalf of teachers, particularly as regards their technology skills (Bose, 2007). Administrative support also includes the amount
of time provided for the videoconference coordinator (Lim, 2009) or teacher (Bose, 2007), in the case of this study the SL teachers.

At the virtual-level, the supportive collaboration of eTandem partners from the remote school also affected the quality of their videoconference-integrated experiences. Anastasiades et al. (2010), for example, have already shown how synchronous communication under pedagogical conditions plays a significant role in supporting collaborative synchronous learning activities at a distance by “strengthening the social relations”, not only among students, but also among teachers of the local and the remote classes.

First I give an overview of background information from an initial survey sent to the participant-teachers in Year 1 of the study linked to the item planning the social environment. Together with this background information and a first analysis of their accounts, I guided the investigation of the critical incidents that they encountered in Year 2 and Year 3 of the study to focus on the teachers’ involvement when generating support.

4.2.1 Teachers’ background on planning the social environment

The second part of the initial survey (Appendix C – Planning the social environment) aimed at investigating the possibilities for the SL teachers to receive classroom support from other teachers, language assistants or work-placement students. Six questions in the survey (Table 4.2.1) aimed at discovering how issues linked to planning the social environment influenced SL teachers’ involvement when integrating videoconference technology in their SL classrooms. The first set of questions focused on whether teachers could receive support from language assistants (question 15a), other teachers (question 15b), parents (question 15c) or other people (question 15d).

While these first four questions (questions 15a to 15d) were based on Hartnell-Young’s (2003) conceptual considerations on planning the environment, the last
two (question 15e and question 23) built on data gathered from two initial focus group interviews with twenty-three teachers in Year 1 of the study (Table 3.5 - page 98). Most of the SL teachers in both focus groups commented that they usually worked alone in their classes (Roura, 2011b). Taking into consideration this data from the two focus groups, the survey also included a request (question 14e) to inform me whether or not they preferred to work alone.

Although a sense of community is regarded as a positive aspect of synchronisation between schools (Flacke, 2010), many of the teachers in the initial focus group also expressed that they would not feel confident with the idea of working on a project with other teachers with whom they usually shared the same groups at that moment. Some also indicated problems of relationship with other teachers. Question 23 requested them to tick, among several other issues, whether or not they considered the lack of support from the other teachers a challenge.

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<tr>
<th>Item: Planning the social environment</th>
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<tr>
<td><strong>Questions</strong></td>
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<td>15a</td>
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<td>15b</td>
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<td>15c</td>
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<tr>
<td>15d</td>
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<tr>
<td>15e</td>
</tr>
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<td>23.6</td>
</tr>
</tbody>
</table>

Table 4.2.1: Survey questions on planning the social environment

Supporting the constructivist view, Wenger stresses (1998:24) the importance of creating “places of engagement for people” where education is not limited to schooling, but is a mutual development process between communities and individuals. However, the initial results in the survey (Table 4.2.2 and 4.2.3) already hinted that classroom support from other teachers, school staff or
external members might be critical for the development of the exchanges. While only two of the teachers showed their preference to often work on their own (question 15), ten teachers ticked lack of collaboration from other teachers as one of the reasons not to participate in these kinds of exchanges (question 23).

<table>
<thead>
<tr>
<th>Item: Planning the social environment</th>
<th>Questions: 15e I prefer to work alone</th>
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<tbody>
<tr>
<td></td>
<td>Teachers out of 20</td>
</tr>
<tr>
<td>1 Never</td>
<td>12</td>
</tr>
<tr>
<td>2 Rarely</td>
<td>4</td>
</tr>
<tr>
<td>3 Sometimes</td>
<td>2</td>
</tr>
<tr>
<td>4 Often</td>
<td>2</td>
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<tr>
<td>5 Always</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>20</td>
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Table 4.2.2: Results from the survey (question 23): teachers’ preferences to work alone

Teachers were asked more specifically about the support from other staff members. The majority of them stated that they never (17 teachers) or rarely (3 teachers) received support from language assistants (question 15a) and only sometimes (2 teachers) from other teachers (question 15a). A similar tendency is shown with support from parents (question 15c): 16 teachers indicated that they never or rarely received support from parents; this last questions shows a tendency of some teachers to be more opened to parents than to other teachers in the school.
<table>
<thead>
<tr>
<th>Item: Planning the social environment</th>
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<tbody>
<tr>
<td>Questions: 15 Do you have anybody else helping you in your classes?</td>
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<table>
<thead>
<tr>
<th>Teachers out of 20</th>
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<tbody>
<tr>
<td><strong>15a</strong> Language assistant</td>
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<td>Never</td>
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<td>Rarely</td>
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<td>Always</td>
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<td>TOTAL</td>
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*Table 4.2.3: Results from the survey (question 15): support from other staff.*

### 4.2.2 Teachers’ accounts on planning the social environment

This initial background information from the survey already hinted that classroom support from other teachers, school staff or external members might be critical for the development of the exchanges. Looking through the teachers’ accounts, as contextualised below, I identified three relevant themes, namely *individuality, experience,* and *support.*

#### 4.2.2.1 Teachers receive support from other staff at the local school

The majority of the teachers who participated in the exchanges did so with the intention of working on their own. Far from regarding their participation in the eTandem exchanges from an interdependence perspective (Hartnell-Young, 2003), most participant-teachers viewed their role as an independent activity that did not include the involvement of other staff members in their local schools.

From the twenty participant-teachers, thirteen of them participated on an individual basis and received minor assistance from other staff in their local school. At least in this initial stage, these teachers did not involve other members...
of the school community and they did not open up their experience to the
decisions made at school. Only one father was partially involved in the project
helping Hill with specific aspects, such as the recording of the videoconferences.

The initial individual approach of many of the participant-teachers, an attitude of
interdependence emerged among some of the teachers, who were not only
cconcerned with their own progress but also with the progress of others and the
whole school community. Initially, these teachers regarded their participation in
the exchanges as an ‘on trial’ experience; they viewed it as a point of departure
for a future expansion of the project to other teachers in their schools.

Pat, a teacher from a secondary school in the USA, indicated that she was the
only one who participated in an international exchange out of six SL Spanish
teachers in her department. As she explained, she encouraged the other teachers
to participate; and they took the opportunity to do so, but on a ‘less risky’
national level:

   Alone. We are six Spanish-as-a-SL teachers; I’ve tried. I let
them know that if they wanted to participate ... and I had to
find penpals in Philadelphia and elsewhere in the United
States for the other five; you were the only one that was
international [Interviews – Tandem 7 – Pat] [34].

Ari, a newcomer but a very enthusiastic secondary-school teacher in Catalonia,
joined up in the first meeting with me together with Carme, another SL teacher
from the same school; but it was the first and last time that I met Carme. In one of
the interviews, Ari explained that Carme and other teachers had an interest in
participating in the exchanges, but they were waiting to see how much of a
success or a failure Ari’s first experience would be:

   People are very interested but a waiting a little to see how
the first experience goes [Interviews - Tandem 7 - Ari] [35].

Hartnell-Young (2003:200) indicates that “in the social constructivist classroom,
collaboration among learners is important, but since students are apprentices (not
yet experts) in the processes of learning, it remains the teachers’ responsibility to
be a meta-mediator". This context requires more teachers "to see themselves as leaders and followers, as experts and novices, as teachers and learners" (Hartnell-Young, 2003:264). While Hartnell-Young (2003) insists that decoupling the different roles may affect the social purpose of connectedness expressed by many teachers, she also refers to the necessity of doing so due to the shortage of teachers and the high skills required for each of these roles.

Tere, the teacher in the USA, was working alone. Jerry described teachers who worked on their own as snipers – referring to those teachers who take charge of all the responsibility that implies the participation in a project like the one in the study:

> If we do not work as a team, a person ends up being a sniper. [...] Look at that, perhaps, this was one of the reasons why it did not work properly. In our messages we were five people who received a copy of the email; instead Talia did not have anybody [...] This is something to consider [Interviews – Tandem 8 – Jerry] [36].

With a wide professional experience as SL teachers, many participant-teachers showed confidence in assuming their role as SL experts. Four teachers (Luca, Cathy, Ari and Jerry) had some kind of support from other SL teachers (Sara, Mari, Car and Martha, Cris, Seli and Esther) throughout the different phases of the project (Table 3.3 - page 93).

Far from working together with common goals, taking risks to explore areas outside their expertise and sharing their learning between them, as Hartnell-Young (2003) defines an ideal community, local collaboration between SL teachers from the same department did not prove, in general, to be a real collaboration. Cathy’s comment below shows how some teachers introduced themselves as a group of SL teachers working in the SL department and participating in the project:

> Maria (my colleague) and I [Emails – Tandem 6 – Cathy] [37].
In one of the interviews, Maria, Cathys’ partner, defined herself more as an assistant, whose role was limited to accompany either Cathy or the substitute teacher on the day of the videoconferences:

Assisting Cathy! I only go during or before the conferences [Interviews – Tandem 6 – Maria] [38].

Some of these teachers reported a varied range of responses linked to their involvement when generating supportive collaboration among their local school members. Their answers revealed complaints about other teachers in their SL department.

Enid, a secondary teacher in Catalonia, expressed her gratitude to Jose, the ICT coordinator in her school, for motivating and pushing her to participate in the exchanges, yet she complained about the imbalance generated with the other SL teachers who were teaching on the same level. She regretted that, while the other teachers were advancing through their syllabuses, she not only had to participate in the exchanges and to cover the same syllabi required in her school, but was given the same amount of time.

The fact of doing the preparation before doing the videoconferences has taken time from other things from the curriculum that I have to do and so I am also extremely busy [Interviews – Tandem 6 – Enid] [39].

Some of these SL teachers expected to establish novice–expert relationships both with other members in their local school and with their eTandem partners. In fact, experts on ICT (Iu) and experts on coordinating international projects (Jose and Jerry) both encouraged and collaborated with the new SL teachers so that they continued with the exchanges. Gina, for example, defined Iu as being very helpful and as being the one who pushed her to get involved in the project:

Iu has been an important help, of course. In addition to pushing me to get involved in the project [...] [Interviews – Tandem 4 – Gina with Iu] [40].
Iu and Jose supported and motivated Gina and Enid, the SL teachers in their respective schools. They revealed a tendency to decouple the different roles required to participate in the eTandem exchanges. These teachers specialised – or restricted – their support mainly to dealing with administrative issues and solving technological problems, as Gina commented about Iu:

She takes the responsibility for the technical side [Interviews – Tandem 8 – Gina with Iu] [41].

Iu, the ICT coordinator, draws a picture of Gina, the SL teacher, as a passive partner following instructions from an expert:

We work well together because Gina is good; I say ‘do this’ and she does - she’s a jewel [Interviews – Tandem 4 – Iu with Gina] [42].

As Anna in Tandem 3 reflected in one of her comments, the previous experience of many of these teachers in this kind of projects was extremely limited and their participation in the exchanges aimed at gaining some experience:

I am gaining experience. I honestly did not know what qualifies as videoconferencing [Interviews – Tandem 3 – Anna] [43].

Regarding the skills required for each of the roles needed to integrate videoconference technology in the classroom, Fullan (1992 in Bose, 2007) sees the implementation of what teachers have learnt during their professional development as a dynamic system. He comments that, prior to implementing any new instructional strategy, the teacher has to acquire the knowledge about it and then incorporate it into his or her curriculum. Linked to videoconferencing, Bose (2007:50) concludes that "teachers need training on learning not only about the videoconferencing system, and other aspects of logistics but also about learning how to integrate the videoconference into their existing curriculum".

Some teachers in the study pointed out that their professional training had acquainted them with many of the technological tools suggested for the project,
such as recording and uploading videos on a blog or the use of videoconference technology; yet, they did not feel at ease because they could not remember how use them, as they had never introduced these in class with their students. The previous exchanges that some SL teachers had managed were simple penpal experiences, in which students would write letters to other students from other countries. Pat, in Tandem 7, regarded the exchanges as a continuity of her previous participation in penpal experiences:

In case our times do not match, we could still do penpals [Interviews – Tandem 7 – Pat] [44].

Pat’s eTandem partner, Ari, also admitted a limited experience, basically limited to previous unsuccessful exchanges aimed at improving her students’ written skills:

I tried to get into another project but I never received anything. She was a young woman who was also in college doing a university project. My students were supposed to write ten essays, one per week, and the students from there had to correct it. Our students have already written the things but I never heard back from them. She [the teacher] told me that she had problems getting students from the same age [Interviews – Tandem 7 – Ari] [45].

Even when Alex, one teacher participating in the exchanges for the first time, managed to connect with his eTandem partner via Skype, he expressed his complete gratitude to him; he even defined the experience as ‘something of an advanced level for himself’:

[Seeming pleased] This is an advantage level for us, eh? [T-T VC – Tandem 1 – Alex] [46].

Hartnell-Young (2003:265) adds that “professional development strategies that focus on providing emptiness — space for reflection, collaboration, conversation and debate — will support an emphasis on creation rather than consumption of knowledge”. Bose (2007) lists some factors such as teacher beliefs, teachers’
teaching methods, years of experience, teachers’ stage of awareness of technology that influence teacher utilisation of the professional development in technology.

A whole-school approach to design (Hartnell-Young, 2003:243), in which all teachers’ contributions were welcomed, was rarely evident. Jerry, a secondary-school teacher of geography with an extensive background as a coordinator of national and international educational projects, attended the first teacher-to-teacher meeting accompanied by a group of primary and secondary SL teachers from his local school (Figure 4.2.1).

Figure 4.2.1: 1st teacher-to-teacher meeting with Tandem 8 teachers in Catalonia

SL teachers seemed enthusiastic about participating in an international project; but at the same time they did not seem too confident about it, as they did not feel sure about the use of ICT in their classrooms. Jerry was not an SL teacher in the school and described himself as not being proficient in English. He was the one, though, who pushed the SL teachers at his local school to join the exchanges.

Jerry adopted the role of teacher as a transformational leader (Hambley, 2005). In doing so, he aimed at “motivating and inspiring followers to perform beyond expectations” (Bass and Avolio, 1993 in Hambley, 2005:14). He led the eTandem exchange at his school and encouraged the other teachers to get involved in it, trying to motivate them "to go beyond their self-interests for the good of the
group” (Den Hartog and Koopman, 2001 in Hambley, 2005:15) and assuming a role similar to that of the videoconference coordinator (Lim, 2009).

Jerry understood that the role of the novice teacher was that of someone who should learn on the go as soon as possible:

I, having more experience, will do it one way and Cristina will do it in another (way) but this is the only way to start and to make it happen. Because a person test being a coordinator, either he does it or not. Once he has little learning, he does a go and he will know more next done a time [Interviews – Tandem 8 – Jerry] [47].

With this idea in mind, Jerry stepped down from his role as an expert to give way to the novices. What happened, though, is that the eTandem partnership did not continue:

At school it was clear that I would start leading it but, once the initiative is started, there should be other people who encourage it; Cris in primary and Martha in secondary would lead the next tandems, and I would support them and not lead it because I’m a restless person, but we can not be innovating always the same with everything. Leadership must be passed on to other people who have already seen how it works [Interviews – Tandem 8 – Jerry] [48].

When the ‘leader’, Jerry, was asked about the reasons why the other teachers did not continue with the exchanges, he described his role in leading the project as something that involved many ‘extra’ hours; it implied lots of extra work encouraging other teachers, coordinating them, planning, answering emails and so on and so forth:

I, for example, have spent many hours [on this]. It involves many hours and the teacher should have it clear that it involves an effort of coordination, encouraging your school teachers, thinking how we can do it, answering emails [Interviews – Tandem 8 – Jerry] [49].
Again, it is a work-intensive experience that requires the participation of teams, both from the local and the remote schools. In the following section, I will refer to several issues relating to how some teachers enhanced supportive collaboration with their remote eTandem partners.

4.2.2.2 Teachers enhance collaboration for long-term virtual membership with their remote eTandem partner

Hambley (2005) refers to four main dimensions when describing how virtual teams differ from each other: lifecycle, boundary spanning, temporal distribution and member roles. The last dimension, member role, has already been discussed above on the previous point (4.2.2.1) and ranges from "each team member holding multiple roles (e.g. tasks are interchangeable amongst team members) to members possessing singular, more fixed roles (e.g. expertise in a certain area)" (Hambley, 2005:8). Temporal distribution refers to "the degree to which the team transcends the boundaries of space and time" (Hambley, 2005:7). In this section, I mainly refer to the first two dimensions (e.g. lifecycle and boundary spanning) with the aim of describing and analysing how eTandem virtual partners collaborated with each other.

Apart from tackling the difficulties encountered in his attempt to ensure the success of the exchanges, Jerry’s role as a ‘pusher’ also included encouraging his eTandem partner, Tere. When Tere showed the first signs of discouragement, Jerry rapidly encouraged her to persevere. In his role as a virtual leader or e-leader (Hambley, 2005), Jerry made a difference to the team performance. In his leadership role, he accomplished Hambley’s (2005:7) dimension of boundary spanning by showing the ability to cross-functional, organisational and cultural boundaries and "be more adaptive, flexible and responsive, and to access the most qualified individuals for a project".

As shown in the following extract from an email, he used adjectives such as wonderful to define these kinds of projects; he also used the imperative mood in
three expressions. He even added several exclamation marks at the end of each of three of the four statements used for additional emphasis:

International projects, to start, are difficult to coordinate, but then they are wonderful. We must persevere!!!! Do not be discouraged!!!!!!! We’re going to make it work!!!!! [Email – Tandem 8 – Jerry] [50].

Lifecycle ranges from temporary (e.g. short-term specific projects) or more permanent (e.g. long-term) virtual membership. It often implies a fluid team collaboration that "evolves according to changing task and competency requirements" (Townsend, DeMarie and Hendrickson, 1998 in Hambley, 2005:7-8).

Considering Lim’s suggestion (2009) that one teacher may use videoconferencing four or five times in a school year, one of the requirements for participating in the exchanges was to set up an eTandem videoconference approximately once a month. Inevitably, securing a long-term and continuous commitment from these SL teachers became a crucial factor, both from the point of view of the different teachers involved and also from the point of view of the data being gathered for the project.

Teachers often appeared to be quite enthusiastic about their participation in the research project; they seemed motivated with the idea of starting the exchanges, collaborating with their eTandem partners and planning exchanges as often as possible. These positive attitudes were particularly evident in the first emails exchanged between eTandem partners and in the initial teacher-to-teacher videoconferences. Here teachers like Tere, for example, promised a close relationship to each other in order to solve any challenges that could come up:

We are looking forward to working together and we hope to do a very interesting project. We are very excited to be working together and we are sure that we will reach a common understanding [T-T VC – Tandem 8 – Tere] [51].
But, as shown on Table 4.2.4, the required frequency of the videoconference encounters was not met; for at least two months elapsed between the first teacher-to-teacher (T-to-T) videoconference (VC) meeting with me and the first student-to-student (S-to-S) eTandem videoconference. More than three months elapsed between the first and the second videoconference.

From the ten eTandem partnerships with twenty SL teachers initially committed to the Youngcast project and the research project, tandems 2 and 7 withdrew early in 2011 and five more (tandems 1, 3, 4, 6 and 8) withdrew at the end of Year 2. Tandems 5, 9 and 10 withdrew even before starting the first of the videoconferences with students.

Despite the initial enthusiasm and initiative of these teachers, their solitary endeavours appeared to be one of the main factors for the discontinuity between the different videoconference sessions and, in many cases, for the final withdrawal from the eTandem exchanges. Many of these unsuccessful experiences could have been solved if eTandems had worked as a team or approached the exchanges as a whole-school project, and not as single partners.

It was often the case that the indisposition of one of the two teachers meant the postponement of the videoconference. I categorised the obstacles encountered as having three possible sources: within the school, outside the school, and teacher-linked.

<table>
<thead>
<tr>
<th>Tandem</th>
<th>1st contact</th>
<th>1st T-T VC</th>
<th>1st S-toS VC</th>
<th>2nd S-toS VC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hill Alex</td>
<td>Edinburgh University Primary School contact</td>
<td>10/10/2011</td>
<td>09/12/2011</td>
</tr>
<tr>
<td>2</td>
<td>Jude Luca</td>
<td>iEARNYoungcast Congress Webquest</td>
<td>04/10/2011</td>
<td>12/01/2012</td>
</tr>
<tr>
<td>3</td>
<td>Anna Elia</td>
<td>CAP-space iEARN member</td>
<td>17/11/2011</td>
<td>05/12/2011</td>
</tr>
<tr>
<td>4</td>
<td>Mary Gina</td>
<td>Skype platform Personal contact</td>
<td>30/11/2011</td>
<td>13/01/2012</td>
</tr>
<tr>
<td>6</td>
<td>Cathy Enid</td>
<td>CAP-space iEARN member</td>
<td>16/11/2011</td>
<td>11/01/2012</td>
</tr>
<tr>
<td>7</td>
<td>Ari Pat</td>
<td>CAP-space iEARN summer course</td>
<td>17/11/2011</td>
<td>12/01/2012</td>
</tr>
<tr>
<td>8</td>
<td>Jerry Tere</td>
<td>Itinerarium Skype platform</td>
<td>16/11/2011</td>
<td>10/01/2012</td>
</tr>
</tbody>
</table>

Table 4.2.4: Time distance between 1st T-to-T meeting and the 1st two S-to-S videoconferences.
When asked about the reasons why teachers did not hold the videoconferences as frequently as required, Anna, for example, blamed her eTandem partner, Elia. Apparently, Elia was on a trip with her students:

I would not have had any trouble making a videoconference per month but it seems Elia’s children were traveling […] and until now we could do this one in April and another one in May [Interviews – Tandem 3 – Anna] [52].

Like in the case of Elia’s trip, many of these inconveniences were caused by internal factors linked to the school, and which could have easily been foreseen. As Hill anticipated, periods of exams usually meant teachers being under a lot of pressure and without much free time:

I see it a little bit complicated to do it before December because we have to re-evaluate the kids in order to give them marks [Emails – Tandem 1 – Hill] [53].

An email sent on the 17th of October – the date set for the 1st videoconference – proposed a one-month holiday and school inspections:

We are on holiday this week but back at school on the 24th of October. We have two school inspections coming so it is a bit hectic at the moment. After November the 19th everything will be back to normality and I hope we can start with the videoconferences by then [Emails – Tandem 4 – Mary] [54].

Unlike Spanish schools, many schools in United States and one in the UK could not predict the number of students that would register for their SL courses. Cathy, Tandem 6 partner in the US, sent an email just four days before the synchronous meeting (Email from the 8th of December, 2011); she wanted to postpone a videoconference scheduled for December the 14th, 2011 until January 2012 explaining that there were administration problems with students’ registration:

I regret having to communicate that there is a problem with the number of students that registered to our class. At first,
they told us that we were gonna have thirty students; however, the administration was wrong and finally they were eight, which caused the cancellation of the Wednesday class [Emails – Tandem 6 – Cathy] [55].

Definitely the discontinuity in the internal make-up of students’ groups also became a critical incident that affected the development and continuity of the videoconferences:

With the transition from one semester to the other, I was losing some students and gaining others and we had to change groups [Interviews – Tandem 3 – Anna] [56].

While the above factors could be easily predicted as part of the dynamics of the school, other factors were unpredictable. Ari, for example, apologised for her absence explaining that she had not been able to arrive home for the meeting:

First of all, apologies for my keeping up with the appointment on last Friday. I was hiking with a group of students from my school and I could not get home for the connection. The truth is that I was not entirely sure of the meeting and I could not login to see my email (... I have no iPhone!), So I could not see the last email from Sergi specifying the details of the meeting. So ... SORRY! [Emails – Tandem 7 – Ari] [57].

Sara in Tandem 2 made it clear from the beginning that her participation in the project was provisional, as she was a substitute teacher:

I'm only the substitute teacher and I'll probably be so until late October or mid-November. So don't panic if I ask you too many questions because I want to know as much as possible before Luca comes back so I can explain to her what this is all about [Emails – Tandem 2 – Sara] [58].

For three months, Jude and Sara had been collaborating on the planning of the 1st students’ videoconference. However, they failed to launch the 1st videoconference with their students despite all the arrangements through a first online meeting on October the 4th, 2011, the exchange of over 40 emails, and a
second teacher-to-teacher videoconference on January the 12th, 2012. When everything was arranged, the teacher that Sara was substituting returned to the school and she did not wish to take part in the exchanges. Jude, the teacher from the UK, showed her disappointment at the situation in one of her emails:

> It is a shame because we had started to work very well, hadn’t we? And above all that, you seemed very enthusiastic to do it; but hey, it is what it is and what we’re going to do [T-T VC – Tandem 2 – Jude to Sara] [59].

Contrary to Sara’s professional situation, Alex, a primary-school teacher in Catalonia, was actively involved in the project during Year 2 of the research; but he quit when taking a one-year leave during Year 3 to work as a teacher in Canada. Although the eTandem exchange with Hill did not continue, in this case, his first experience was useful as he arranged an exchange between his new school in Canada and some of the teachers in his previous school in Catalonia, who felt attached to him.

Tandem 6 was arranged with one teacher in New York, Cathy, and a classroom in Catalonia with Berta first and Enid later. In my first online meeting with Cathy, she informed that she would be absent on maternity leave; she then introduced me to another full-time teacher in her school, Maria. Maria would guide Cathy’s substitute teacher in the exchanges. But Cathy’s departure did not make things easy at all, as Maria described:

> Cathy has another person substituting for her but she has no idea [Interviews – Tandem 6 – Maria] [60].

Berta, the first teacher from Catalonia who agreed to participate in the tandem 6 exchange, stepped back even before starting the first teacher-to-teacher meeting with their tandem partner and me. She explained that she was still suffering from the consequences of a three-month illness.

> I have not caught up with being on sick leave that has lasted almost the entire first quarter [Emails – Tandem 6 – Berta] [61].
Tere, Jerry’s eTandem partner in the USA, complained about having other teachers attached to the emails. She had never met these teachers online before, and they never answered any emails. She suggested trying out some kind of activity where all the teachers involved could know about one another:

That was also a little bit of that trouble but if they had responded and been part of the emails or maybe he [Jerry] took a little bit of a step back […] I did not really understand their role so I think that for the future it would be better or easier to have one-to-one [Interviews – Tandem 8 – Tere] [62].

4.2.2.3 **Teachers collaborate with managers and other teachers at all levels**

Hartnell-Young (2003:60) refers to the most challenging new role for teachers as that "where teachers work in real collaboration with each other and take responsibility for their learning (Venezky and Davis, 2001; Wade, 1987)". As part of this professional collaboration, she includes teachers and administrators "working together, sharing their knowledge, contributing ideas and developing plans for achieving educational and organisational goals".

Participation in a project like this usually operates on an entirely voluntary basis and teachers receive no official support or recognition for their engagement. It means that a high level of commitment cannot be guaranteed unless it is viewed as a project in which the whole school takes part, and where other teachers and school managers also become involved.

Anna, in her second interview, concluded that her experience had been really important for the students and that she had received the official support—not collaboration—of other teachers and the school manager:

I think it is great for them to have contact with other people in the world and it is something that the headmaster here and many of the teachers have supported [Interviews – Tandem 3 – Anna] [63].
Being a generalist teacher and not an SL teacher, Jerry had no problems switching between the different key learning areas. Rather than limiting himself to specific levels and disciplines, he had the support and tended to collaborate with other teachers from both primary and secondary levels.

In our school, we are coordinated with the teacher in secondary school […] We are very pleased to establish this cooperation between primary and secondary teachers from different areas. It is important to emphasize the availability of Martha and Cris, because it is not common in other schools and even with other fellows in the same school that this could happen. Thanks mates from secondary level! ;) [Emails – Tandem 8 – Jerry] [64].

He went a step further and proposed the implication of as many schoolteachers as possible, even those who were not participating in the current exchange:

The consensus is that we send a copy of everything; even to the English teacher who is not involved, so that she can follow what this is. [...] This is also a learning experience ... to be informed about everything that this contact entails, not only about the final product [Interviews – Tandem 8 – Jerry] [65].

All this happened with the encouragement of the school principal and the management team:

The move in the school has been a move that counted on the support of the management team and it was very clear which were the objectives of the English department; it was very clear that this was an idea that was to be encouraged [Interviews – Tandem 8 – Jerry] [66].

But even teacher-leaders as enthusiastic about their profession as Jerry found it difficult to handle what it means to be a teacher in general, while at the same time being in charge of an exchange like this in particular. As he describes, the feeling of being overworked and the time limitations become a critical factor difficult to overcome:
The situation for teachers in terms of time as you can see for yourself is dramatic. We’re barely managing and cannot do everything. Sorry. I wish I could dedicate more time ... but I do not get there. Anyway, it is the best profession in the world ;)) And we are lucky to be able to work on that. A hug. Jerry [Email – Tandem 8 – Jerry] [67].

To solve this critical challenge, some SL teachers agreed to start planning ahead over the summer for the second year in the project. Again, the school agenda made some teachers to step back from participating in the project, as Tere describes:

Hi Sergi, I wanted to contact you because the school year is quickly approaching. I know that you and I discussed taking some time over the summer to start planning the tandem exchange. I start school in just three weeks, and I’m not sure this exchange will work. I have a lot going on this year and I’m not sure I can really dedicate the time that is really necessary to make this programme successful. I’m sorry for waiting so late in the summer, and I know you all just finished school, but I would hate to commit and not hold my end of the stick [Email – Tandem 8 – Tere] [68].

In general, the involvement of school managers and other staff members was limited to more bureaucratic matters. As head of the language department, Mary, for example, first wanted to try the experience alone before involving the rest of the SL Department; but she specified that she needed permission from the principal and the technological support of the ICT coordinator:

Let me get organised and check all with my principal and IT support and, if I see it feasible, I will let you know [Emails – Tandem 4 – Mary] [69].

This same teacher sent an email just after Christmas and before the first videoconference informing very briefly that she should withdraw from the project. When I asked her what her reasons were, she explained that the school staff was too busy trying to implement a new methodology they had decided to follow:
The school has decided to start teaching with a method from the University of Cumbria (Communicative method), so now we are madly trying to change EVERYTHING. The truth is that we had already begun to experience it this year but it is now that we have to apply it to all classes and levels. It is like starting from scratch [Emails – Tandem – Mary] [70].

Contacts with the two teachers from Tandem 3 and Tandem 6 in Spain were arranged through the headmaster in the school. Initially, the headmaster seemed interested in the exchanges as part of the school methodology. Finally, though, all he did was to decide which teachers matched the requirements for the exchanges – mainly taking into account the level and age of the students.

As shown in the interviews with the selected teachers and emails received from them, they regarded their participation in the exchanges as an imposition from above. Soon after the initial contact Berta, the first of the teachers selected for Tandem 6, sent me several emails with different reasons not to continue with the exchanges:

Good day, Sergi, I’m sorry but I have to tell you that right now I am unable to do this project [Emails – Tandem 6 – Berta] [71].

Enid, the second teacher selected for Tandem 6, also showed lack of enthusiasm and usually complained about her participation in the exchanges. In one of her emails, she reported that she was not given enough time to participate in the exchanges:

The handicap is that the school in New Jersey has it [the videoconferences] as part of its programme ... they keep certain hours for preparing the videoconferences [Emails – Tandem 6 – Enid] [72].

Contrary to this detached participation, Jerry did not only encourage teachers from primary and secondary, as commented above, but also secured the support of students in the higher courses:
We also agreed that the boys and girls in 3rd of ESO who would help with technology issues would also receive the support of another companion from 3rd year of secondary education with a proficient linguistic competency. Therefore, these "duos" strengthen "cooperation among equals" from the same stage and from different stages. Each group will also have 4 children from primary [Interviews – Tandem 8 – Jerry] [73].

**4.2.3 Critical findings and SL teachers' development on planning the social environment**

Summarising this section, tables 4.2.5 to 4.2.7 present three relevant themes and its related critical incidents on teachers’ planning role with regard to the social environment, namely: *individuality, experience and support*.

<table>
<thead>
<tr>
<th>THEME</th>
<th>DEVELOPMENT</th>
<th>CRITICAL INCIDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuality</td>
<td>Unsuccessful developments (due to)</td>
<td>Diversity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vulnerability</td>
</tr>
<tr>
<td></td>
<td>Successful developments (due to)</td>
<td>Predisposition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interdependence</td>
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</table>

| Table 4.2.3.1: Critical incident and development on the theme *individuality* |

The recurring theme *individuality* (Table 4.2.3.1) refers to the SL teachers’ and their students’ chances of building on prior identification and cooperation with their eTandem partners with the aim of generating a sense of belonging with each other.
Diversity

The SL teachers were geographically located in USA, UK, Switzerland and Spain. It allowed the investigation to be part of a diverse and complex virtual environment of classrooms from different countries, different levels and ages with the shared aim of integrating eTandem videoconferencing in their SL classrooms.

Predisposition

Considering this diversity, the selection of these teachers did not respond to issues of age, SL level of the students, school characteristics or availability of videoconference technology. Their recruitment built by a shared aim: their predisposition - or in some cases imposition by their school managers - to participate in the eTandem videoconference exchanges.

Vulnerability

These SL teachers generally viewed their initial experience of participating in the eTandem exchanges as an individual experience. SL teachers working on an individual basis proved to be extremely vulnerable to factors that may disrupt their participation in the exchanges: teacher-linked issues (e.g. illnesses, professional situation of the teacher, maternity leave), issues external to the school (e.g. traffic jam on the day of the meeting) or internal issues linked to the school (e.g. pressure to do other things, school inspections, holidays).

Interdependence

Despite the individual - vulnerable - approach of many of the participant-teachers, an attitude of interdependence emerged among some of the SL teachers who viewed their participation in the exchanges as an on trial experience, that is, as a point of departure for a future expansion of the project to other teachers in their schools and towards a whole-school approach. Findings indicate the importance of participating in teams (of teachers) to deal with the requirements of the work-intensive experience of these kinds of exchanges.
<table>
<thead>
<tr>
<th>THEME</th>
<th>DEVELOPMENT</th>
<th>CRITICAL INCIDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience</td>
<td><strong>Unsuccessful developments (due to)</strong></td>
<td><strong>ICT professional experience</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Electronic leadership</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Novice-expert relationship</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Successful developments (due to)</strong></td>
<td><strong>Professional experience as SL teachers</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>ICT personal experience</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Experience in projects</strong></td>
</tr>
</tbody>
</table>

**Table 4.2.3.2:** Critical incident and development on the theme *experience*

The theme termed *experience* (Table 4.2.3.2) entails the array of strengths and challenges that SL teachers brought from their previous professional experience.

- **Professional experience as SL teachers**

Although their background varied among them, the majority indicated to be experienced SL teachers.

- **ICT personal experience**

Most were also experienced technology users, confidently using communication technologies for personal purposes and accessing Internet for searching personal and educational material.

- **ICT professional experience**

The findings identify a gap between the previous professional technological training received and the use of it in the classroom. This lack of educational experience with technology increased when referred to videoconference technology. Although SL teachers shared general knowledge of technology for personal purposes, some of them indicated challenges on the practical applicability of this technology in their classrooms. They showed their concern on their lack of experience in this kind of exchanges, at least on its online eTandem format.
This lack of practical experience did not allow the majority of them to self-confidently take the role of leaders or, in the context of the study, of e-leaders. In fact, findings have revealed that very few of the SL teachers led the exchanges in their schools.

This role of e-leader was transferred to teachers with more background in participating in national and international projects with other schools. These teacher-leaders with no experience as SL teachers played an important role in leading the exchanges and pushed SL teachers in their schools to do so.

Findings show that many of the relationships between novice and expert teachers did not occur; e-leaders who tried to trespass their leadership to their SL teachers, for example, did not succeed. Few of the SL teachers regarded their participation as an opportunity to learn on the go and expected to establish novice–expert relationships with other staff involved in the exchanges.

<table>
<thead>
<tr>
<th>THEME</th>
<th>DEVELOPMENT</th>
<th>CRITICAL INCIDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unsuccessful developments (due to)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Successful developments (due to)</td>
</tr>
</tbody>
</table>

Table 4.2.3.3: Critical incident and development on the theme support
Teachers in charge of applying videoconferencing in their schools may be affected by the theme I have termed support (Table 4.2.3.3). This refers to the way SL teachers perceived their experience in relation to the participation of their school and remote partners. The findings show that very few of the SL teachers involved other staff members in their department or in the school.

[← Peripheral role]

In general, other staff members played a peripheral or secondary role. In particular, those SL teachers who worked as a group with other SL teachers did not participate on a one-to-one collaborative relationship and the role they played was more of an assistant or a supply teacher.

[← Overwork]

There was also a growing unease caused by the imbalance of overwork generated between those SL teachers participating in the exchanges and other SL teachers in the same school who were teaching in the same level, with the former reporting feeling overworked.

[→ Time]

Therefore, the findings suggest the need for these SL participant-teachers to have extra time to participate in the exchanges.

[← Decoupling roles]

In part, to solve issues of overwork, findings indicate a tendency to decouple the different roles needed: […]. The assistance of other staff members in the school, though, was limited to solving more technological or administrative issues. Support from school managers also limited to initial permissions. In some schools, the intervention of the management team usually implied an imposition to SL teachers. This imposition from above – either to participate in the exchanges or to withdraw from it – created an environment of discontent among some SL teachers, who felt that school managers obliged them to participate in the project according to their needs.
More than decoupling the different roles, findings suggest the need to generate team membership.

4.3 Planning the virtual setting

While the previous section outlines how the SL teachers planned the videoconference environment in terms of the physical space and the social environment, the following section describes how they did so in terms of the virtual setting.

This provides information on the teachers’ approaches to generating what I have termed connectivity. By generating connectivity, in the context of my study, I refer to the way in which the SL teachers’ plan and use of virtual learning environments and asynchronous and synchronous computer-mediated communication tools (CMC) diminished or encouraged the integration of the exchanges within the virtual communities of the geographically-distant SL classrooms.

Hartnell-Young (2003) considers connectivity as one of the main barriers to teachers improving classroom practice through information technology. She refers to two types of connections: boundary objects and brokering practices that can influence each other. According to her (2003:24), boundary objects include "curriculum and standards frameworks documents, school policy documents and the language associated with computers". Brokers are "those people — teachers, principals, researchers, and students — able to make connections across communities of practice and open new possibilities for meaning" (ibid). These teachers operating as brokers are "able to make these connections over time and space" (Hartnell-Young, 2003:186) and share a desire to replace "fragmented connections with a deeper community connectedness" (Hartnell-Young, 2003:240).
Hartnell-Young’s model (2003) on the teachers’ roles in classrooms where computers are used suggests several issues to consider when examining the roles of teachers in planning the virtual environment in these classrooms. According to her, the role of designer as a planning role in relation to the virtual setting includes planning the learning space created by digital technologies.

I initially deal with findings on the teachers’ planning role as designers and users of online collaborative spaces during their videoconference eTandem experience. In the context of this study, these online spaces are contextualised both within the official eTandem site I designed for the project with the collaboration of iEARN-Pangea coordinators (See: Chapter 3), as well as within the online platforms generated by the participant-teachers.

Furthermore, this role of designer as a planner in relation to the virtual setting also implies planning the learning space created by electronic communication (Hartnell-Young, 2003). This first section of the study also reveals significant findings on how the teachers’ use of asynchronous and synchronous computer-mediated communication tools (CMC) influenced the integration of the eTandem exchanges within their SL classrooms.

Juxtaposing background information from the initial survey (Appendix C) with my observations during the whole process and the teachers’ accounts, I identified four themes that contributed significantly to painting an overall picture of the teachers’ involvement when planning the virtual setting: online support, security, unstructure and misunderstanding.

### 4.3.1 Teachers’ background on planning the virtual setting

Setting the virtual scene, question 13 (Table 4.3.1) of the initial survey delivered to teachers asked about their potential choices when planning their virtual

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5 [https://sites.google.com/site/iearnyoungcast/?pli=1](https://sites.google.com/site/iearnyoungcast/?pli=1)
setting. This question requested teachers to inform me about their use of their school’s intranet platform, such as Moodle or WebCT. To do so, teachers had to choose the items that applied to their experiences from the list provided.

<table>
<thead>
<tr>
<th>Item:</th>
<th>Planning the virtual setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question:</td>
<td>13 If your institution has an online 'intranet' platform such as Moodle, WebCT, among others, what do you use it for?</td>
</tr>
<tr>
<td>Teachers out of 20</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>We do not have one.</td>
</tr>
<tr>
<td>2</td>
<td>We have one but I rarely use it.</td>
</tr>
<tr>
<td>3</td>
<td>I use it to communicate and share information with teachers.</td>
</tr>
<tr>
<td>4</td>
<td>I use it to communicate and share information with my students.</td>
</tr>
<tr>
<td>5</td>
<td>I create online-shared spaces for my students to work in groups.</td>
</tr>
</tbody>
</table>

Table 4.3.1: Results from planning the virtual setting: online space.

Only two of the teachers reported that they did not have an intranet platform in their school; the ones who had such a platform reported that they used it both to communicate and to share information with teachers and/or students. Results indicated a high number of participant-teachers (8 teachers) who had already communicated and shared information with teachers in the same school through their local intranet. The number of teachers who used the intranet platform with students is even higher than with teachers (12 teachers); half of them (10 teachers) also gave information on the creation of virtually-shared spaces for their students to work in groups.

Questions 11 and 12 from the initial survey (Table 4.3.2) asked teachers to specify their previous use of synchronous and asynchronous computer-communication tools both in personal and professional environments. Two of the teachers did not answer some of the questions of this part of the survey; it might probably had to do with the observation that one of them wrote down asking me to clarify

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these concepts (e.g. asynchronicity and synchronicity) in the ‘notes’ section of the survey: “I don’t know the difference between asynchronous and synchronous computer-mediated communication” — a flaw in the design of the survey.

Question 11 asked them about their use of the email (11a), discussion boards (11b) and blogs (11c). Question 12 asked them about their use of videoconference technology (12a), instant messaging (12b) and chat tools (12c).

<table>
<thead>
<tr>
<th>Item</th>
<th>Planning the virtual setting</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Use of asynchronous tools:</td>
<td></td>
</tr>
<tr>
<td>11a</td>
<td>Email</td>
<td></td>
</tr>
<tr>
<td>11b</td>
<td>Discussion board</td>
<td></td>
</tr>
<tr>
<td>11c</td>
<td>Blogs</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Use of synchronous tools:</td>
<td></td>
</tr>
<tr>
<td>12a</td>
<td>Videoconference technology</td>
<td></td>
</tr>
<tr>
<td>12b</td>
<td>Instant messaging</td>
<td></td>
</tr>
<tr>
<td>12c</td>
<td>Chat tools</td>
<td></td>
</tr>
</tbody>
</table>

*Table 4.3.2: Question from planning the virtual setting: CMC tools.*

The majority of teachers reported a high use of the email for personal reasons (Table 4.3.3). The eighteen participant-teachers who answered this question — two of them just did not answer this part — indicated that they always or often used it. Though only a minority of them (2 teachers) indicated that they rarely used asynchronous tools in the school, yet there were few teachers who often (6 teachers) or always (6 teachers) used it for educational reasons.
Item: Planning the virtual setting

Questions: **11a** Use of asynchronous tools: Email

<table>
<thead>
<tr>
<th>Teachers out of 20</th>
<th>Personal reasons</th>
<th>Educational reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Never</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2 Rarely</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>3 Sometimes</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>4 Often</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>5 Always</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>18</td>
<td>20</td>
</tr>
</tbody>
</table>

Table 4.3.3: Results from planning the virtual setting: CMC tools - Email.

Contacting this group of teachers via email was the usual form of asynchronous communication; while participation in discussion boards (Table 4.3.4 - question 11b) or blogs (Table 4.3.4 - question 11c) was often or always used by less than half of them.

Item: Planning the virtual setting

Questions: **11b** Use of asynchronous tools: discussion boards  
**11c** Use of asynchronous tools: blogs

<table>
<thead>
<tr>
<th>Teachers out of 20 [Educational reasons]</th>
<th>11b</th>
<th>11c</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Never</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>2 Rarely</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>3 Sometimes</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>4 Often</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>5 Always</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>18</td>
<td>18</td>
</tr>
</tbody>
</table>

Table 4.3.4: Results from planning the virtual setting: CMC tools - Discussion boards and blogs.
Most of the teachers participating in the study had used some type of synchronous communication tool before starting the exchanges, as Table 4.3.5 below shows. Most of the teachers indicated (question 12a) that they had often (8 teachers) or always (4 teachers) used videoconference technology for personal reasons; only a minority of them (4 teachers) had never communicated synchronously before. The patterns in the use of videoconference technology in their professional setting revealed a minimal use: eight teachers sometimes used it, four rarely used it, and the other eight teachers never used it at all.

<table>
<thead>
<tr>
<th>Item: Planning the virtual setting</th>
<th>Questions: 12a Use of synchronous tools: videoconferencing</th>
<th>Teachers out of 20</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Personal reasons</td>
<td>Educational reasons</td>
</tr>
<tr>
<td>1 Never</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>2 Rarely</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>3 Sometimes</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>4 Often</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>5 Always</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>18</td>
<td>20</td>
</tr>
</tbody>
</table>

*Table 4.3.5: Results from planning the virtual setting: CMC tools - Videoconferencing.*

These teachers could choose among a list of other synchronous tools; but only two out of the twenty teachers indicated that they always used other synchronous tools, such as instant messaging (Table 4.3.6 - question 12b) or chat (Table 4.3.6 - question 12c) in order to communicate with each other.
### Table 4.3.6: Results from planning the virtual setting: CMC tools - Messaging and chat.

<table>
<thead>
<tr>
<th>Item: Planning the virtual setting</th>
<th>12b Use of synchronous tools: instant messaging</th>
<th>12c Use of synchronous tools: chat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers out of 20 [Educational reasons]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Never</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>2 Rarely</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3 Sometimes</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>4 Often</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5 Always</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>18</td>
<td>18</td>
</tr>
</tbody>
</table>

#### 4.3.2 Teachers’ accounts on planning the virtual setting

##### 4.3.2.1 Social presence in eTandem videoconferencing

The eTandem exchange project aimed to use videoconference technology as the main tool for interaction between eTandem students. Rather than focusing my investigation solely on the use of videoconference technology per se, the current study may include contributions to the available research on the SL teachers’ preferences when communicating with their eTandem partners (teachers and students).

In doing so, I explored how SL teachers’ preferences may help them to establish and maintain social presence as part of the eTandem partnership. As defined in Chapter 2, social presence refers to the manner in which the medium of communication "allows individuals to maintain an awareness of others in a group and the impression that the group is communicating through mutual interaction" (Andres, 2006 in Keohane, 2010:39).

The geographical diversity of the participants, though, did not facilitate the meetings between the different partners. It did not make it easy for me as a researcher to keep communication open with all the different eTandem partners.
Emails received from some of the teachers during Academic Year 1 of the study already requested an online space for sharing the material generated with their eTandem partners:

I propose you create a space with material for the teachers [Emails – Tandem 1 – Alex] [74].

Initially I assumed the responsibility of establishing social presence as part of the online exchange project by designing and creating an online space where the different eTandem teacher-partners and their students could plan the exchanges and engage in online learning. Together with periodic communication by email and several synchronous encounters, the construction of an ‘official’ virtual space was a key element in establishing the collaborative environment I sought and maintaining social presence.

The official site provided each eTandem partnership with different online spaces as a way to document the videoconference design processes in an online format. Participant-teachers could upload and share information about the school, the students and teachers; they could also work online on the lesson plan design for each of the videoconferences, and all the videoconferences recorded were also uploaded on the same platform.

Some participant-teachers regarded the organisation, sharing and documentation of the videoconference design processes in an online format as a helpful aid. Some of these teachers showed considerable expertise using the platform, administering permissions, filling in the lesson plan sheet with the information requested or sharing their videopodcasts (Tandem 1 and Tandem 6), and recording and uploading their videoconferences (Tandem 1, Tandem 3, Tandem 4 and Tandem 6). Tere, a primary teacher in the US, only asked for more time in order to understand how 'the site' worked:

With more planning, I think I can get a better understanding of - how this job task can work. ... I will try to spend more time with the site before Friday [Emails – Tandem 8 – Tere] [75].
But several teachers considered it as an additional impediment to the progress of the exchanges and they transferred the control of the virtual classroom to technicians. Iu, an ICT and project coordinator, mentioned benefits associated with the use of the platform and regarded it as helpful for the SL teachers; yet, she believed one of the reasons why teachers did not use the tool was their lack of competency in the use of technology:

All this extra technological stuff that you are suggesting can be an aid for certain teachers, but for others it is an impediment to participating in the project [Group Interviews - Iu with Jose and Elia] [76].

She observed these teachers tended not to cross the line between what it is traditionally understood as the role of the SL teachers and other issues more traditionally linked to the role of an ICT coordinator. Elia, another teacher in the same group interview, supported Iu’s view and added what some of these technical aspects imply:

Uploading the videos, logging into the site and filling the template, you (ICT coordinator) are behind, helping, even to set up the classroom, if it is not prepared with the projector for that day so they can do the videoconferencing, either you are behind this technical part or the teacher does not do it [Group Interviews - Iu with Jose and Elia] [77].

Although not being familiar with the tool or a certain unwillingness to cross the line of the SL classroom might play a part, Jordina, unlike the above teachers, defined it as just a matter of convenience.

I will do it, if you prepare it; if it does not imply an effort for me. If it means an additional effort, why should I?” [Group Interviews – Jordina with Jerry and Tere] [78].

Not all teachers used the virtual setting they had been officially offered as a way to document their progress; many teachers preferred to use their own virtual settings and try new ways of improving communication between them. In fact, I encouraged teachers to use their own alternatives to communicate and share
information, and I did not compel them to use the online site generated for the project.

Some of these teachers considered the potentiality of other web 2.0 applications such as wikis, blogs or social networking sites (Table 4.3.7 - Format) to engage them (and their students) in collaborative activities, transforming them into active, multi-dimensional content contributors (Crampton and Ragusa, 2010). The use of web 2.0 virtual environments emphasised the teachers’ ability (and that of their students) to change their role from mere consumers of information to prosumers (Garcia, 2011) of this information. Research (Alexander, 2006) shows that the use of these sites, aimed at transforming passive dialogue into interactive communicative events, has led to the popularity of user-modifiable sites, such as Edmodo (2014), MySpace (2014) and Facebook (2014).

Rather than allowing technicians or other teachers in the school to take over the role, some SL teachers assumed the control of the virtual classroom and took on the responsibility of creating social presence. The combination of different technological sources provided teachers with the possibility of generating a virtual environment with a great potential for eTandem language learning.

The use of multiple channels of communication offered them the possibility to bridge both physical distance and multiple ways of creating meaning. Each eTandem partnership tackled the issue of virtual collaboration in a different way (Table 4.3.7). In general, the SL teachers’ general approaches when generating or using virtual collaborative environments, as evidenced by their accounts, were generally quite unstructured and uncritical.
Some eTandem partners started creating their own sites as eTandem partners (Table 4.3.7 - Designer - eTandem), others proposed using the official site of their schools (Table 4.3.7 - Designer - School) and one of them proposed using their own site as a teacher (Table 4.3.7 - Designer - Teacher). Only one eTandem pair used the official site of the Youngcast project as the only platform (Table 4.3.7 - Designer - Project designer). The intended users of these modifiable sites (Table 4.3.7 - Aim) varied depending on the eTandem teachers (e.g. students, teachers or parents) with different aims (e.g. student control, parental control).

### 4.3.2.2 Individual sites vs. sites serving the community of practitioners

Hartnell-Young (2003:45) argues that "when choosing software and multimedia products, teachers implementing a constructivist approach can use the same criteria they would apply to any resources". She indicates (2003:46) that "the inclusion of information and communication technologies allows for the creation of virtual learning spaces interacting with the physical spaces" but insists that "paradoxically, social interaction in working and learning is changing to become at once more collaborative and more individualistic" as the workplace demands
team structures while "individualised learning methods using ICT are being promoted" (Hartnell-Young, 2003:47).

Within constructivism, two main streams comprise those who focus on the individual’s cognitive development (cognitive processing) and others who see learning as always requiring a social setting (social constructivism). Fosnot (1996) as cited in Hartnell-Young (2003:18) argues that the result when following a social constructivist approach is “knowledge that is temporary, developmental, non-objective, internally constructed and socially and culturally mediated”.

Hartnell-Young (2003:32) observes three distinct ways of thinking about and using technology that from the point of view of the learner can be organised along a continuum; this begins with "consumption of information via technology, to (re)production of information using technology, and lastly the creation of new knowledge using technology”. The influence of teachers on establishing the environment and mediating student learning through questioning and critique might be the difference between classifying uses of technology as passive or active. Imison and Taylor (2001) use the labels instruction (content-specific, drill and practice), construction (generic software, simulations) and co-construction (communication) to classify types of software and their classroom uses, but they argue that the contribution of technology to co-construction has more to do with the contexts teachers create, than the software itself.

Hartnell-Young (2003:32) refers to Wiegand (1998), who suggests "dimensions along which Internet use might be measured, such as the degree of independence displayed by students in searching for information, and the extent of collaboration". Among his examples, Wiegand includes "accessing information, collaborative publishing, asynchronous or synchronous collaborative learning with remote peers, external collaborative projects with experts and virtual learning environments". Similarly, she refers to Leafe (2001) who describes "Intranet use (such as within a school) as browsing, interacting or collaborating".

Background data from the survey detailed a high percentage of participant-teachers (8) who had already communicated and shared information with
teachers in the same school through their local intranet. The percentage of use of the intranet platform with students was even higher than with teachers (from 8 to 12). Half of the teachers also reported the creation of virtually-shared spaces for their students to work in groups.

Many teachers started collaborating with their individual eTandem partners on generating their individual eTandem site without raising the possibility of creating a community of practitioners for the different eTandem partners. In general, the use of other online alternatives to the official site designed for the project was not regarded as a conglomerate of several eTandem classrooms contributing, through sharing their eTandem experiences, with the other eTandem community members who were also participating with other eTandem partners.

Regarding the official site, all eTandem partners were granted privileges as owners of their site and initially access to the site was public on the web. This meant that anyone on the Internet could find and view – though not edit – the information published. Teachers had to decide whether or not to share their online material with the other eTandem partners; they could change the public status of each of the sections of their eTandem site and make this private, if necessary. Playing with permissions, teachers could also decide the level of autonomy of their students.

Views on the use of permissions for sharing and publishing the material generated varied substantially from teacher to teacher. Not all of the eTandem partners viewed the official online site as a way to create an adequate virtual and collaborative environment. Of all the teachers who used the online space, only teachers in Tandem 3 decided to keep teachers’ and students’ profiling information, warming up activities (videopodcasts, etc.) and recordings of the synchronous sessions public. This allowed other teachers to view what they were doing. Students in this eTandem partnership recorded one video presentation for each of the eighteen groups into which the class had been divided; some of these
recordings showed either different parts of the school or geographical areas of their towns or cities⁶.

The majority of teachers opted for privacy and decided to share just with their eTandem partners. One of the reasons for keeping the official online space private was that some schools had to follow strict rules regarding Internet security. Mary pointed to strict Internet rules as an essential aspect for not sharing material:

> Even this videoconference is recorded because the principal authorised it because she knows that only teachers have access to it, but they are very delicate regarding publishing things on the Internet. To give an example, I have a blog with the class and the kids write on the blog, but it is private, I control it. They write and I have to approve the comment [Interviews – Tandem 4 – Mary] [79].

Internet security issues hindered some participant-teachers’ use of online platforms when these opened the classroom to online external groups. Ari, the partner in Catalonia for Tandem 7, informed me that her school did not allow her eTandem to use the schools’ platform to share their material with each other. Instead, they were allowed the use of alternative online platforms to any institutional one. Both eTandem teacher-partners started working on a social networking site designed for educational purposes that allowed them to manage their own groups without being involved in anything official. In Ari’s words:

> They said [referring to their eTandem partners] that their school was very strict and they could not use the school blog and proposed Edmodo [Interviews – Tandem 7 – Ari] [80].

Mary linked it to a problem with the age of her students; furthermore, she also hinted at an intercultural aspect, emphasising that the institution was an American school in the UK:

⁶ https://sites.google.com/site/tandemtorlan1/tandem-teachers-presentation
They are under 16 years; it is an international school, rather American, really ... We have a lot of image control [Interviews – Tandem 4 – Mary] [81].

Others came up with alternative ways of circumventing these restrictions. Students’ information from Ale, for example, could not be public but, instead, he uploaded a three-minute very well-edited videopodcast presentation of different parts of the school. Far from putting the locus of control in the hands of the students, he put it in the hands of the teacher (Hay, 1996).

The first emails received already showed some teachers’ experience with using these kinds of online platforms. Pat, for example, signed her emails with her name and her personal website, where she shared information on her previous experiences with tandem exchanges (French-Spanish as a SL classrooms exchanges), and added information on her current eTandem experience:

FrenchII/Spanish III Clear Falls High School-CCISD https://sites.google.com[...] [Emails - Tandem 7 - Pat] [82].

Contrary to Mary and other teachers above, who regarded this as a problem, Pat stressed the importance of creating and using an online space. Far from offering pedagogical reasons, she pointed to security reasons for doing so. She showed a special interest in using her site as the exchanges’ headquarters, probably because she regarded it as an advertisement platform for parents. Despite the strict rules regarding Internet issues that she was also supposed to follow, publishing the material and sharing the videoconference recordings generated through the exchanges was reason number one for showing parents how she took control of what students were doing during the videoconferences:

Number one is for the safety of the students; if parents tell me what they [students] talk about, I can show them, more or less, that these are things pertaining to the school 100% [Interviews – Tandem 7 – Pat] [83].

Tandem 3 partners (Elia and Anna) allowed their students to work out the videoconferences from home, thus avoiding any significant breaks in their
classroom activities. They also justified changing the platform as a means of improving their control of the students. Despite the high level of autonomy achieved by their students, teachers were concerned about the lack of control: teachers could not control who was really participating and who was not. The synchronous exchanges were done as homework and these were part of the assessment; some students did not participate and put the blame on their eTandem partners’ irresponsibility. In order to solve this situation, teachers implemented measures of control to check that the different steps they were requested to follow were accomplished.

This need to control the students marked a tendency to create and use these online spaces –either the official one or the alternatives generated – to share students’ material and to encourage them to establish online asynchronous communication. Some eTandems used the official site to share part of the exchanges, but they also used other platforms to arrange more private issues. Jose asked teachers to share information on the official site, but he used an online document (Google docs) to manage groups.

This is the document with the names of the students in teams and with their Skype nickname [...]. Give me a Gmail username to be able to edit, please: [...]. Eni and Mar, remember that on the “Youngcast page - Tandem 6” we still have to finish putting information: [...] [Emails – Tandem 6 – Jose] [84].

Jerry even tried four different settings where they were supposed to work. Apart from the official one, he created a blog for writing the students’ information “I’ve shared the file "Intercambio entre Barcelona y Chicago" with you” [Emails – Tandem 8 – Jerry]; he also shared a private one for managing groups, and he even experimented with a social networking site:

So far, while we experiment with it, we discussed with Tere that we should focus on working on the blog and prepare other connections with the entire group, as we did last time. What do you think? [Emails – Tandem 8 – Jerry] [85].
Jerry reported an exchange of information between him and her eTandem partner, Tere, regarding potential ways of improving the communication between their students through the use of this same social networking site:

He asked me if I know ‘edmodo’. Yes, I do know it, but I have never used it with children. But we found it interesting to try it. We’ve set them homework to try it out. We will give it a try! [Emails – Tandem 8 – Jerry] [86].

Tere also shared her students’ personal blog with her eTandem partner, Jerry, who informed me by email:

They work with Wordpress. Here is the personal blog of the students at their school: [...] [Emails - Tandem 8 - Jerry] [87].

Even teachers who had previously used the online site facilitated for the study changed to their own alternatives during their second year in the project (Academic Year 3 of the research study). Partners in tandems 1 and 3, who had used the official site during Academic Year 2 of the study, also decided to create their own alternatives. Tandem 1 partners in the second year (Jordina and Hill) regarded their new partnership as a personal encounter since one of the teachers (Hill) was working in another country on a one-year leave.

4.3.2.3 eTandem partners’ email miscommunication

When planning the videoconferences, the use of the email was a favourite way of communicating and sharing information between eTandem teachers. As Hugues (2009) states, this evident tendency for teachers to use a particular communication tool be based on its familiarity (Duncan, 2012). The SL teachers’ evident familiarity with the email – reflected in the background data received from teachers – might be one reason for using it instead of other online platforms for communication.
When reflecting with these teachers on the little use of the online platform for sharing and communicating, Elia, an SL teacher participating in one of the final group interviews, concluded that the lack of time also increased teachers’ tendency to use the email instead of online platforms, as illustrated by her comment:

Well, if they do not have time they will take the easy way out: go down the email route [Group Interviews – Elia with Iu and Jose] [88].

But the initial classification of the data gathered with QSR Nvivo (2014) (3.3.3 - page 119) points to the use of the email as a critical feature for the development of the exchanges, and that affected significantly the development of the videoconferences. Some of the consequences of this deficient use of the email as a way of communicating with each other were: students left by themselves in the ‘waiting room’, videoconferences continuously postponed, and even participants quitting their exchanges. I shall contextualise this below.

Jerry, for example, expressed his disappointment at the continuous postponement and final interruption of the exchange with his eTandem partner, Tere; he pointed to the lack of commitment in her way of communicating:

For my part, the evaluation is that it has been so because of lack of commitment by the other partner. Honestly, we had arranged a meeting many times but it has been postponed. But things for us were ready and we would have met. A little bit of communication by the other partner would have made things easier. We encourage a lot and we found a certain lack of commitment from them [Interviews – Tandem 8 – Jerry] [89].

Some times this lack of communication was usually exemplified in the lack of a response to emails, as Mary describes:

Well, look, I had the videoconference planned and I have been waiting to hear from Gina to confirm. So far, there is nothing. We have previously made videoconferences with other schools and the only way it will work is with planning
and communication. Unfortunately, I think we are all under pressure in terms of time and it has become complicated [Emails – Tandem 4 – Mary] [90].

Jerry supported Mary saying that his eTandem exchange failed due to a complete lack of communication:

I still do not know why Tere has not gotten in touch. Let’s better leave it for next year. This message has not been answered. This is one thing that has died because of no contact rather than something has happened [Interviews – Tandem 8 – Jerry] [91].

Some teachers showed a tendency not to answer emails due to external but probably predictable reasons such as holidays or, as Mary justified, lack of time due to exams:

(Sorry I have not replied to this). It has been very busy at school and we have exams coming now so I think I will have to pull out this time and maybe try next year so I can plan over the summer. Sorry about it and thank you [Emails – Tandem 4 – Mary] [92].

Sara was more specific on the list of obstacles that she had to overcome:

These weeks we have been waiting to pass the ‘basic skills’ test sessions and we also had to prepare ‘good practice’ sessions for some teachers who have come to observe how we give classes. In addition, we have a holiday on the 20th, so you see I do not have time to have the work ready for the 27th, as desired. I will try that to do it for the 5th [Emails – Tandem 2 – Sara] [93].

An ironic comment from Mabel is followed by her complaint at receiving a response while on holidays:

Sometimes they answer [...]. The last videoconference, I did not know if we were going to do it or not because she answered me when we were on holidays [Interviews – Tandem 6 – Mabel] [94].
Contact via email was the usual form of asynchronous communication in this group of teachers. As background information from the survey showed, the majority of teachers reported a high use of email for personal reasons (18 teachers) but not all of them (12 teachers) indicated that they often (6 teachers) or always (6 teachers) used it in the school (Table 4.3.3 - Page 193). Mary could not understand Enid’s failure to communicate more often, as Mary’s rate of email use at her school was at least of ten times every day:

Communication was not there; I was sending an email to Enid and she answered after one week. [...] We use the email at school constantly; we check our email 10 times a day because it is a way to communicate with parents and students [Interviews – Tandem 4 – Mary] [95].

Incomplete or half-answered emails to previous emails also contributed to the breakdown of the exchanges. Elia complained about ‘difficult communication’; she suggested I changed her eTandem partner, as the one she had seldom provided all the information requested in the emails:

No, basically it was that, I do not know, your impression is difficult, but your communication with Anna is also a bit like, hmmm, difficult, I find. I mean that… I don’t know, it’s like…for example, I told her: ‘Prepare some questions that my students have to ask yours when they have ... when they meet to do the second videoconference about where they live and so on. She passed me some questions like: ‘hay playa?’ I found it was very little [effort] ... I could not use it because it seemed very, well, they were quite absurd, you know [Interviews – Tandem 3 – Elia] [96].

While smart-phone technology facilitates instant access to communication, it also leads to writing shorter and incomplete emails. The following example is the answer to an eighty-five-word email from Jerry, her tandem partner, who requested information on several issues:

No problem :) – sent from my iPhone – [Emails – Tandem 8 – Tere] [97].
Ari described the situation generated and its consequences in terms of a miscommunication by email with her eTandem partner, who did not appear on the day arranged for the synchronous meeting:

The first videoconference was quite frustrating [...]; the day before rehearsal with all the paraphernalia [...] there were even students who had another class at that same time and we asked the teachers for permission to allow their students to come and we went to hang out and it was a little sad [Interviews – Tandem 7 – Ari] [98].

The reason for this miscommunication, as obvious as it might seem, came from a repeated tendency not to check the most recent email. Thus when Jose, in Tandem 6, sent me an email complaining that his eTandem partner had not appeared on the day arranged for the videoconference, the misunderstanding came from the fact that he had checked the planned schedule in an old email without reading the most updated email information.

While the contexts described above ended up with just the postponement of the videoconferences, email miscommunication caused other eTandem partners to even quit the project. This is the case of Tere, in Tandem 8, who expressed her disappointment with the exchanges after what seemed the last straw in a series of not-received emails:

I am happy and surprised to receive this email. Gerard, two weeks ago I sent you an email about the blog and about continuing our conversation on Tuesday. In addition, we had an appointment on Skype for last week. I have not done anything to prepare because I did not hear anything from you. I have no idea what to do on Tuesday and I'm a little uncomfortable about continuing [Emails – Tandem 8 – Tere] [99].

Surprisingly, her eTandem partner, Jerry, also showed his disappointment and reversed the situation complaining that he was the one who did not receive the emails:
I do not quite understand what happened :(, nor what I did wrong … if I have done something wrong. Neither do I have any evidence of not having replied to your messages. […] I am very surprised with your message and I would like to solve the situation […] [Emails – Tandem 8 – Jerry] [100].

Each of the videoconferences scheduled with the students occurred as single instances and not as part of a regular procedure; long periods of non-communication followed the conclusion of each of the students’ videoconferences. Pat, for example, literally disappeared—he did not communicate by email— for more than two months after one of the students’ videoconferences. Her eTandem partner, Ari, defined this period of silence as the period of ‘let’s meet again later’:

Stage of “let’s meet again later” […]. Pat did not reply for quite some time but, fortunately, he replied and we continued [Interviews – Tandem – Ari] [101].

When asked about these periods of silence, Pat’s perception was the opposite one:

I feel that maybe, I do not know, because I no longer received anything from Ari [Interviews – Tandem 7 – Pat] [102].

More than miscommunication between eTandem partners, significant cases of misunderstanding between them occurred because teachers used their second language to communicate with each other. Tere defines this as ‘lost in translation’ misunderstandings. Tere, the only Spanish SL teacher who was not a native speaker of English, linked issues of miscommunication to language differences:

Language, you know, I speak Spanish but sometimes we saw through the emails when I was trying to share that I was frustrated not with him but about the situation of timing and trying to get everything in. I think Jerry was a little bit offended unintentionally because of the language difference and the way that I use language, which is very different from a native speaker; there are some miscommunications or some of the finer details are missing …it is easier to have a
misunderstanding. Otherwise, something has just got lost in
the process ... Lost in translation [Interviews – Tandem 8 –
Tere] [103].

As well as a problem of translation, misunderstandings were also linked to time
difference issues between countries. A very large number of emails referred to
trying to schedule the right time for the videoconferences and once the time to do
the videoconferences was arranged, it was also often the case that last-minute
changes still occurred

I am afraid I won’t be able to do the videoconference on
Friday at 1 pm. I have been timetabled to give support at
that time (until the exam in January). I am available the
following days and times (UK times), please let me know
when is more convenient for you both [Email – Tandem 2 –
Jude] [104].

Surprisingly, after more than 60 emails – many of them aimed at arranging a time
for the videoconferences – Jude from Tandem 2 put an end to the exchange just
after Christmas with just a short email. As she informed in the email, when the
Spanish students were still on holidays, she justified quitting the project as a
pedagogical decision of the school managers:

Unfortunately I have bad news. The department has decided
to adopt a completely new system for doing the classes and
as a result this year we will be really busy writing lesson
plans and creating materials, and we will not buy books,
CDs or anything like that. I’m afraid that I will not be able to
continue with the project because of this added work.
Regards, Jude [Emails – Tandem 2 – Jude] [105].

Teachers should have taken into account that arrangements and changes must be
arranged much in advance, as the time difference between many eTandem
partnerships required a longer period to allow communication with each other.
Again, the use of smartphone technology, which allows teachers to answer
immediately, might have facilitated these last minute changes:
Dear all, I won’t be able to make it until 9.45 – 9.50. Apologies for any inconvenience caused. Sent from my iPhone [Email – Tandem 8 – Jude] [106].

Tandem 6 from Catalonia sent a last reminder when the other ones were sleeping:

Today is the day of the videoconference. We meet at 16h (GMT+1), that is, at your 10h [Email – Tandem 6 – Jose] [107].

As a researcher, I finally decided to check and remind all tandems about the right time they should meet. Here is an example of a reminder I sent to Luca and Jude from Tandem 2:

Hi Luca and Jude, It’s Ok for me 9:45 UK Time, 10:45 Spanish Time [Email – Tandem 2 – Researcher to Luca and Jude] [108].

Moreover, as problems with the time schedule were repeated too often, I finally decided to share an online calendar on the official platform for the project. This online calendar had a time converter. The proposal did not work, though, as partners continued sending emails trying to arrange the time for the videoconferences.

Tandem 3 teacher-partners, Elia and Anna, allowed their students to do the exchanges as homework during their second year in the project. To solve issues with time, these two teachers created their own site, where each eTandem group had to share their schedule with potential times to meet synchronously. The creation of this online space allowed them to check that all the eTandem partners collaborated with each other, arranging events very much like the previous year, when they had arranged the videoconferences through email.

As part of the research study, I requested teachers to inform me about their involvement with the integration of videoconferences. I invited them to add my address to the emails that they exchanged. Communication by email involved the
participation of both eTandem partners and myself as a researcher for a start; later, some teachers decided to include other members of their schools. Some teachers understood the eTandem exchanges as one-to-one partnerships. In doing so, significant miscommunication problems came from teams of teachers working together and not as individual partners as, among the members of a team, there usually existed either different levels of involvement or particular roles in the exchanges, all of which generated critical miscommunication.

Teachers with experience in similar international projects were not always the SL teachers in the school; but these experienced teachers encouraged SL teachers to become involved in the exchanges. Playing the role of videoconference coordinators (Lim, 2009), they usually started the first contact with me and played an active role during the initial online encounters, leaving the other team members – usually SL teachers – in the dark. And I have termed these other team members peripheral eTandem participants.

One of the significant problems came from what I have termed misidentification, that is, eTandem partners not identifying peripheral participants. Jerry, a primary teacher who is familiar with international projects, was one of these expert teachers I initially contacted with. Three SL teachers in his school, both from primary and secondary levels, joined the project and received all the emails exchanged between him and the eTandem partner from the US. But the latter complained that the emails were sent to teachers whom she had never met before. Despite not being a peripheral participant, Gina, who was new in this kind of exchanges, complained that she did not receive the information about the exchanges; whereas her ICT coordinator, the one who had the first encounters by email with the eTandem partner, kept receiving it:

There was an argument there on the first dates and so on; the same issue I told Iu: “Tomorrow, do we have videoconference or not? Because I have not received a response [Interviews – Tandem 4 – Gina] [109].
4.3.3 Critical findings and SL teachers' development on planning the virtual setting

Summarising this section, the following lines present four relevant themes around the teacher’s planning of the virtual setting, namely: *online support*, *security*, *unstructure* and *misunderstanding*.

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<thead>
<tr>
<th>THEME</th>
<th>DEVELOPMENT</th>
<th>CRITICAL INCIDENTS</th>
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<tbody>
<tr>
<td><strong>Online support</strong></td>
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<tr>
<td><strong>Unsuccessful developments (due to)</strong></td>
<td></td>
<td>Time</td>
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<td></td>
<td></td>
<td>Overwork</td>
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<td></td>
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<td>Unfamiliarity</td>
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<td></td>
<td></td>
<td>A matter of convenience</td>
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<td><strong>Successful developments (due to)</strong></td>
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</tbody>
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Table 4.3.3.1: Critical incident and development on the theme *online support*

Some SL teachers identified the need for an *online* space as a *support* (Table 4.3.3.1) to share and publish their material and to establish a collaborative environment with each other. I have termed the first of these themes in this section as *online support* to refer to how SL teachers in the study dealt with the different online possibilities.

[← Overwork]

All that some teachers requested was some more *time* to understand how to use the official site designed for the project. Far from viewing the use of these online spaces as a *support*, other SL teachers viewed the use of these online spaces as an impediment. For them, the use of these online spaces meant an addition to the already *overloaded agenda*. 

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Some teachers made little or no use of these spaces, citing lack of competency with technology – or at least, unfamiliarity with the specific technology required for participating in the eTandem videoconference exchanges – as the reason for this.

More than a lack of technological skills, some teachers viewed it as a matter of convenience.

The reflective account of some of these teachers revealed a tendency not to cross the line between what it is traditionally understood as the role of the SL teachers and other roles needed. Reflections reflected on the need to develop interdisciplinary skills. Some teachers reflected on the necessity of decoupling the roles needed to participate in the exchanges and, for example, transfer control of the virtual classroom to technicians.

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<th>THEME</th>
<th>DEVELOPMENT</th>
<th>CRITICAL INCIDENTS</th>
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<tbody>
<tr>
<td>Security</td>
<td>Unsuccessful developments (due to)</td>
<td>Age</td>
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<td></td>
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<td>Intercultural aspects</td>
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<td>Personal encounter</td>
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<td></td>
<td>Successful developments (due to)</td>
<td>Transfer control to students</td>
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<td>Middle position</td>
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<td></td>
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<td>Whole-school approach</td>
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</tbody>
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Table 4.3.3.2: Critical incident and development on the theme security

Despite the official online space designed for the project aimed at generating a collaborative eTandem environment, security (Table 4.3.3.2) concerns also hindered some participant-teachers’ use of the online platform. This made it
almost impossible to create a conglomeration of several online contributors of the eTandem community.

[⇐ Age & Intercultural aspects]

The findings suggest issues linked to the age of the students, as well as intercultural aspects, which could have influenced teachers’ decisions not to use and share these online spaces with other eTandem partners openly.

[⇐ Personal encounter]

Some teachers viewed the exchanges as a personal encounter between two schools and others regarded it as an experience not officially linked with their school as an institution.

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<th>THEME</th>
<th>DEVELOPMENT</th>
<th>CRITICAL INCIDENTS</th>
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<tr>
<td>Unstructure</td>
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<tr>
<td>Unsuccessful developments (due to)</td>
<td>Multiplicity of spaces</td>
<td>Control</td>
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<tr>
<td>Successful developments (due to)</td>
<td>Control</td>
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</tbody>
</table>

Table 4.3.3: Critical incident and development on the theme unstructure

With such a view, the use of the official online platform or the creation of new ones occurred in a quite unstructured way (Table 4.3.3.3).

[⇐ Multiplicity of spaces]

While some preferred to simplify issues and just used the official site or a familiar one, the procedure followed by other teachers consisted in using a multiplicity of spaces, and use each of them for different purposes. Some teachers
regarded it as a way of experimenting with different ways of improving the online communication between the different eTandem partners.

[↩ Control]

One of the central claims of a socio-cognitive approach is that, for online language learning activities to be most purposeful and effective, they should be learner-centred, with students having a fair *amount of control over their planning* and implementation. Far from such an approach, some of the SL teachers’ procedures when using the online platform reinforced a model aimed at enhancing the SL teachers’ control of the learning environment. One of the teachers, for example, viewed the *public* use of an online space as a way to show how she controls the exchanges (e.g. *for parents*).

More in accordance with a *whole-school approach*, some of the reflections that took place during the text- and video-stimulated recall interviews seemed to have helped some teachers gain a better understanding of the importance of generating and using such a collaborative online space as part of the eTandem videoconference exchanges. Thus a few teachers used these interviews as an opportunity to rethink their decisions regarding the use of either the official online space or one personally generated by them. In doing so, some teachers adopted a middle position and made information public but with restrictions (e.g. public only with their eTandem partners; showing the school but not the students).
Deficient use of the email as a way of communication resulted in a continuous postponement of synchronous encounters and even in quitting from the project in what I have classified as *misunderstanding* (Table 4.3.3.4).

[← Deficient use of email]

The findings reflect an increase of significant challenges due to such a deficient use of the email that contributed to a continuous postponement and even quitting of some of the eTandem partnerships. Various SL teachers’ comments suggested a tendency to answer emails in an incomplete way. One teacher associated it with the extensive use of smartphone technology. The use of the email brought some teachers not to check the most updated information or not properly check essential information such as time conversion between different countries. As a kind of reminder, one teacher suggested the need to use an online platform to share this kind of essential information and a person in charge of doing so.

[← Last minute changes]

Linked with time issues, findings indicate a tendency to do last minute changes through the use of the email within a context where planning ahead and longer periods to communicate are needed.
Unsuccessful communication also increased due to the SL teachers’ use of their second language to communicate with each other that led to some misunderstandings between eTandem partners.

The fact that some SL teachers, apparently working as a team, had different levels of involvement or assumed particular roles in the project also brought periods of miscommunication. One teacher suggested the importance of arranging communication with both active eTandem teachers and peripheral eTandem participants.

This section has revealed an apparent imbalance between those SL teachers who used the email as part of their daily professional schedule and those who do not integrate online (email) communication on their professional habits. Some teachers pointed to their eTandem partners’ lack of commitment in the way of communicating such as lack of regularity in communicating that ranged from a lack of a response to some emails to a complete lack of communication.
4.4 Mediating towards interaction

The previous sections outlined how teachers planned the learning environment in terms of the virtual setting (4.1), the physical space (4.2) and the social environment (4.3). Despite the considerable challenges already reported, participant-teachers focused on mediating eTandem students towards interactive synchronous relationships. Once pedagogical and communication routines were set, eTandem teachers had the last word on how to implement the synchronous sessions in their classes.

This section explores how teachers as mediators exploit videoconference technology in relation to the interactive processes that occur within the context of the eTandem exchanges. This section investigates whether or not teachers develop new forms of mediation through the implementation of the videoconference eTandem exchanges in their SL classrooms. This part of the investigation studies whether or not, in the process, SL teachers and their eTandem students take turns in leading the dialogue in the videoconference exchanges. It also investigates whether or not SL teachers provide encouragement and prompts to create a system of temporary support that is adjustable for their students. This study investigates whether or not this scaffolding is gradually dismantled and this way learners become more independent and create personal systems. This section reveals how the implementation of the eTandem videoconference exchanges developed towards a more interactive approach.

In doing so, it mainly examines the third of the four classroom roles identified by Hartnell-Young (2003): the role of mediator. Linked to the eTandem-videoconference experience, this mediating role focuses on how participant-teachers develop new forms of mediation through the implementation of videoconference technology in their eTandem experience.

Hartnell-Young (2003:166) defines the mediating role as “that which provides an intermediary in the learner’s quest to make sense of human experience”. Instructing, demonstrating and coaching, monitoring and assessing, and
reflecting on learning are among the forms of mediation that she listed as part of her model of teachers’ roles in classrooms where computers are used. Previously, other authors (Moll, 1990; Brown and Campione, 1994) also added encouraging discovery, guiding participation and engaging in reciprocal teaching.

According to Vygotsky (1962), students’ cognitive processes have their origins in social processes, also mediated by tools, artefacts and signs. Among these tools, Hartnell-Young (2009) includes technology, curriculum and dialogue in the social context. But teachers are mediators too and when mediating learning, teachers use tools. Vygotsky’s Zone of Proximal Development (ZPD) recognises the part that both teachers and students in the social context have to play in mediating learning. Rather than stepping back to allow videoconference technology to mediate learning, the context of this study allows me to discover how teachers as mediators use videoconference technology to influence the interactive processes within the social context of the eTandem exchanges.

Examining this role implies observing and analysing how teachers developed into exploiting the potential of this technology with the aim of encouraging students’ SL learning through peer interactive collaboration and towards more message-oriented exchanges. In the context of this study, interactions relate to the ways students actively engaged with their eTandem partners, that is, to particular instances of the students’ active learning-related involvement in trying to establish more message-oriented communication with their eTandem partners. By message-oriented exchanges, in the context of this study, I refer to a level of interactivity where students exchange information with each other with more spontaneous contributions and without an excessive focus on choosing "their responses from a fixed set of options" (Beauchamp and Kennewell, 2010 in Cutrim Schmid, 2010:165).

Jerry, for example, clearly stated that the main objective of the teachers when participating in a ‘real exchange’ was to avoid ‘anything canned’, that is, any artificial exchange:
What we want to do is a real exchange. [...] In this sense we would not do anything canned [T-T VC – Tandem 8 – Jerry with Martha and Cris] [110].

Opposed to the message-oriented aim of the exchanges, this ‘canned’ situation refers to what Aldrich, Rogers, and Scaife (1998:323 in Cutrim Schmid, 2010:165) call “multimedia-based interactivity”, a reactive model of interactivity that supports learning through drill and practice. In the context of this study, it refers to the lack of spontaneous contributions during the eTandem videoconferences. This seems to be also the main type of interaction supported by Interactive Whiteboard (IWB) and used in Gray et al.’s study (2007:421), for example, where materials were created “to increase behavioural and linguistic control”. Beauchamp and Kennewell (2010:762 in Cutrim Schmid, 2010:165) would categorise this kind of interaction as "authoritative", since students have to choose their responses from a fixed set of choices, and they are not given the opportunity to influence the course of the lessons.

Findings from this section amplify and complete the word picture from the previous sections. Hartnell-Young’s theoretical considerations on teachers as mediators (2003, 2008, 2009) and the literature review in Chapter 2, together with a first analysis of the teachers’ accounts, all these guided the exploration of those critical incidents encountered in Year 2 and Year 3 of the study linked to this section of Chapter 4. Juxtaposing all this data, I identified four relevant themes (4.4.2), namely identity, SL ZPD, openness and continuity. These are mainly linked, as I will discuss below, to the planning of more message-oriented activities, and to the lack of social links before, during and after all the videoconference work.
4.4.1 Teachers' accounts on mediating students towards message-oriented interaction

4.4.1.1 Teachers provide a balanced approach to scaffolding

"In the constructivist classroom students are autonomous, or self-directed, learners, free to take risks in learning, assess their own progress and develop the insight necessary to improve their own learning (Brown and Palincsar, 1989; Freire, 1993; Goodman and Goodman, 1990), and technology is expected to support this" (Hartnell-Young, 2003:134). In general, SL teachers in the study regarded students' self-management as the long-term goal that should allow their students to decide in an autonomous way when and how to communicate with their eTandem partners and enhance the quality of the interactions.

Hartnell-Young (2003:134) considers that "managing to this end demands a dynamic equilibrium balancing structure and openness, depending in part on the management skills of the students and the willingness of the teacher to relinquish control (Nias, 1987)". The present study looked at how teachers scaffolded their students by providing encouragement and prompts adjustable for the whole classroom or for each of the students. This investigation also observed whether or not this support was only temporary and gradually dismantled as learners became more independent and created their own personal systems.

Many teachers in the study refer to scaffolding as providing structures. In testing out their approaches to scaffolding, SL teachers in the study mediate students towards message-oriented synchronous exchanges attempting to find the appropriate balance between provided structures and more opened approaches.

All the teachers favoured the message-oriented interactive context provided by the use of videoconference technology; Jerry, for example, listed “speaking, saying and commenting” among the possibilities available for students through videoconference technology; and Jerry also clarified that he viewed the videoconference-integrated eTandem project as an opportunity for the students not only to express and to explore, but also to exchange:
that the students have to be lively in front of the camera to speak, to comment, to talk [...] We do not want simulation, what we want is to do the videoconferences so that our students could express themselves, explore and exchange ideas [T-T VC – Tandem 8 – Jerry with Martha and Cris]

It is during the first synchronous meetings that teachers should show leadership and function as a model for students (Renshaw, 2002) of how they should speak, how they should behave and how they should act in these kinds of exchanges. A teacher in a primary school suggested the idea of generating the role of speaker:

I insisted on the very issue that there should be a kind of 'speaker' [Interviews – Tandem 8 – Jerry] [112].

Nonetheless, many of the experiences indicated that SL teachers showed real difficulties in achieving the right balance between the structures provided by the teacher and more open approaches. When asked, the majority of teachers showed their dissatisfaction with the low level of message-oriented interactivity achieved during the students’ synchronous encounters. What actually happened was that the expected transition from this kind of exchange towards more message-oriented exchanges rarely took place. In general, their experiences were limited to an authoritative model of the interactive exchanges, as defined above.

In practice, most of the videoconference sessions were carefully organised and even rehearsed beforehand. Hardly any of the eTandem partnerships crossed the bridge from their rehearsal stage to more message-oriented exchanges. Alex, a primary-school teacher, habitually met with his students one hour before the videoconferences to rehearse everything in detail before the arranged schedule with their eTandem partners. Figure 4.4.1, with the teacher in the centre of the camera indicates a tendency to design the exchanges from a more teacher-centred perspective.
This same teacher considered that the synchronous exchanges should involve some rehearsal and should be more product-oriented to avoid the need for immediate reaction to questions:

The other students should always ask my students the same questions, because if they ask the question in a different way mine get completely lost [...]. It should be really structured [Interviews – Tandem 1 – Alex with Hill] [113].

Many times the teachers provided the answers. In a videoconference-recall interview, the two eTandem teachers in Tandem 6 reflected on her students' expectations of teacher direction. This teacher observed how an eTandem pair had difficulties deciding how to lead their talk, as they wished to follow their teachers' instructions but did not wish to stray from the script previously provided by the teachers:

No, our teacher told us that ... you would have questions, I do not know, about our city [Student-to-student videoconferences - Tandem 6 - Student videoconference 03] [114]

Anna and Elia regarded their students' self-management as high. They arranged their students’ videoconferences as homework due to difficulties with their timetables. Their students were proficient in English and they had technological
issues solved. All the teachers did in class was to manage groups of three students and tell them about the topic. But when I did a video-stimulated recall interview with Elia, she agreed that her students were not even trying to ask questions outside of the formal script; when watching the video recording, she showed her astonishment at her students’ cold attitude and lack of empathy:

Yes, yes, yes. There isn’t any kind of empathy, no? I do not know how it comes out from them, no? … to do something like this, so cold? [Interviews – Tandem 3 – Elia] [115].

Rather than focusing on what their eTandem partners had to tell them and scaffolding them accordingly, these two teachers complained that their students’ main worry was to prepare and transmit the information in their SL during the time they were allowed. Anna, Elia’s eTandem partner, defined it as a business interaction aimed at just getting credit:

Elia’s were more ‘business’: “Here there is our PowerPoint. We will present it, you present yours, and that’s all. Bye!” [Interviews – Tandem 3 – Anna] [116].

4.4.1.2 Teachers design towards knowledge creation

Teachers using a constructivist approach focus more on the design of open-ended tasks. In contrast to a behavioural approach to teaching, a classroom based on a social constructive approach implies teachers who provide opportunities "to engage students (Corcoran, 1995) to focus on knowledge construction, through a process where learners are meaningfully engaged" (Bose, 2007:42). More in accordance with a constructivist approach, Hartnell-Young (2003:106) refers to Petraglia (1998 in Hartnell-Young, 2003:29) who champions open-endedness, "arguing that if the learner is to think in the knowledge domain as an expert user of that domain might think, limits on content deny possibilities of knowledge creation". She (2003:203) draws a wider picture of the process of participating in activities likely to create knowledge:
"While there are times when it is appropriate for teachers to mediate learning through direct instruction and consumption of digital information, the issue is one of increasing repertoire, so that consumption does not dominate. Similarly (re)production activities have their place, but they can be taken further into knowledge creation when they are used to build up the pool of knowledge in the classroom, the school and society".

In general, the videoconferences consisted of one-way information exchanges through PowerPoint presentations, rather than students’ spontaneous contributions. The material that the students designed was just a presentation of information, which already integrated the answers to potential questions. Most of the students simply read what they had prepared in their PowerPoint presentations.

Some of the slides (Figure 4.4.2) contained certain elements that could help students to interact with each other; but as Cutrim Schmid (2010:165) says, there was still an excessive focus on the “search for the correct answer”. Rather than activities likely to create knowledge, these materials centred on the mere consumption and reproduction of information. With this panorama, students did not need to start collaborating with one another, as they did not need one another; nor did they have any need to explore more “dialectic and dialogic forms of interaction” (Beauchamp and Kennewell, 2010).

Figure 4.4.2: PowerPoint presentation as part of a videoconference exchange.
Jerry’s comment below questions the appropriateness of turning the exchanges into just the transmission of information already shared in a PowerPoint presentation:

Make a PowerPoint to see it here and there, nowadays, I think [T-T VC – Tandem 8 – Jerry with, Marta and Gemma] [117].

This same teacher distinguished between two differentiated periods throughout a videoconference exchange. A first period should provide students with opportunities to interact through the activities formally designed for the exchanges. Increasing periods of informal dialogue should follow these initial structured situations. Teachers should try to remove the scaffold and allow students to improvise, comment or have a more informal conversation, as Jerry comments:

There must be the possibility of improvisation, of the commentary, of the informal dialogue between kids, as this also creates bonds; that you can ask and you can do whatever you want, though but I do not think that activities do not have to be prepared [Group Interviews – Jerry with Teresa and Jordina] [118].

Hartnell-Young (2003) reflected that “allowing extra time for students to interact during peer teaching improved the quality of the mediation”. Some teachers suggested the idea of using locally generated and remotely generated communication during the synchronous encounters. Jerry exemplified this with a picture of the two classrooms videoconferencing, but also communicating and cooperating with their local partners:

We are not only bringing together two classes that communicate by Skype but we are bringing together two classes that work in their classrooms – there are times when we are communicating and times when we aren’t [Group Interviews – Jerry with Tere and Jordina] [119].
He insisted on the importance of allowing students to work with their local groups as part of the videoconference time and, if necessary, leave the videoconference on standby for a while:

_A videoconference seems that everything is very bish bash bosh but of course, if what you are requesting is that people do a job and then, that they discuss it ... then, there is a moment when the videoconference is open while the kids are working [Group Interviews – Jerry with Tere and Jordina] [120]._

The possibility of establishing asynchronous communication with their remote classroom during the videoconferences seemed a good choice using the videoconference as a chat tool. Despite problems with technology, the use of this tool provided a substitute when communicating synchronously was impossible. Recordings of the students’ videoconferences only show four instances of students using this tool to communicate with each other, and all of them by members of the same eTandem partnership.

### 4.4.1.3 Teachers build a sense of belonging around the synchronous encounters

Within the constructivist approach, students create their identity starting from the framework provided by their prior views and perspectives. The importance of “previously establishing a strong, cooperative working relationship” is regarded as “the first requisite for building a successful international classroom in place” (Little, Titarenko and Bergelson, 2005:358). Hartnell-Young (2003:185) cites Wenger (1998) who argues that “newcomers and old-timers should be engaged in shared practices, not only for purposes of transmitting cultural heritage, but also for the mutual negotiation of identity”. Hartnell-Young (2003:27) adds that “identity resources build a sense of belonging and encourage participation”.

With the idea of actively engaging all the participant-teachers, I requested SL teachers to participate in at least one teacher-to-teacher synchronous meeting with both eTandem teams and myself. Moreover, as part of the process for establishing strong links between the different eTandem partnership members, and as part of the process where they finally felt that they ‘belonged to the group’, the design of the videoconferences called for the participation of teachers and their students in both asynchronous and synchronous social encounters.

Hartnell-Young (2003:186) refers to some teachers in her study who emphasised "the importance of participation through personal rather than virtual connectedness". She (2003:201) adds that "teachers generally valued physical interaction above online interaction, although there were signs that for some, face-to-face now includes communication through video conferencing". The possibility of interacting personally was not possible in the eTandem exchanges. Instead, SL teachers had to collaborate with each other online and had to convey higher social presence with the idea of increasing social interaction among eTandem team members.

Little, Titarenko and Bergelson (2005) emphasises that, at least in its developmental stages, a successful international classroom must have an actively engaged contact member in each country. Tere, a teacher who participated alone, thought that she was going to participate in a one-to-one teacher exchange. Nevertheless, Tere complained about other teachers in her eTandem partner team, with whom she had never had a chance to build a relationship; all her eTandem partners had never had an active communicative participation – at least through the emails and during the first T-to-T meetings –:

I thought it was going to be one teacher to one teacher and I did not realize there was a group of other teachers. They were in the emails but they never responded; they were not really part of the planning [Interviews – Tandem 8 – Tere] [121].

An analysis of the emails and comments from teachers pointed to the lack of empathy among them as a reason influencing their decision not to carry on with
the exchanges or, at least, not with the same eTandem partner. Some comments in the first emails exchanged between one of the eTandem teachers and myself – as a researcher – already suggested rather ironically a weak relationship established between both eTandem partners since the start of their conversations:

Good start [Email – Tandem 4 – Gina] [122].

ICT school coordinator Iu also supported Gina’s view:

Bumpy start. You see, it looks like you will not get bored with us, after the beginning we have had [Emails – Tandem 4 – Iu] [123].

Elia in Tandem 3 asked me to change her partner for the following year exchange; she objected to her partner’s lack of commitment towards the project. She hesitated as she reflected on the situation:

Because you do not know. I do not believe it is a matter of feeling because ... I do not think she is unpleasant. Not this. She works very little, just the minimum, you know? You know what I mean? [Interviews – Tandem 3 – Elia] [124].

Contrary to the above eTandem relationships, the two partners in Tandem 2 exemplified how a change of teacher-partner affected the continuity of the project. The relationship between both schools started with Sara, a substitute teacher in the Spanish school. They exchanged various emails and had several teacher-to-teacher conversations. Despite the fact that they did not have enough time to start the synchronous exchanges with their students, Jude, the eTandem partner in the UK, expressed her gratitude towards Sara and invited her to contact her if she was sent to another school:

If you go to another centre, contact me because I want to do this with you, you know [T-T VC – Tandem 2 – Jude] [125].

During the interviews, many of the teachers agreed that they should have spent more time trying to reinforce their relationship with their eTandem partners. Iu
commented on the importance of starting their participation in the project allowing eTandem partners enough time to be familiar with one another:

If you make the first step that teachers are, somehow, familiar with each other, to know each other, to create a network that ultimately is what works in this project and elsewhere, and then, you already avoid an obstacle [Group Interviews – Iu with Jose and Elia] [126].

Teachers, in general, agreed on the lack of time that both teachers and students had for socialising with their eTandem partners. Anna, for example, recalled one of her students complaining about the lack of social links during their synchronous encounters:

One of the complaints of one of my students was that they were not given time to socialise; she wanted to socialise with the students, ask them more things [Interviews – Tandem 3 – Anna] [127].

A general consensus was that the videoconferences should include a first social synchronous encounter with the whole classroom. Tere insisted on the importance of starting the exchanges with a synchronous social meeting with all the eTandem teacher-partners:

I do not know, obviously technically I never met you guys, but at least I know your face, ... I feel that I know you but I do not know them, so, I do not feel that I have built a relationship with them [Interviews – Tandem 8 – Tere] [128].

In a final group interview, Iu also mentioned the importance of putting a face to the eTandem partners through an initial synchronous encounter:

We've met and it's different; you give a face to the person on the other side [Group Interviews – Iu with Jose and Elia] [129].

The importance of previously establishing a strong relationship was also transmitted to the student-to-student’s partnerships. Elia suggested that
eTandem teachers on both sides should have set their timing and organised a first synchronous encounter with their whole classes so that students got to know one another:

Perhaps, at the beginning, we should have had to also organize a meeting in the classroom: ‘Today, you are gonna know your colleagues and see what occurs; today, you should know as much as possible’ [Interviews – Tandem 3 – Elia] [130].

Jerry expanded Elia’s view suggesting the idea of students’ getting to know one another:

What the children are interested in is to discover who is the one on the other side [Group Interviews – Jerry with Teresa and Jordina] [131].

Despite the considerable challenges reported, teachers generally characterised their overall first experiences with their students as positive. Elia, a teacher participating in one of the group interviews with Jose and Iu, added the ‘motivating’ nature of these first encounters –and of the videoconferences in general– as another important factor that should help students to keep trying and overcome difficulties and to push them to participate in more message-oriented encounters. Enid shared this view describing their first encounter with expressions such as “amazing” or “motivating” as part of the following email:

Maria, our students enjoyed this first connection a lot. Your students are very nice and they did a great job introducing themselves [Emails – Tandem 6 – Enid to Maria] [132].

When one of the arranged eTandem videoconferences did not occur as expected, Jerry, one of the teachers involved, was not worried about the other teachers’ reaction, but about the students’. Ari also commented on the impact that unsuccessful first experiences could have on students; but unlike Jerry, Ari described it as a positive learning challenge and showed her astonishment at the positive reaction of some of her students:
I thought that, typical of teenagers, that they would see me and they would say that it had been crap; but the truth is that no, no, no. All of them saying that “what a pity” that ‘we have to keep trying’, that ‘it doesn’t matter’, that ‘one already knows’ … happy, thrilled [Interviews – Tandem 7 – Ari] [133].

These same students even reminded Ari to show their parents this experience with the videoconferences during the school’s Open Day:

Even to tell you that during the Parents’ Open Day, there is a group of students that show the language classroom and one said: ‘Ari, you forget the videoconferences’. It caught my attention as I realised that for them it is very interesting to do it [Interviews – Tandem 7 – Ari] [134].

Pat, for example, commented on the importance of generating asynchronous identity activities, starting with a list of students so that they could identify each other:

I already feel that when we have the lists, it will be easier for students to identify with one another […] but really identify because, this way, when they speak, they already have specific questions and we can better guide the conversation, if not … they will not know what to ask [Interviews – Tandem 7 – Pat] [135].

Gina also insisted on the importance of defining pairs before each videoconference and having them email each other following some topic:

I would also like to match the boys and make them write about the topics between videoconferences [Interviews – Tandem 4 – Gina] [136].

Many teachers believed that the planning of the videoconferences should also consider the design of asynchronous activities linked to the topic to be discussed. In line with this idea, Bereiter and Scardamalia (1999 in Hartnell-Young, 2003:197) consider that asynchronous communication such as email allows
students “to take time formulating a contribution, and reducing the barriers which prevent some from taking part in oral discussion”.

Elia described her students’ synchronous interactions as ‘disastrous’; she said this was the consequence of not doing preparatory work before each of the synchronous encounters:

In this sense, it was a disaster. I think we skipped that part of making this ‘warm up’ that you start a bit all the work and that somehow … and that it motivates them more for the day they have to meet and do something more formal, somehow [Interviews – Tandem 3 – Elia] [137].

Tere also referred to one of the first synchronous meetings as an ‘unsuccessful attempt’:

The first meeting we had we played this first ‘who game’. To be honest, I did not even understand the name of the town you guys were living in. I understand that it was close to Barcelona and when we finally figured it out, when we looked at the map: it was a lot further than I thought [Interviews – Tandem 8 – Tere] [138].

She insisted on the importance that both eTandem groups be ‘ready’ for the first synchronous part of the exchanges. Tere described it as a ‘track’ that teachers are supposed to follow:

Before we meet for the first time we both gonna do this in our separate schools in our separate languages and now we are prepared to meet each other and then we go on the next track, […] but to do something so that we are ... both ready ... [Interviews – Tandem 8 – Tere] [139].

She shared a preliminary activity before the first videoconference, focused on knowing about the students in the remote school. She described how she urged her students to find out about their eTandem partners through using Internet mapping tools:
So, creating things together like ... before the second videoconference, the kids and I did something like using the map, figuring out where they live [Interviews – Tandem 8 – Tere] [140].

Tere suggested using this initial information to create things together with their eTandem partners through some asynchronous cooperative activities.

... doing some comparison through using asynchronous tools [Interviews – Tandem 8 – Tere] [141].

Like Tere, other teachers suggested encouraging student learning through peer collaboration both internally with the local groups in their classrooms and externally with their eTandem partners in the remote school. In doing so, these teachers shared the mediator role with their students. The teachers referred to a range of scaffolding tools they used for this that indicated that they were experienced in their use of technology. Particularly, Sara suggested a follow-up to the videopodcast as a kind of asynchronous interactive activity; her students were supposed to record another videopodcast to the one suggested for the project and use a social network to share it with their eTandem partners:

What about recording a very short podcast about who they are and all that? ... I will upload it on Youngcast, the webpage, you will see it first and then they have to prepare a response to this [T-to T VC – Tandem 2 – Sara] [142].

Some teachers designed private online spaces for their students to build relationships with their eTandem partners. Some of them reported technological problems or restrictions in terms of permission. In Jerry’s words:

Once we have created the blog, we found that Tere’s students cannot access it as users because they have Google Scholar […]. We cannot access now because children under 14 cannot have a Gmail account [Emails – Tandem 8 – Jerry] [143].
One of the teachers used the blog\(^7\) they created for a school trip around Europe to upload a recorded presentation, and they asked their eTandem partners to comment on that.

As I was making that trip with my students, I told them to record a small presentation ... to greet their tandem partners ... and their tandem partners could watch it and could make some comments on that [Interviews – Tandem 3 – Elia] [144].

Anna, Elia’s eTandem partner, expressed her disappointment at the high level of informality when communicating on the blog; by informality, she referred to the fact that the task was not properly part of the formal plan of the exchanges. Nevertheless, she admitted that her students’ participation on the blog prepared them for their next videoconference from the perspective of social connectedness as they could start exchanging information with each other, as shown on Figure 4.4.3.

![Figure 4.4.3: Messages exchanged between Tandem 3 students on a blog.](http://viatge12.blogspot.com.es/)
Godwin-Jones (2005:9) states that both audio and video podcasting and synchronous computer-mediated-communication tools offer intriguing opportunities for language professionals and SL learners, as they provide “additional channels for oral communication”. As part of the exchange project, teachers and students were requested – but not compelled – to create either audiopodcasts or videopodcasts before participating in the synchronous exchanges with their students. Most teachers complained that the videopodcast activities or other preliminary activities suggested as part of the eTandem Youngcast project meant an increase in their already heavily overloaded agendas and they did not participate in them.

The use of these so called ‘disruptive technologies’ – disruptive “in that they allow for new and different ways of doing familiar tasks” (ibid) – varied among eTandem partners. Table 4.4.1 summarises the participation of each of the students in each of the eTandems on the videopodcast suggested for the project, in preliminary activities designed by the teachers, and in the synchronous part of the exchanges. Tandem 1 recorded the videopodcast, but did not do any other preliminary activities before the videoconferences. Tandem 2 and 5 did not do any of the three activities. Anna and Tere, the Spanish SL teachers in Tandem 3 and 8, recorded the videopodcast and also participated in the eTandem exchanges. Only Elia and Jerry, the teachers from Spain in Tandem 3 and 8 respectively, did all the three activities. Tandem 4, 5, 6 and 7, 9 and 10 only focused on the synchronous part of the exchanges.
Tandem Teacher Videopodcast Preliminary Video-conferences

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Table 4.4.1: Activities done throughout the exchanges

4.4.1.4 *Teachers build on students' second language comfortable zones*

Technology promotes the acquisition of knowledge through social interaction (Imison and Taylor, 2001; Leafe, 2001; Scardamalia and Bereiter, 1999; Sproull and Kiesler, 1991; Wiegand, 1998. When teachers are in the advanced stages of adoption of technology, they have the capacity to use various technologies which "help students to function at a higher cognitive level" (Bose, 2007:41). The potential of videoconference technology to provide opportunities for interactive synchronous communication allows students to perform at a higher level than they would independently. Sweeney’s study (2007) also points out higher-level thinking as one of the 20 individual videoconferencing items that support constructivism.
The use of videoconferencing under pedagogical and social conditions has also proved to be a key technological tool for assisting SL teachers in bringing learning experiences into their SL classrooms as it opens them up to new communities of native speakers. As expressed in Chapter 2, the term interactive videoconferencing (Ramirez, 1998:3) has already been used to refer to the kind of exchange using videoconference technology that “can help students gain insight into the target culture when they are using conversational skills learned in the classroom to have authentic dialogue with native English speakers”.

From the SLA perspective, the participation in the eTandem exchanges seemed a realistic starting point to improve the oral expression of the students, as the 'second language socialization' (Roberts, 2001) with members of the eTandem online community seemed especially suitable for the development of oral skills and could therefore provide speaking practice, the lack of which most distant learners deplore in CALL environments (Felix, 2002; Blake et al., 2008).

The interviews with teachers frequently contained explanations of the success or failure of particular activities, but these were rarely related to the students’ use of their second language. Though these exchanges took place in the SL classroom, no comments during the video-stimulated interviews considered the improvement of students’ SL as the main objective. Enid’s eTandem partner, Maria, highlighted the experience as just a cross-cultural exchange and did not consider the exchanges as an opportunity for students to use – and much less “acquire” – their SL:

For the experience; for the kids to learn a little bit of culture [T-T VC – Tandem 4 – Mary with Gina] [145].

What is more, none of them referred to the kind of interactive approach achieved during the synchronous part of the exchanges. In part, this might be explained by the fact that, before considering language issues, teachers probably had to overcome other difficulties such as planning the virtual setting (Chapter 4 - 4.1), planning the physical space (Chapter 4 - 4.2) and planning the social environment (Chapter 4 - 4.3). Indeed, I was the one who had to initiate
comments linked to the planning of the videoconferences regarding the use of second language.

During a videoconference-call interview with Anna, she complained that her students had hardly used their second language to interact with their eTandem partners. She suggested dividing the time of the videoconferences into two parts to allow the students to interact in each other’s language:

In this second videoconference, hopefully, more Spanish is spoken. [...] and I would like, let’s say, 50-50 [Interviews – Tandem 3 – Anna] [146].

The management of the eTandem videoconferences into two differentiated second language blocks was an important concern for many teachers. Tere justified the need to use both languages saying that each of those groups had to feel comfortable; so she introduced a ten-minute ‘comfortable zone’ for each group where they could initiate scaffolding interventions with their eTandem partners:

10 minutes in one and 10 minutes in the other so that both groups felt comfortable, at least some of the time [Interviews – Tandem 8 – Tere] [147].

Elia’s proposal, for example, suggested shifting from one language to the other during the same conversation. First, one group doing a presentation in their SL who would be given the performance feedback in each other’s second language:

The one who did the presentation made it in his/her second language and the feedback in the language of the ones who had made the presentation and vice versa [Interviews – Tandem 3 – Elia] [148].

Cathy drew a similar picture:

My students will prepare it in English and after this speech, they will ask your students some questions in Spanish (that way we make use of both languages) [Emails – Tandem 6 – Cathy] [149].
However, the structuring of the synchronous exchanges into two blocks for each group of students to communicate further did not lead to more message-oriented exchanges. Some teachers suggested lengthening the time available for each second language.

Providing students with linguistic comfortable zones means mediating their prior second language knowledge. Hartnell-Young (2003:200) comments that "mediation builds on learners’ prior experience [...] and all the diversity of culture, language, gender, ability and resources they bring to the classroom". In contrast to a behavioural approach to teaching, a classroom based on a constructive approach tries to provide opportunities for students to build on the prior views and perspectives of students. Knowledge building takes place when the student links their "previous knowledge and understanding" (Brooks and Brooks, 1993 in Bose, 2007:42) with new one. Within the constructivist approach, the prior views and perspectives of students are a basis for their learning (Goble and Porter, 1977; Jones et al., 1995 in Hartnell-Young:181) and knowledge building takes place when learners make links between existing and new knowledge (Selinger, 2001).

"Scaffolding learning implies that there is a distance between what exists and what one is capable of: in Vygotsky’s terms, the zone of proximal development (ZPD)" (Hartnell-Young, 2003:190). Teachers try to give students a sense of their own capabilities and potential and then work with them to help them reach that potential (Hartnell-Young, 2003:190). She (2003:201) adds that in their attempts to test out different approaches to scaffolding, the teacher’s skill in knowing “when to remove the scaffolds depends to a large extent on his or her knowledge of individuals”. "To work within individual zones of proximal development, it is important that they know their students well" (Hartnell-Young, 2003: 181).

In the context of this study, many teachers appeared to know their individual students well, especially in relation to their role as SL teachers. This allowed some teachers to encourage their students to use their own scaffolding techniques to communicate in their second language, regardless their proficiency
level. Anna in Tandem 3 comments on the potential of her students to find strategies to communicate with their eTandem partners in their second language, as she exemplifies:

Then it’s like the first thing that if I do not understand this way, I have to find the other [Interviews – Tandem 3 – Anna] [150].

This same teacher, Anna, did not regard the difference in SL level as a reason to stop students from interacting with their eTandem partners. Contrary to that, she pushed them to try with the basic language tools (e.g. certain grammatical structures, vocabulary) they had already acquired:

They can say their name, their likes [...]. At least, they have to ... talk of their town in Spanish so they can practice more Spanish [Interviews – Tandem 3 – Anna] [151].

Contrary to Anna, Alex reasoned that his students’ SL level could be an important factor in hindering them from answering in a natural way:

The level of our students is not as fluid or as good as it should be to start this job, which is natural conversation, in such a way that if one student from Switzerland asks one question the other students will be able to answer in a natural way [Interviews – Tandem 1 – Alex] [151].

Nonetheless, Alex associated the problem of not participating in more message-oriented exchanges with a general problem of communication in the first place:

I think that the challenges we face are basically the problems that we have for our students to communicate, because communication sometimes is not natural [Interviews – Tandem 1 – Alex] [152].

In general, the management of groups built on a collective classification of their students’ proficiency in their second language and did not consider the proficiency level of individual students. Anna classified her students’ level as
'beginners' and described in a general way what they should be capable of doing when communicating with their eTandem partners:

First, my students are beginners and Elia’s are more advanced [Interviews – Tandem 3 – Anna] [153].

Later in the interview, she made it clear that only students in level 3 could engage in a conversation:

Starting January I will have level 3 students who, in general, are very good students and who already speak a little more Spanish. Those, of course, I can engage more in a conversation but level 1 students would be “hello, my name is such and such” [Interviews – Tandem 3 – Anna] [154].

In general, teachers participating in the project in UK and US usually indicated that they had fragmented contact with their students and they could not work enough in advance on aspects that could allow them to know their students. Some of these Spanish as SL teachers could not say much about the level of their students in advance. As Anna explained:

It also depends on which month it is [Interviews – Tandem 3 – Anna] [155].

4.4.1.5 Teachers cross boundaries towards the curriculum

In their managing and mediating roles, the majority of teachers felt disempowered to manage for continuity of the same groups. They considered that school managers should address this at the school level. More in accordance with a constructivist approach, managers should facilitate and promote crossing the boundaries of the Key Learning Areas (Hartnell-Young, 2003).

Some teachers insisted on the importance of starting planning the videoconferences before the academic year to facilitate the integration of the exchanges within the curriculum framework. Tere defined the planning as
‘tough’ because planning started too late; she insisted on the importance of planning from one academic year to the next:

I think that the planning was really tough because we started so late. […] I would have liked to start the planning earlier. I would like to start planning now for next fall [Interviews – Tandem 8 – Tere] [156].

Nonetheless, even teachers who insisted on being in touch with their partners during the summer did not do so because they were so far off from school that they did not even suggest a timetable for communication. When classes started in September, postponement of the videoconferences was the normal procedure again. Improvisation was the normal way of designing the videoconference lesson plan; the tendency was to share their ideas hurriedly by email. Even Gina, during a video-stimulated interview, commented that she did not have any idea of what the videoconference was about:

About this videoconference, I did not know what was coming. Our questions were little more than improvised [Interviews – Tandem 4 – Gina] [157].

Anna described how the initial postponement of the videoconferences brought a change in students’ groups:

In January, we could not do it with the transition from one semester to another and with that transition I lost some students and gained others and we had to change groups. […] and until now, in April, that we could do this one and another in May. At first it was postponed too much [Interviews – Tandem 3 – Anna] [158].

It was often the case that students registered just a few days in advance. Cathy, for example, commented on administrative problems that cancelled the class available for the videoconferences:

I regret to inform you that there was a problem with the number of students who signed up for our class. At first we were told that there would be 30 students, but the
administration was wrong and only about 8 students signed up, which caused the cancellation of the Wednesday class [Emails – Tandem 6 – Cathy] [159].

The usual procedure was that, once a first lesson plan was designed, teachers would not prepare a second one, as many of the teachers did not have the opportunity to repeat another videoconference with the same group of students. As Elia explains:

We always did the same because we did a change of group as Anna’s students change each semester and so we do the same with the new students. Next year, there will be other students [Interviews – Tandem 3 – Elia] [160].

Anna also described the complexity of the management of groups after this change of students throughout the different semesters of the academic year. She linked it to the role of Spanish as a SL as a non-compulsory subject in her country (USA):

It is not a requirement to take Spanish. Some students take it; then I have some semester with a lot of people and in other ones very few people. Once a year I also teach what we call Spanish 3 and 4 and then the level of the students change and each semester there are new students. I can have the same students as in Spanish 1-2 but not necessarily [Interviews – Tandem 3 – Anna] [161].

These non-compulsory subjects, usually arranged in three-month periods, did not facilitate the continuity of the same group of students for a long period of time. Three-month periods to meet, design, arrange and participate in the exchanges proved insufficient for a successful partnership in most cases.

Sara, for example, scheduled the videoconferences as part of the Oratory module, as she considered that the videoconferences fulfilled the requirements of the subject. This subject aimed at improving the oral skills of the SL students; it usually had the support of a native speaker of the second language working as a
language assistant in the school. She regretted to announce the cancellation of the optional subject she was involved in:

So I have some news, not very good ones though. The Oratory module finishes next week and after that, there won’t be any similar modules so I don’t know what the school will decide to do with this project [Emails – Tandem 2 – Sara] [162].

With the aim of solving the difficulty of managing groups, Cathy and Mary decided to integrate exchanges under the compulsory SL subject:

Accordingly, as Mary and I want to continue to work with you and we believe in the educational value of this initiative, we decided to integrate the Youngcast Project in one of our Spanish classes. The problem is that this change will cause the postponement of the date of the videoconferences until January the 11th at 10 am (USA time) [Emails – Tandum 6 – Cathy] [163].

Other teachers also integrated the exchanges as part of an optional subject, as they considered the exchanges to be on a ‘trial’ period. Similarly to what Cathy and Mary did, Ari meant to make the exchanges part of a compulsory activity in the school. She considered that the only way the exchanges could have value within the school is to integrate them into a compulsory subject, as she comments:

Optional [...] when we move the videoconferences to a compulsory subject, they will have a value within the trimester; now we are just trying it out a little bit [Interviews – Tandem 7 – Ari] [164].

Some teachers saw this process of preparation before the videoconferences as a requirement not easily fulfilled; so they regarded the videoconferences just as ‘premium’ activities. Rather than focusing on engaging their students in a general way, it was often the case that only some of the students were allowed to participate, as they were considered the only ones to be ‘ready for the
videoconferences’. Like Ari’s possibilities in Spain, most of the US teachers thought of Spanish as ‘a bonus’ class. In Tere’s words:

I write my own curriculum because it is just me ... it is what we call extra, I mean, it is special. You learn English because it is required but Spanish is a bonus for us. As long as I do what I am planning to do and I reach all the goals, I have the freedom to sort of do what I want [Interviews – Tandem 8 – Tere] [165].

This excludes the other students from any opportunity to participate and, therefore, to learn and from being scaffolded by their peers. Only a group of ‘the best students’ from Gina’s classroom in a secondary school, for example, were invited to participate in the videoconferences, as they were the only ones who finished the activities prepared as part of their curriculum framework:

If it is with the second-year students, no problem because we are divided by levels ... and with the high-level students, we are always preparing alternative activities. The curriculum doesn’t provide enough [activities] for them [Interviews – Tandem 4 – Gina] [166].

Alex’s comments in Tandem 1 extended the spectrum, placing the videoconferences as the final step in the curriculum framework. He suggests that the curriculum should be more compacted in time and, in the end, learning should be reinforced with activities that also included the videoconferences.

The curriculum will be all centred, maybe, from summer to fall [...] and in the end we will do the videoconferences about your favourite animals, for example, as you have them written on the wall, and then they have the vocabulary to talk and ask questions [Interviews – Tandem 1 – Alex] [167].

Ari defended the option of integrating the exchanges within an optional subject as it allowed her to be more flexible with contents:

Since I’m dealing with an optional subject for which I have to create the content myself, I went to look for things that I find interesting and, you see, I found this [information around
the project. Our participation in the videoconferences did not appear in the programme, as we did not know about it. But as we are doing the optional subject where we can do more or we can do less, it has been well [Interviews – Tandem 7 – Ari] [168].

In doing so, they paint a picture of the videoconferences as an activity detached from the curriculum framework they are supposed to follow. The possibility of integrating the eTandem videoconference exchanges as part of their curriculum framework was viewed differently depending on the teacher. The spectrum of opinion among SL teachers on whether the implementation of the exchanges was viewed as part of their curriculum or not was extremely wide. It includes views from SL teachers who regard the eTandem experience as an extra-curriculum experience to teachers who contemplate it as an integrated part of the curriculum framework (Table 4.4.2).

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<thead>
<tr>
<th>No integration</th>
<th>A cross cultural experience</th>
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<tbody>
<tr>
<td>No integration</td>
<td>A cross cultural experience</td>
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<tr>
<td>Books – Cds / DvD’s – Manual for the videoconferences</td>
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<tr>
<td>Fast integration – Probationary year –</td>
<td></td>
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<tr>
<td>Curriculum framework (discover links) – Videoconferences</td>
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<tr>
<td>Fully integrated</td>
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Table 4.4.2: Teachers’ views on the integration of the videoconferences within the curriculum.

Far from a more open-ended approach, some teachers saw the term curriculum as heavily structured, leaving little scope for creativity (Cuban, 1984; De Marrais and LeCompte, 1999). This view impeded teachers from providing their classrooms with enough levels of flexibility to include the eTandem experience as part of what they considered their curriculum framework. Enid, for example,
defined her situation as ‘extremely busy’ because the videoconferences limited the time she should devote to fulfilling her curriculum syllabus:

The preparation before the videoconferences has taken time from other things from the curriculum that I have to do and so I am extremely busy [Interviews – Tandem 6 – Enid] [169].

Maria also referred to her videoconference experience as something completely detached from the curriculum. She perceived the curriculum as something handed to her at the beginning of the year, and that she had little control over, and described the situation generated as something ‘difficult’ and ‘not comfortable’ to deal with:

For me it was very difficult because you have to give a curriculum at the beginning of the year [...]. For me it’s not comfortable [Interviews – Tandem 6 – Maria] [170].

Alex, an experienced primary teacher, viewed his participation in the videoconferences as just a minor step towards what he considered a long-way process towards fully-integrating the videoconferences as part of his SL classes. He compared it to what had previously occurred with the current fully integrated use of CDs or DVDs within SL classes:

When we started teaching, many years ago, we just had the books and then we got the DVDs for the computer and now even I have CDs and DVDs to give at home; and these DVD’s are in coherence with the book [Interviews – Tandem 1 – Alex with Hill] [171].

He referred to publishers in his country – and the Department of Education behind them – who provide supporting resources for SL teachers on CD-ROM format, on its websites or in print form. But he predicted a period of ten years for the potential integration of the videoconferences in the school with these kinds of supporting resources:

In ten years, maybe, we do it this way [Interviews – Tandem 1 – Alex with Hill] [172].
His view suggests a role of a teacher as a passive actor, a mere consumer of resources, who regards the integration of the videoconferences as something that will be handed down to him from above. As part of a better integration of the exchanges within the curriculum framework, Alex even asked for a manual to link up with the SL textbook:

We should have a manual for the videoconference coherent with the book; that would be the future [Interviews – Tandem 1 – Alex with Hill] [173].

Unlike Alex, Hill was very keen on keeping videoconference sessions more interactive; he also wondered if interaction need always happen through questions, and asked about other ways of developing interactive topics:

Perhaps, we shouldn’t focus so much on what kind of structures will be used but use this as an excuse to say “let’s go to do the presentation of our city” and see what we get. I am not sure if it is a little daring due the fact that it is not clearly structured, but it’s a possibility [Interviews – Tandem 1 – Hill with Alex] [174].

A group of teachers in this study regarded the progress towards a full integration of the videoconferences within the curriculum framework as a long-term goal. This second group of teachers, as Hill expressed, defined her extra-curriculum experience as a necessary step towards a full integration of the videoconferences within their curriculum framework. In the words of Bereiter and Scardamalia (1999 in Hartnell-Young, 2008:284), these teachers viewed the curriculum as "flexible design spaces which can be filled with a wide range of learning activities that teachers and students devise together".

Influenced by their lack of experience in these kinds of projects, though, Hill agreed on the necessity of ‘trying it out first’ [Interviews – Tandem 1 – Hill with Alex]. She clarified that during this trial period, it would be useful to try to discover all the links that could exist between the curriculum framework and the videoconferences:
The curriculum? It reinforces it perfectly: explaining their everyday life, the present simple, the present continuous, their aspirations for the future ... we will search for all the connections to the programmes [Interviews – Tandem 1 – Hill with Alex] [175].

Only Jerry regarded the curriculum framework as a support for the planning of the videoconferences in what he defined as the deepest level of ‘pedagogical integration’ possible and also as an issue integrated within the school:

In the sense of having it consolidated, in the sense of having it pedagogically integrated into the curriculum, I do not think you can do more because we know that from this point of view, and also from the point of view of competencies, that it is a very rich project [Interviews – Tandem 8 – Jerry] [176].

4.4.1.6 Teachers link their eTandem classrooms to broader communities

The concept of the school as a connected community underpins social constructivism and in this study, teachers tended (or tried) to collaborate with their colleagues in the school and in the remote eTandem classroom. Vygotsky (1962), as quoted in Hartnell-Young, (2003:185) stressed that it is important for students to acquire learning “in a situated way”, through tasks and activities that are contextualised to their experience and environment and relevant to their everyday life. Within the constructivist approach, students create their identity starting from the basis provided by prior views and perspectives. This means that experiences outside the school (e.g. the culture of the home or family, and the input of peers or the media and recreational activities) must be valued by teachers and peers (Damarin, 1996 in Hartnell-Young, 2003:181).

To a certain extent, eTandem SL teachers in the study attempted to add authenticity to the tasks by mediating students’ local experiences and making connections with wider contexts than the classroom setting. Some of these
teachers analysed the difference between the types of school culture in terms of the school’s policy on the implementation of a second language. These teachers considered that the role of a SL within the school policy facilitated the continuity and integration of such projects. Anna commented on the role of English as a second language in Spanish schools as a whole-school strategy and country strategy that allow SL teachers in Spain to plan for longer-term goals:

In Spain, I guess they start learning English since childhood and mine, they barely have a semester or two and they have never heard Spanish [Interviews – Tandem 3 – Anna] [177].

Rather than contextualising the exchanges as a personal goal, some teachers regarded the exchanges as an integral part of the school-wide goals. Jerry, who encouraged a group of teachers in his school to participate, described the exchanges as an integral part of a whole-school approach based on the integration of language in the different school areas. Hartnell-Young (2003:210) defines this kind of teacher as one who works “in collaboration using the whole-school design elements, including professional development (Hill and Crévola, 1997), to look at school-wide goal setting”. In doing so, Jerry contextualised the eTandem videoconferences within a language-integrated project (Pla Experimental de Llengües Estranderes - PELE*) that involved a team of SL teachers in the school:

We have linked the videoconferences to the curriculum and to the school to the largest degree possible and they have also been linked to an integrated language project and to an English-language project in the school [T-T VC – Tandem 8 – Jerry with Martha and Cris] [178].

Both primary and secondary teachers in the same school mentioned the gap between the broad communities of primary and secondary classrooms when secondary students built primary students’ confidence in both their use of

* http://srvcnpbs.xtec.cat/pluriling/pele.html
videoconference technology and the SL. The secondary students in this case instructed their primary students regarding both technology and SL. One of the secondary students was in charge of scaffolding primary ones with technology and the other one took the role of SL expert.

Attempts were also made to link the classroom to a broader community, as teachers attempted to situate learning within the broader society. This same teacher stressed the importance of connecting some members of his school with associations with a solid educational background, such as iEARN, which promote these kinds of collaborations, as he comments:

We wanted to work with iEARN-Pangea and a project that already exists; we are not just two schools, but two schools which agree to collaborate with each other and who also are part of an organisation [T-T VC – Tandem 8 – Jerry with Martha and Cris] [179].

Gina also praised the SL policy implemented by her school system as one of the reasons for the success of her students in communicating in their SL. This policy included not only many hours of English during and after school, but also a new system for learning languages imported from the US:

We do many hours of English, we do extracurricular hours, we are preparing for the Cambridge exams, even the little ones [...] and yes, it is very noticeable, and the little ones have begun with an American system [...] and I notice it. I notice the difference from a couple of years ago that children came with barely language ability [Interviews – Tandem 4 – Gina] [180].

Tere also reinforces Gina’s view on the importance of the school policy, adding that students in her school had the choice of learning several languages:

I think in their lives ... they have a choice to take French, Spanish or now Mandarin Chinese and a lot of the 5th graders that I have now [Interviews – Tandem 8 – Tere] [181].
Tere linked her students’ motivation when participating in the videoconferences to the fact that they had the possibility of travelling:

Because we go to Mexico, there are a lot of people who speak Spanish [referring to the videoconferences] […]. They felt it was important or that it actually helped them [Interviews – Tandem 8 – Tere] [182].

4.4.2 **Critical findings and SL teachers’ development on mediating towards interaction**

The critical findings in the first three sections of this chapter responded to the teachers’ involvement when planning the physical (4.1.3), social (4.2.3) and virtual environment (4.3.3) of the eTandem videoconferences.

Overall, they expressed positive thoughts about their participation in the exchanges and the motivating nature of the experience regarding its potential to establish more message-oriented communication with their eTandem partners. From the perspective of the SL, their participation in the exchanges provided their SL students with an opportunity to interact with native speakers of the language. From the perspective of the technology, SL teachers also favoured the message-oriented interactive context provided by the use of videoconference technology.

Nonetheless, the findings suggest an apparent imbalance between their positive attitude and the level of interaction achieved during the students' exchanges. The majority of SL teachers expressed their dissatisfaction with the low level of message-oriented interactivity achieved and these teachers reflected with me on relevant themes and significant incidents linked with such dissatisfaction.

Summarising this fourth section, Tables 4.4.2.1 to 4.4.2.4 with its subsequent information present an overview of critical findings on how participant-teachers mediated the implementation of videoconference technology in their eTandem experience. They did so with the aim of encouraging students’ SL learning
through peer-to-peer interactive collaboration. In doing so, my analysis of the data built on recurring themes namely: *identity, SL ZPD, openness* and *continuity*.

Next, I also detail significant aspects detected that SL teachers encountered around each of these essential themes in the form of *critical incidents*. I also indicate how these particular but interconnected experiences were used at all stages of their development as vehicles for responding to each of these relevant themes. In doing so, I distinguish between two developments in their process: unsuccessful developments, that is, efforts or behaviours that did not bring development as they failed, or partially failed, to be completed and those efforts or suggestions from teachers who brought development in the process of integrating eTandem videoconference exchanges in their classrooms, that is, successful development.

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<tr>
<th>THEME</th>
<th>DEVELOPMENT</th>
<th>CRITICAL INCIDENTS</th>
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<tbody>
<tr>
<td>Identity</td>
<td>Unsuccessful developments</td>
<td>Physical encounters</td>
</tr>
<tr>
<td></td>
<td>(due to)</td>
<td>Social familiarity</td>
</tr>
<tr>
<td></td>
<td>Successful developments</td>
<td>Management of small groups</td>
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<tr>
<td></td>
<td>(due to)</td>
<td>Social online presence</td>
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*Table 4.4.2.1: Critical incident and development on the theme identity*

The recurring theme *identity* (Table 4.4.2.1) refers to the SL teachers’ and their students’ chances of building on prior identification and cooperation with their eTandem partners with the aim of generating a sense of belonging with each other.
Overall, the impossibility of arranging physical encounters between the eTandem partners did not facilitate such a complex endeavour, that is, developing identity.

The findings reflect a lack of social online encounters between teachers and between students aimed at establishing stronger identity. Some teachers felt that the design of the exchanges lacked activities aimed at developing familiarity and confidence with their eTandem partners.

During their video-stimulated and text-stimulated reflective analysis, and with the aim of changing this approach, some teachers pointed out the need to develop some practical strategies to manage eTandem synchronous exchanges in smaller groups. They did so through the use of other spaces in the school (e.g. computer lab, headmaster’s office, rooms to meet parents, other classrooms free at the time of the exchanges, among others).

Findings emphasise the need to know what is possible with computers to generate social presence. Some teachers referred on the need to develop more social presence and they praised videoconference technology as a way of generating such a need (e.g. videoconference technology allows to put a face).
### Table 4.4.2.2: Critical incidents and development on the theme SL ZPD

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<th>THEME</th>
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<th>CRITICAL INCIDENTS</th>
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<tr>
<td>SL ZPD</td>
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<tr>
<td><strong>Unsuccessful developments (due to)</strong></td>
<td>SL low level</td>
<td>Collective classification</td>
</tr>
<tr>
<td><strong>Successful developments (due to)</strong></td>
<td>Scaffolding strategies</td>
<td>SL proficiency level</td>
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<td></td>
<td></td>
<td>Asynchronous communication</td>
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From the perspective of the SL, teachers' approaches to using the second language during the exchanges showed diverse views on how the students' SL level could provide their students with enough scaffolding resources to afford them with a zone of proximal development. I have termed such a theme as **SL ZPD** (Table 4.4.2.2). Critical incidents linked with **SL ZPD** appeared from reflections with SL teachers on how they encouraged their students into developing within their own zone of proximal development through the use of their SL as a scaffolding resource.

[← SL Low level]

The SL teachers’ general view was that the SL level acquired in the classrooms did not make students capable of interacting with their eTandem partners.

[→ SL proficiency level]

In their role as SL teachers, some teachers - mainly English as a SL ones - appeared to know their students well and were aware of the prior knowledge of their students regarding their SL proficiency. They built on this prior knowledge and showed confidence that these basic skills should be enough for students to remove the scaffold of the teacher. This group of teachers considered that the SL proficiency level acquired by their students – even in primary classrooms –
afforded their students with a linguistic comfortable zone to try to interact with their eTandem partners.

[Scaffolding strategies]

These teachers pushed their students to do so by putting into practice more or less successful scaffolding strategies with the aim of removing the scaffolded interventions of the teacher (e.g. paraphrasing). In their ability to use videoconference technology towards a more learner-centred approach, a minority group of teachers demonstrated further development into scaffolding their students within their own zone of proximal development such as timely interventions during the students’ videoconferences.

[Collective classification]

More than working on individual linguistic zones of proximal development, lack of time contributed to a collective classification of their students’ proficiency in their second language when managing groups.

[Asynchronous communication]

In contrast to previous exchanges where the eTandem exchanges were conceived of as just synchronous partnerships, some teachers identified an important pedagogical development in their practice through exploiting asynchronous tools such as Internet mapping tools, videopodcast activities or private social networking sites in specific sessions and previous to the synchronous exchanges.
Many of the eTandem exchanges lacked balancing more structured approaches with more open approaches when planning and implementing the videoconferences with their students. I have termed this theme as *openness* to refer to the difficulties of implementing more opened approaches when implementing synchronous encounters. On the following lines, as summarised on Table 4.4.2.3, I have categorised critical incidents around this theme linking them to these SL teachers' successful and unsuccessful developments when trying to implement more opened approaches to their experiences.

**Table 4.4.2.3: Critical incident and development on the theme openness**

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<tr>
<th>THEME</th>
<th>DEVELOPMENT</th>
<th>CRITICAL INCIDENTS</th>
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</thead>
<tbody>
<tr>
<td>Openness</td>
<td>Unsuccessful developments (due to)</td>
<td>Rehearsal approach</td>
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<tr>
<td></td>
<td></td>
<td>Structured timely interventions</td>
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<td></td>
<td></td>
<td>Control</td>
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<td></td>
<td>Successful developments (due to)</td>
<td>Informal SL interventions</td>
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<td>Self-management</td>
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Far from taking risks, the findings of this section indicate that many SL teachers followed a completely structured approach. Many of the students' exchanges did not go further than the initial rehearsal stage. These were limited to an authoritative, reactive exchange model that followed clear teachers' instructions or were aimed at getting grade.

During the interviews, video-stimulated recall observations of the students' videoconference experiences led some SL teachers to indicate the need for more structured timely interventions regarding the use of the SL.
Informal SL interventions

A second group of teachers, though, expressed their concern about dividing the time of the videoconferences with regard to the SL used; they made a commitment to more spontaneous and informal approaches during the synchronous exchanges. Rather than limiting the exchanges to one-way information presentations, VSRs were useful in helping them to realise the importance of lengthening the time of the synchronous encounters to allow for such informal interventions.

Self-management

Student self-management, another long-term goal for many of the teachers in this study, was enhanced by some teachers in this study. They achieved so by gradually redirecting their focus on a more structured approach to the use of videoconference technology and opened up the videoconference exchanges to more flexible approaches through increasing periods of informal dialogue during the synchronous sessions.

Some of them add communication through asynchronous tools, if necessary. My analyses from the student-to-student videoconferences do not show many instances of such informal asynchronous communication, though. The use of asynchronous tools was limited to periods when synchronous tools did not work properly. In order to allow for knowledge creation, some teachers suggest extending this informal communication with the remote classroom to their colleagues in their local classroom while the synchronous encounters.

Control

Contrary to the above group of teachers, student self-management was impeded in some cases by teachers' low levels of flexibility on relinquishing control.
The theme *continuity* (Table 4.4.2.4) categorises those critical incidents linked with the management of the same groups of eTandem partners and the difficulties in keeping them on a long-term inquiry. The following lines show the teacher developments on trying to find answers to this kind of challenges.

[← Fragmented contact]

Spanish-as-SL classrooms from the UK and the USA showed a tendency to have more fragmented and short-term contact with their students, as these usually changed throughout the different semesters of the academic year.

[→ Long-term inquiry]

Contrary to them, continuity within the same group of students allowed many of the Spanish groups to plan for long-term inquiry.

[← Whole-school involvement]

Some teachers considered that achieving continuity implies changes at the school level with managers to involve in this kind of projects.

[→ SL as compulsory subject]

Findings show different teachers’ views on the place that the eTandem videoconferences should occupy within the curriculum framework. Teachers suggested several options for where to integrate the exchanges as part of a subject: non-compulsory subject, compulsory SL subject, optional subject and

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<th>THEME</th>
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<tr>
<td>Continuity</td>
<td>Unsuccessful developments (due to)</td>
<td>Fragmented contact</td>
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<td></td>
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<td>Whole-school involvement</td>
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<td></td>
<td>Successful developments (due to)</td>
<td>Long-term inquiry</td>
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<td>SL as compulsory subject</td>
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*Table 4.4.2.4: Critical incident and development on the theme continuity*
even e-subjects. Some teachers linked the possibility of continuing with the same
group to the role of English as a SL as a compulsory subject in their countries.

5 Conclusions

This chapter contains a summary of the key findings and research contributions. It also
discusses the limitations of the research and concludes with recommendations for further investigations on eTandem videoconferencing. In this study I have shown how twenty SL teachers have developed when trying to implement eTandem videoconferencing in their SL classrooms. In this way, I have responded to the main question of the study:

- How do SL teachers develop throughout the process of eTandem videoconference integration in their classrooms?

By following their development, I have also identified which teachers’ roles emerge during the eTandem integration in their classrooms and how these teachers use their experience to move towards a more social constructivist approach to CALL. In this way, I have centred the study on the main objective of answering the two subquestions respectively:

- What teacher roles emerge in the process of eTandem videoconference integration in their classrooms?

- How do these SL teachers exploit eTandem videoconferencing in accordance with a social constructivist approach to CALL?

In doing so, this investigation adds to the knowledge base available to educators and researchers by offering a greater understanding of these SL teachers’ particular experiences.
This study used Hartnell-Young’s theoretical considerations (2003) on the role of teachers in classrooms where computers are used. It took one more important step as it inquired on the role of teachers in classrooms where eTandem videoconferencing was intended. With this, I tried to make a contribution to the wider field of technology in the classroom, by observing these SL teachers’ experiences, involving both technological innovation, and international mediated collaboration.

As Hartnell-Young (2003:241) comments, a study such as this with the intention of providing advice to teachers, schools and systems "should tackle the issue of what could be, so it was felt important to capture and report on single instances", because if an occurrence supporting eTandem videoconference-integrated technology is found in one setting, it might be able to occur in another.

5.1 Summary of Key findings

In this study, I have observed SL teachers intending to implement eTandem videoconferencing in their schools. In presenting my findings, this research built on Hugues’ (2009) two ways of presenting her findings: as a multifaceted word picture and as a condensed set of critical findings. The former aims at an in-depth understanding based on the teachers’ accounts; the latter aims to identify those critical incidents that appeared when trying to implement eTandem videoconferencing in their classrooms.

This has revealed a complex picture of three inter-connected teachers’ role, namely as teacher-designers of the physical space (4.1), teacher-planners of the social environment (4.2) and teacher-designers of the virtual setting (4.3). These three roles have prepared the ground for the SL teachers’ mediation of the interactions of their students’ eTandem videoconference experiences (4.4). Overall, fourteen relevant themes (Figure 5.1) with their subsequent critical incidents convey the essence of their experiences.
Figure 5.1: Overall picture of relevant themes
5.1.1 *Teacher-designers of the physical space*

Three themes (Figure 5.2) convey the essence of their experiences as teacher-designers of the physical space. These themes are *adjustability*, *learner-centred layout* and *unpredictability*.

![Diagram](image)

Figure 5.2: Relevant themes as teacher-designers of the physical space

- *Adjustability*

Affordability describes the SL teachers’ choices of being supplied with the required technology to participate in the eTandem videoconference exchanges with their students usually requires doing so in stationary spaces, more technologically adjusted to practice.

Far from being afforded with better and more technological choices to participate in their eTandem videoconference exchanges, SL teachers usually managed
access to this technology within temporary locations (e.g. normal classrooms, extra spaces used for videoconferencing, computer labs).

Contrary to stationary-like spaces, technically adjusted to practice as default, the effects of using more temporary spaces were apparent in the lack of *adjustability*. This refers to spaces not properly adjusted as needed for eTandem videoconferencing - usually technologically adjusted. *Adjustability* refers to how the SL teachers adjust their practice within these locations.

- **Learner-centred layout**

The findings identify that very few of these SL teachers adjusted their physical spaces to evolve into more interactive encounters. In line with more open approaches to the use of time and space characteristics of a constructivist approach to learning, the findings vindicate the need for a more active role of these SL teachers on the architectural design of their particular temporary spaces and towards a learner-centred approach.

- **Unpredictability**

The findings recognise the complexity of the SL teachers’ eTandem videoconference-integrated experiences and addresses issues of *unpredictability* related to previous encountered technological challenges (e.g. audio, Wi-Fi connection, among others). Although technology had been piloted beforehand, unpredictable issues, usually on the temporary spaces, oblige some SL teachers to improvise B plans.
5.1.2 Teacher-designers of the social setting

Three relevant themes (Figure 5.3) convey the essence of their experiences as teacher-designers of the social setting. These relevant themes are individuality, experience and support.

![Figure 5.3: Relevant themes as teacher-designers of the social environment](image)

- Experience

The twenty SL participant-teachers, geographically located in different countries, shared the same aim: integrating eTandem videoconferencing in their SL classrooms. This allowed the investigation to be part of a diverse, complex and virtual environment of classrooms from different levels and ages. There is evidence of shared experiences as SL teachers and of being experienced technology users for personal purposes. These teachers, though, reported varied patterns of previous and current technological use in their professional environment. Many of these teachers showed lack of experience in this kind of exchanges, at least on its online eTandem format. In general, the findings identify a gap between the previous professional technological training received and the use of it in the classroom.
- **Individuality**

*Individuality* describes the tendency of these teachers to participate on an individual basis, as opposed to any clear perception of peer interdependence. This had apparent effects on the SL teachers’ continuous postponement of the exchanges that affected considerably a long-term and continuous commitment sought for the exchanges.

- **Support**

In line with a social constructivist approach, the findings emphasise the importance of creating a community and acquiring learning in a situated way as an integral part of the school-wide approach. Reports from SL teachers on limited support from their respective management teams or other staff members in their schools also form part of critical findings from their eTandem experiences. The formal institutional support received from them limited to give permissions; sometimes, the intervention of managers was seen as an imposition.

### 5.1.3 Teacher-designers of the virtual setting

Four relevant themes (Figure 5.4) convey the essence of their experiences as teacher-designers of the virtual setting. These themes are *security, unstructure, online support* and *misunderstanding*. 
Online support

The findings highlight various contrasting aspects in the SL teachers’ using and sharing of the online space. In particular, there are evident imbalances between some SL teachers who regarded it as a support and others who viewed the use of these spaces as an impediment to their already overloaded agenda. This second group justified not using it due to their lack of competency with technology, due to their lack of interdisciplinary skills or due to a matter of convenience.

Security

The official online space designed for the project aimed at generating a collaborative eTandem environment. The relevant theme named security basically refers to a challenge associated with the decision of some teachers not to use or share the online platforms with other eTandem partners due to Internet security issues. Some teachers linked their reasons for not sharing information with their eTandem partners with intercultural aspects or the age of the students. Some other teachers viewed the exchanges as not officially linked with the school as an institution and regarded it as a more personal encounter. Findings indicate that...
all these security concerns did not facilitate the conglomeration of several schools that could contribute to the eTandem community.

- **Unstructure**

By *unstructure* I refer to the way many of the teachers created and used their own alternatives to the official site to communicate with each other. Some of them even used – experimented – with a multiplicity of spaces and they used each of them for different purposes. The use of all these multiple resources might be associated with the difficulty in identifying a suitable online platform or CMC tool to encourage communication and to foster collaboration with their colleagues in the school, in the remote eTandem classroom and in the remote eTandem community.

Instead, the findings recognise the tendency of these teachers to use CMC online tools in accordance with their familiarity with them (e.g. email) and lack of time to learn about other tools. Findings also reveal an apparent imbalance between those SL teachers who did not use the email as part of their daily professional schedule and those who did. Etandem online exchanges needs to: foster balanced CMC-use that integrates security, familiarity and structured approaches.

- **Misunderstanding**

The relevant theme termed *misunderstanding* points to a deficient use of the email in terms of lack of regularity and lack of commitment in communicating, in terms of answering emails in an incomplete way and/or in terms of not answering the most updated or essential information. This contributed to a continuous postponement of the synchronous encounters.

Significant challenges increased due to the SL teachers’ use of their second language to communicate with each other that led to some misunderstandings between eTandem partners. The effects that some SL teachers, apparently working as a team, had different levels of involvement (e.g. active vs. peripheral eTandem participants) or assumed particular roles in the project were also apparent in the SL teachers’ challenges associated with miscommunication.
All these points suggest the need to plan ahead and avoid last minute changes and the need of an online platform to share this kind of essential information and a person in charge of updating this information for both more active partners and more peripheral participants.

### 5.1.4 Teacher-mediators towards interaction

Four relevant themes (Figure 5.5) convey the essence of their experiences as teacher-mediators towards message-oriented interactions. These themes are identity, SL ZPD, openness and continuity.

![Figure 5.5: Relevant themes as teacher-mediators](image)

- **Openness**

The findings highlight some points of imbalance in the SL teachers’ eTandem experience. On a general level, there are evident imbalances between the SL teachers’ initial motivation and the positive attitude to participate in the eTandem videoconference experiences with their students and on the message-interactive context of the exchanges, and the dissatisfaction with the message-
oriented interaction achieved during the student-to-student videoconference exchanges.

To achieve so, the findings suggest that SL teachers’ structured approaches and the difficulties (for some of them) in relinquishing control should be balanced with more opened approaches. More in line with a social constructivist approach, these should include spontaneity, knowledge construction and creativity, asynchronous and synchronous informal dialogue between participants and opportunities to take risks.

- **Identity**

The theme named *identity* basically refers to a challenge associated with the lack of establishing more social relationship between participants, both teachers and students. Teachers referred to the importance of starting the exchanges with more social encounters and cooperative activities but lack of time impeded them in so doing; instead, most of them centred on conducting more business-like encounters. The potential of videoconference technology to generate social presence would compensate for the difficulty of arranging an initial physical encounter to establish stronger identity.

- **SL ZPD**

The theme named *SL ZPD* relates to the SL teachers’ diverse views on how the proficiency level in the second language of their students provided them with linguistic comfortable zones. More in line with a constructivist classroom, the findings indicate that some SL teachers viewed their students’ SL linguistic knowledge as a strength to achieve the teachers’ final aim: to scaffold their students towards being autonomous, self-directed learners in their eTandem experience.

Diverse views arose on the potential of the second language acquired to afford the students with scaffolding resources. As required in a classroom based on a
constructive approach, the findings indicate the importance that teachers place on the students’ prior knowledge.

- Continuity

Continuity with the same group of students allowed some groups to plan for long-term inquiry but some participant-teachers reported short-term and fragmented contact with the students. They linked it to the role of the SL as a compulsory subject in their countries.

### 5.2 Research contributions

This research makes significant contributions to knowledge about teachers’ roles in classrooms where videoconference technology is used (5.2.2), to qualitative research methodology (5.2.2) and to teacher development (5.2.3).

#### 5.2.1 Contribution to knowledge about teachers’ roles in classrooms where videoconference technology is used

The study has adopted Hartnell-Young’s model (2003) on the teachers’ roles in classrooms where teachers use technology as the initial conceptual framework for the study (3.3). Guided by her model and her extensive research (2003, 2005, 2006, 2009), the investigation addresses a gap in the literature associated with the need for current in-depth knowledge on the SL teachers’ roles emerging from integrating eTandem videoconferencing in their classrooms.

Investigating the experiences of this particular group of twenty SL teachers has led to greater understanding of SL teachers’ roles in eTandem videoconferencing, thereby contributing to the knowledge base in the field of teachers’ roles where technology is used and in particular, where videoconference technology is used. In doing so, I focused on several studies that particularly influenced my investigation such as Bose’s (2007) investigation on the teacher, school and
professional development characteristics that influence the utilization of videoconferencing technology or Lim’s (2009) research on the role of the coordinator and factors affecting their ability to support curriculum videoconferencing.

When covering this gap, I also contributed to complement findings from an extensive research on the integration of videoconference technology in the classroom (Anastasiades et al., 2010; Yanguas, 2010; White, 2011, among others). From this perspective, Keohane’s (2010) study on the perceptions and experiences influencing the decisions of virtual team members to use different kinds of videoconference technology particularly influenced my investigation.

The investigation goes a step further from Hartnell-Young’s theoretical considerations (2003) and other studies linked to the integration of videoconference-technology in the classroom as I have drawn a qualitative picture of the complex nature of these SL teachers’ eTandem videoconference-integrated experiences. In doing so, the study contributes to a better understanding of these SL teachers’ potential problems in terms of how they planned the learning environment regarding their roles as teacher-designers of the physical space (4.1), the virtual setting (4.2) and the social environment (4.3) and in terms of how they mediated the implementation of the exchanges towards a more interactive approach (4.4).

5.2.2 Contribution to qualitative research methodology

The review of the existing literature performed in the study reveals significant quantitative studies into the relationship between specific aspects of videoconference technology in the classroom (Hayden, 1999; Sweeney, 2007; Lim, 2009). The findings of this study represent a qualitative analysis into the SL teachers’ encountered challenges when engaging with their students in videoconference-integrated exchanges. In doing so, this study considers the
whole experience of integrating eTandem videoconference technology in the particular context of this group of teachers.

The methodology chosen for my research explores the potential of Flanagan's (1954) critical incident technique (CIT) and Hugues' (2009) expanded critical incident technique (ECIT). My research approach contributes to qualitative research methodology adapting and incorporating several elements and strategies that built on CIT and ECIT.

**Thematic categorisation - relevant themes in the data**

Contrary to CIT and similar to ECIT, I adopted a thematic approach when categorising data from SL teachers' accounts. The broader categories referred to the teachers' roles and the broader subcategories indicated recurrent and relevant themes in the data. Building on these main categories, I started (re)categorising and analysing each of the subcategories of the data with the aim of increasing their specificity. Each of these subcategories included references from SL teachers' accounts that supported and exemplified incidents considered as significant for their development when integrating eTandem videoconferencing in their SL classrooms.

**Cyclical element**

Contrary to CIT and similar to ECIT, I incorporated a cyclical element of reflection. During Academic Year 2 of the study (2011 - 2012), I did so in the form of a second cycle of interviews with some of the SL teachers. During Academic Year 3 (2012 - 2013), I went further on this cyclical approach through a series of group interviews with two ICT experts, project coordinators and some of the SL teachers still participating with me in the investigation.

**Text and video-stimulated recall interviews**

With the aim of seeking wider insights about their experiences, I invited SL teachers to participate in several text and video-stimulated recall interviews. During the first part of each of these interviews, I invited them to share with me
any aspect connected with their experiences. From the initial unstructured comments and reflections from their experiences, I continued the interviews with several semi-structured stimulated recall interviews with them. To stimulate the critical and cyclical element I sought, I had to use previous data gathered (e.g. emails, observations from class, student-to-student videoconference recordings or data gathered from previous interviews).

As the online format of my investigation made it difficult to share all this material, I devised and implemented an online mindmap to have straight access to this online material so that I could easily share with the interviewees all the previous data. This material was used, when necessary, as a text-stimulated or video-stimulated resource or as a memory refresher for the teachers or as guide prompts for me as a researcher. This kind of checklist guide aimed at stimulating teachers to reflect on the exchanges and moving the focus of the interviews onto specific incidents that occurred during their eTandem videoconference experiences. I also share some problems I had to solve when using this online format, as the preparation of this material was complex and technically, sharing the online mindmap through the share screen facility on Skype proved to be challenging (e.g. reading or listening information on the screen).

5.2.3 **Contribution to teacher development**

The emergent picture contributes to teacher development through a dual perspective: a quilt-like word picture (3.3.2.2.3) and a set of mini-quilts (3.3.2.3.3). Firstly, I present the developmental paths of teachers as a quilt-like word picture that shows these SL teachers actively integrating eTandem videoconferencing in their SL classrooms. This quilt-like picture builds on Hugues’ (2009) ECIT and reflects Denzin and Lincoln’s (2005) notion of qualitative research as bricolage - a pieced-together, close-knit set of practices that provides a solution to a problem in a concrete situation. The product of the bricoleur’s labour aims to incorporate many ‘pieces’ in the form of SL teachers’ accounts and researcher’s observations. In each section of the findings chapter, I start presenting rich descriptions of their
development as SL teachers when dealing with the eTandem videoconference context they participated in through the use of references to the data they shared with me.

Secondly, I also contributed to teacher development with a condensed set of critical findings in the form of mini-quilts with the aim of providing a list of key features to assist other SL teachers wishing to participate in international exchanges. Each of these mini-quilts takes the form of a five-row table (Table 3.15 - page 153) that reveals a relevant theme and its subsequent critical incidents, that is, a condition or occurrence considered as significant for the teacher development when trying to integrate the exchanges.

CIT and ECIT notion of an incident as being significant aspects built on whether or not these contribute either positively or negatively to the general aim of the activity. Similar to CIT and ECIT, I provided a binary categorisation of resources. My approach, though, aimed at drawing a picture of which aspects SL teachers wishing to integrate eTandem exchanges in their classroom should consider as significant for the SL teachers’ successful or unsuccessful development when trying to integrate videoconference-technology in their classrooms.

With this dual approach, the study aims to help other SL teachers to predict challenges when trying to integrate videoconferencing in eTandem partnerships and that could affect their development. A successful eTandem videoconference exchange will depend, in part, on considering these contributions previously encountered by other SL teachers. In addition to that, the findings of the research study may be used to derive insight into factors that may result in negative consequences, that is, unsuccessful development when trying to integrate the exchanges into the SL classrooms.

5.3 Recommendations for future practice

The key findings presented also contribute several recommendations for practice that will be useful to teachers seeking to deploy videoconference technology into
their classrooms. In particular, SL teachers will benefit from understanding the particular conditions that other SL teachers previously encountered when they decided to participate in eTandem exchanges with their students. Divided into four sections, these recommendations are now described in detail.

5.3.1 Recommendations to teacher-designers of the physical space

The introduction of videoconferencing and in particular, eTandem videoconferencing, extends the role of the teacher within the familiar classroom. Teachers should think about what will happen as it overlaps with other spaces and how to manage with these different spaces. The teacher is going to step out from their familiar zone, that is, from the zone that he or she controls. Joining two classrooms together means engagement of people (teachers and students) and also intersection between different spaces within the school and with the remote classroom. As teacher-designers of their physical space, teachers participating in eTandem videoconference exchanges should consider the following points when playing their role as teacher-designers of their physical space:

- Adjust the physical spaces to the needs of eTandem videoconferencing

As many schools cannot afford to purchase equipment or have a special place ready for videoconferencing, SL teachers should take into account that many exchanges will occur in the normal classroom or in temporary spaces within the schools. This might translate in SL teachers having to adjust these spaces to the requirements of eTandem videoconferencing not only from a technological point of view (e.g. computers, Internet) but also from the layout of the classroom (e.g. light, audio). Teachers using these temporary spaces should also consider that moving to some of these spaces (e.g. headmaster’s office, free classrooms) entails lack of control of their students.
• **Manage collaborative work in teams**

In line with a student-centred approach, it is important that teachers exploit the flexibility of physical movement within the classroom with the aim of encouraging teamwork. The use of temporary spaces, that is, spaces not exclusively dedicated to videoconferencing, facilitate such arrangement in groups. More stationary spaces, that is, spaces exclusively dedicated to videoconferencing, usually lack such a flexibility and this makes more difficult to manage collaborative work in teams. This should facilitate a more active participation of each of the eTandem partners.

• **Adapt to the demands of the situation**

Particular attention should be paid to improving the prediction of potential technological issues that the use of these temporary spaces might entail. It is important that teachers adapt the exchanges to the demands of the situation. A successful eTandem videoconference exchange may be more effective by being flexible enough to abandon more risky plans and improvise more functional plans. This flexibility, for example, may mean to move from unsuccessful small group exchanges to successful whole-class encounters.

• **Use familiar technological resources**

Space capabilities, time constraints but especially technological issues might force teachers to lose enthusiasm on their intention to integrate successful continuous encounters in small groups. Teachers planning for the implementation of long-term inquiries may consider two important aspects to diminish unpredictable issues: familiarity with the videoconference tool and regularity of use of the videoconference exchanges. More than the technological possibilities with the
tool, to be familiar with it may diminish unpredictable issues. In addition, regular use of these temporary spaces should facilitate the mutual process of adaptation. A handicap when trying to use these temporary spaces may lie in the fact that it is not easy to book them.

5.3.2 Recommendations to teacher-designers of the social setting

As teacher-designers of their social setting, teachers participating in eTandem videoconference exchanges should consider the following points:

- **Create an eTandem community in your school as an integral part of the school-wide approach**

Findings emphasise the importance of creating an eTandem community that should be part of a school-wide approach. If possible, SL teachers should avoid working on an individual basis - despite their predisposition - as there appear too many factors that may disrupt their participation in the exchanges: illnesses, professional situation of the teacher, maternity leave, traffic jam on the day of the meeting, pressure to do other things, school inspections, among others.

It appears important that other SL teachers, especially those teaching on the same level, do not simply play a peripheral or secondary role as assistant or supply teacher. This may increase the feeling of overwork of teachers participating in the exchanges. If this is not possible, the findings suggest the need for these SL participant-teachers to have extra time to deal with both their participation in the exchanges and their normal duties in the school. While the amount of time the SL students have to dedicate to the project is usually limited, participation in teams of teachers should also compensate for the requirements of the work-intensive experience of this kind of exchanges.
Particular attention should be paid to improving support from other staff members and school managers as their assistance usually involves solving more technological or administrative issues. Just limiting the exchanges to a one-to-one teachers’ partnership may not facilitate that teachers playing a more peripheral role and especially teachers not previously involved in the exchanges could easily substitute these teachers, if necessary, and continue with the exchanges.

- **Experience the eTandem exchanges**

While their professional experience as SL teachers and their ICT personal background might help, SL teachers need to experience the eTandem videoconference-integrated exchanges to be able to understand exactly which are the problems that they might encounter. This should reinforce their lack of practical applicability of videoconference technology in the classroom.

In addition, to compensate for the usual lack of experience in participating in national and international projects with other schools, at least in its online eTandem format, makes it almost necessary to include teachers with this kind of background as part of the eTandem team. These teachers could assist SL teachers and even lead the project for a while. While this novice-expert relationship seems essential for a successful exchange, experts should transfer their leadership to their SL teachers as soon as possible so that they do not lose all their energy on their responsibilities as leaders.
5.3.3 Recommendations to teacher-designers of their virtual space

- Choose an online platform as a support to share material and establish a collaborative eTandem environment

SL teachers planning for the implementation of eTandem videoconferencing should consider identifying a proper online space as a support to share and publish their material and to establish a collaborative environment with each other. Despite lack of time, the use of this space should not be regarded as an impediment, that is, an addition to the already overloaded agenda, but an essential tool for a future successful participation in the synchronous meetings between eTandem partners. Familiarity with the specific technology may facilitate the use of these spaces. As a matter of convenience, findings suggest that one of the eTandem teachers should be in charge of uploading updated information into the online space.

SL Teachers should not necessarily use any official site designed by potential coordinators of the project - if any - rather than using one personally generated by them. The use of an official one, though, may facilitate the creation of an eTandem community between all eTandem classrooms from different schools participating in the exchange as they could visualise and share each other's experiences. The findings emphasise the danger of experimenting with different platforms as this may take them to use a multiplicity of spaces in an unstructured way.

Beyond the concern with planning the use of an online space, SL teachers need to be concerned with issues of security due to the age of the students or intercultural aspects or teachers’ wishing control of the online environment. Concerns on the lack of control should not translate into not using any online space and SL teachers might find a middle position such as making information public but with restrictions, if necessary. Managers, other teachers and parents
need to view successful experiences with videoconferencing and the use of such online platforms might be a way of demonstrating and inviting other teachers and the principal to view them.

- *Provide proper online email communication*

Email allows teachers to communicate in a fast way using a familiar tool. Its deficient use as a way of communication may result in a continuous postponement of synchronous encounters and even in quitting from the project. SL teachers should avoid a tendency to answer emails in an incomplete way, especially when using smart-phone technology, or not to check the most updated information. Essential information such as the exact time of the synchronous encounters should be shared in the online platform. While the level of involvement or the assumed particular roles may vary among teachers, email communication should be arranged with both active eTandem teachers and peripheral eTandem participants.

English and Spanish as SL teachers may communicate in each other’s language, and they do not always use their native language. Although they might be proficient in both languages, messages should be written in a clear way to avoid misunderstandings with the language. The findings also suggest that for a successful email communication SL teachers should completely integrate the use of email as part of their daily professional schedule.

**5.3.4 Recommendations to teacher-mediators of their students’ synchronous experiences**

SL teachers seeking to deploy videoconference technology as part of their eTandem exchanges do so with the intention of creating improvements in communication across remote teams. These teachers may benefit from the
understanding that there are recurring themes that might facilitate students’ synchronous interaction with their eTandem partners.

- **Generate social online encounters previous to the synchronous exchanges with small groups.**

As the possibility of an initial physical encounter between eTandem partners is really difficult, it is important that SL teachers plan activities previous to the synchronous exchanges with small groups. Their function should aim at building on prior identification of their students with their eTandem partners and with it generating a sense of belonging to their eTandem group. They should do so through more social online encounters aimed at developing familiarity and confidence with their eTandem partners. This should also be applied with encounters between teachers.

To facilitate so, teachers should work on strategies to manage eTandem synchronous exchanges in smaller groups as, for example, the use of other spaces in the school (e.g. computer lab, headmaster’s office, rooms to meet parents, other classrooms free at the time of the exchanges, among others).

It seems important that the SL teachers consider the potential that videoconference technology has to generate social presence. There are aspects of videoconference technology deployment that can result in an increase in perceived distance and a decrease in individual social presence. This may compensate for the lack of physical encounters as this allows, at least, identifying their eTandem partners and putting a face on them.
• Provide SL students with enough scaffolding resources to afford them with a linguistic comfortable zone.

The ability to increase students’ linguistic comfort level during the videoconferences is also critical. If the SL teacher can help their students feel comfortable and developing within their own linguistic comfortable zones through the use of their SL as a scaffolding resource, the videoconferences might be more successfully implemented and might help them to interact with their eTandem partners.

Working on individual linguistic zones of proximal development for each of the students, though, is difficult due to lack of time. In general, the management of groups built on a collective classification of their students’ proficiency in their second language and did not consider the proficiency level of individual students. Anna, as shown on page 290, classified her students’ level as ‘beginners’ and described in a general way what they should be capable of doing when communicating with their eTandem partners:

First, my students are beginners and Elia’s are more advanced [Interviews – Tandem 3 – Anna] [153].

Teachers need to work hard on working on their students’ individual linguistic zones of proximal development. To do so, teachers should be aware of the prior knowledge of their students regarding their SL proficiency. Among scaffolding strategies used, SL teachers planned the students’ videoconferences with timely interventions in relation to the SL use or pushed them to paraphrase.

Just synchronous communication is not sufficient. Teachers need to exploit asynchronous tools so that adequate linguistic support is given previous to the synchronous part of the exchanges. Some teachers suggested Internet mapping tools, videopodcast activities or private social networking sites in specific sessions and previous to the synchronous exchanges.
Give time for more [opened approaches] informal interventions

Just limiting the exchanges to one-way information presentations might not enhance another long-term goal for many of the teachers in this study: student self-management. Teachers should take risks and open up the videoconference exchanges to more flexible approaches.

While the amount of time the SL students have to communicate with their eTandem partners may vary, it is important that SL teachers open up the videoconference exchanges to more flexible approaches and afford them with increasing periods for more spontaneous and informal dialogue during the synchronous exchanges. If necessary, these should include informal communication through asynchronous tools with both their eTandem partners and with their colleagues in their local classroom.

Manage continuity with the same group of students

Findings suggest that participating in the exchanges should include how to manage continuity with the same group of students. Just short-term and fragmented contact with students is not sufficient. It appears important to generate continuity with the same group of students as it allows eTandem teachers to plan for a long-term experience. In line with a social constructivist approach, the findings emphasise the importance of creating a community and acquiring learning in a situated way as an integral part of the school-wide approach.

Particular attention should be paid to the place that the eTandem exchanges occupy within the curriculum framework. Teachers need to experience the exchanges with their students and increasingly understand exactly how these experiences might be integrated as part of a compulsory subject.
5.4 Limitations of the study and recommendation for further research

- Initial survey

Initially, my goal in the investigation was to obtain a statistical analysis of the data gathered from an initial survey I delivered to more than 600 teachers from United Kingdom and Spain. The first intention in delivering the survey was to focus my investigation on the preliminary factors that could inhibit or support the integration of videoconference technology in the SL classrooms. Most of the teachers from United Kingdom and some from Spain had never contacted me before and they had never participated in the international project suggested or in any teacher training sessions linked with the project. Moreover, not all of the 600 teachers were English SL teachers.

While designing the survey and informed by the literature linked to the use of videoconference technology in education, I shifted this initial quantitative approach of my investigation. Following a more qualitative approach, I decided to cover a gap in the literature and tightly focus on a more in depth understanding of SL teachers’ integration of eTandem videoconference in their classrooms.

- Involvement of students

Since I intended an in-depth investigation of SL teachers participating in the eTandem exchanges I did not directly involved any of the students. I recorded, though, the student-to-student videoconferences and I used the recordings – previous permission requested– as the main material to video-stimulate teachers during the interviews. Involvement of local and remote eTandem students in the research study and a comparison of groups could enrich the findings.
**Long-term involvement**

Although five out of these twenty teachers initially contributed to the study, they quit the research even before they could start the first videoconferences with their students. While teachers initially showed a lot of enthusiasm about participating in a qualitative research project like this, this positive attitude reversed too easily if the circumstances of either the teacher or the school challenged them with unexpected situations that forced them to quit the project.

To secure a long-term involvement of these SL teachers would improve the qualitative approach of this research gaining further insights into the findings and specially on achieving one of the initial aims of the investigation: to study the students’ evolvement on the acquisition of a second language through their participation on eTandem videoconference-integrated exchanges. While these challenges proved to be a central part of my investigation in the end, similar endeavours should find ways of establishing stronger or more institutionalised ways of dealing with the anxiety of the researcher who is not able to contact teachers and students as easily as in a face-to-face interaction and to reflect qualitatively with them.

**Small group of teachers**

Considering the online format of the study, the participant SL teachers are a representative sample amenable to in-depth qualitative research with the aim of obtaining a more descriptive (and indicative) perspective of what occurred in the exchanges. This small group of teachers does not allow for statistical data analysis. The findings are not intended to be predictive or generalizable, as they are not representative of SL teachers, in general, either in terms of Spanish SL teachers from United Kingdom or United States, or in terms of English SL teachers from Spain.
• **Problems during data collection**

Several features of the research design may have affected the quality of the findings. A first shortcoming of the research design was the decision not to make face-to-face interviews with some of the teachers and visit more geographically-available classrooms participating in the exchanges. There existed severe resource limitations on my ability to conduct such face-to-face meetings, given the wide geographical distribution of the participating teachers.

I decided, instead, to follow the same online format with all the participants. The observation of the eTandem exchanges through the recordings limited the value of the analysis. It had been useful to do more in-depth observations of the classroom layouts and the characteristics of some of the schools.

### 5.5 Conclusion

This study increases understanding about how SL teachers integrate eTandem videoconference exchanges in their SL classrooms. The findings arising from this investigation highlight the complexity of the eTandem videoconference integrated experiences and identify an array of critical findings that are of potential benefit for all those SL teachers wishing to participate in similar endeavours.
6 References


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Data analysis software

7 Appendices

7.1 Appendix A: Own works, conferences and publications linked to the study

The following conference lectures, workshops and papers and publications also presented material linked to this research. References from some of this material are also used as part of the study. Some links are included for completeness, but that it is the nature of the organisations to which the links relate, that some of them are no longer active at time of writing others may also be lost.


7.2 Appendix B: Formal online invitation for the Youngcast project

THE YOUNGCAST PROJECT

Looking for partners for a tandem link-up between primary or/and secondary second language students from UK and Spain.

The "Youngcast Project" is a tandem exchange project between students of English and Spanish as a second language where students communicate by using Web 2.0 tools and participate in several videoconferences. The Spanish-speaking centers are located in Spain and Latin America and the English-speaking ones in United States, United Kingdom. The project is also opened to other schools wishing to communicate in English as a second language with Spanish students.

The "Youngcast Project" is contextualized within the framework of the International Education and Resources Network (EARN), a global network that enables the participation of teachers and students in collaborative projects and has as one of the main objectives the exchange and cultural knowledge of participants as well as the use and development of a second language.

The general communication platform used for the project is a blog (http://youngcast.eearn.cat) being Blackboard Collaborate the media used for doing the videoconferences between schools. Teachers participating in the project receive training and assistance in the use of the ICT tools needed to carry out the activities proposed in the blog. This training is given from the beginning to the end of the project and it is accompanied by a research study, which is part of a doctoral program conducted by one of the coordinators of the project; the main aim of this study is to keep track of what is occurring during the videoconferences in order to evaluate and improve the pedagogical use of videoconferencing in the SL classroom.

Each center works together with another one from the beginning of the project and the activities suggested will take place during the school year with the idea of being incorporated into the curriculum. Many centres have already participated in the years 2008-2009, 2009-10 and 2010-2011 with upper primary and secondary students. The project lasts throughout the school year (October to May), being the first videoconference presentation of the groups in October. If you want to participate, just contact Sergi Roura, project coordinator (sergi.roura @ udg.edu).
7.3 Appendix C: Initial survey

Title: Preparing for eTandem videoconference-integrated exchanges.

Link: https://www.survey.ed.ac.uk/etandem

Questions:

<table>
<thead>
<tr>
<th>Title: E-Tandem exchanges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome message</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
| Welcome to the following survey delivered by iEARN-Pangea. Before starting with the tandem exchange, we would like to hear your opinion about several issues related with personal internet use, school technological resources, classroom methodology, and your experience, if any, on participating in international projects or classroom exchanges.
|
| The survey is aimed at both primary and secondary teachers and its results will help us know how to improve tandem exchanges where synchronous communication is sought and make them more interactive and collaborative. |
|                           |
| Without your contribution we will be unable to take well-informed decisions about the design of our project so, please, take a little time to let us know your views. The survey takes around 15 minutes to complete and all data collected will be held anonymously and securely and no personal data will be retained. |
|                           |
| Thank you for your time. |
|                           |
| Note: Once you have clicked on the CONTINUE button at the bottom of each page you can not return to review or amend that page. |
|                           |
| About your job             |
| 1  Could you tell us which subject you teach? |
|   Art, Citizenship, Design and Technology, Drama, English, Geography, History, ICT, Languages, Literacy, Maths, Modern Studies, Music, PE, Science |
| 2  Could you tell us how long you have been teaching? |
|   Pre-primary, Primary, Secondary, Tertiary, Other |
|                           |
| About the use of Internet  |
| 3  Could you tell us how often you use the Internet? |
|   1 Never |
|   2 Less often |
|   3 Once a week |
|   4 More than twice a week |
|   5 At least once a day |
| 4  Could you tell us where you usually connect to the Internet? |
|   1 Home |
|   2 School |
|   3 An internet café |
|   4 Library |
|   5 Other |
|                           |
| 5  Could you tell us about the availability of the Internet in the classroom? |
|   1 Not available |
|   2 Available for the teacher |
|   3 Available for every child but with firewalls |
|   4 Available for every student |
Have you ever used online resources such as websites, blogs or webquests, among others for personal reasons?

Have you ever used online resources such as websites, blogs or webquests, among others for preparing your classes?

Have you ever used online resources such as websites, blogs or webquests, among others in your classes with your students?

1. Never
2. Rarely
3. Sometimes
4. Often
5. Always

Tell me more if you wish, or jump to the next page:

About the use technological resources

Could you tell us about the use of computers in your classroom?

Do you have a projector?

Do you have a digital blackboard?

Is the portable computer lab available for your classes?

1. I do not have one or I have one, but I do not use it
2. I have one, but I rarely use it
3. I sometimes use it
4. I have one and I often use it
5. I have one and I always use it

Could you tell us about the availability of computers for your students?

1. 1 - 5 per class
2. 6 - 10 per class
3. 11 - 15 per class
4. 16 - 20 per class
5. 21 - 25 per class
6. 1 per student
7. Computer lab

Tell me more if you wish, or jump to the next page:

About the use of Computer-mediated communication tools

Use of asynchronous CMC tools

Use of asynchronous tools: Email

Use of asynchronous tools: discussion boards

Use of asynchronous tools: blogs

Use of synchronous CMC tools

Use of synchronous tools: videoconferencing

Use of synchronous tools: instant messaging

Use of synchronous tools: chat

1. Never
2. Rarely
3. Sometimes
4. Often
5. Always

If your institution has an online 'intranet' platform such as Moodle, WebCT, among others, what do you use it for?

1. We do not have one.
2. We have one but I rarely use it.
3. I use it to communicate and share information with teachers.
4. I use it to communicate and share information with my students.
5. I create online-shared spaces for my students to work in groups.
14 Tell me more if you wish, or jump to the next page:

About human and technological resources in the school

15 Do you have anybody else helping you in your classes?
15a Language assistant
15b Other teacher
15c Parent
15d Other
15e I prefer to work alone

1  Never
2  Rarely
3  Sometimes
4  Often
5  Always

16 Could you tell us about the number of students in your classroom?
16a Whole group
16b Half group

1  No possible
2  1-5
3  6-10
4  11-15
5  16-20
5  21-25+

17 Could you tell us about the computer lab?
17a Is the computer lab available for your classes?
17b Have you ever taught some of your classes using the computer lab?

1  Never
2  Rarely
3  Sometimes
4  Often
5  Always

18 Could you tell us how the computers are arranged in the computer lab?

1  Straight rows of desks facing the front of the classroom.
2  In clusters
3  U form
4  In a circle
5  Other

19 Tell me more if you wish, or jump to the next page:

About online classroom exchanges

20 Could you tell us what you know about the projects or exchanges from the institutions listed below?
20a Comenius
20b Grundtvig
20c Leonardo da Vinci
20d Etwinning
20e iEARN
20f Other

Heard

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

Participated

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

21 If you have participated in any exchange project, which kind of project/s? (select all that apply)

1  System-wide external programs
2  Locally generated (schoolbased)
### Classroom approach programs.

### Expectations on delivering the curriculum, holds you in participating in other projects?

<p>| | | | | | |</p>
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<thead>
<tr>
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<tbody>
<tr>
<td>1</td>
<td>Never</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Rarely</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Sometimes</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4</td>
<td>Often</td>
<td></td>
<td></td>
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<tr>
<td>5</td>
<td>Always</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Don't know</td>
<td></td>
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</tbody>
</table>

23. The following is a set of issues about potential problems encountered by teachers when participating in projects with other schools. Tick the appropriate box/es in relation to what you consider potential problems you could encounter *(select all that apply):*

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</thead>
<tbody>
<tr>
<td>1</td>
<td>I am too busy with other projects.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2</td>
<td>My students are too young.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3</td>
<td>I have too many students in the classroom.</td>
<td></td>
<td></td>
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<tr>
<td>4</td>
<td>The language level of my students is not good enough.</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>5</td>
<td>I do not feel confident with ICT.</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>The other teachers do not wish to collaborate.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>The timetable is not flexible enough to meet the requirements of doing synchronous communication.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>It would not be helpful for my students to be able to communicate with students from other countries via a monitor or PC to practice their second language.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>I have tried to participate in projects but it is very difficult to meet other partners.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>10</td>
<td>I started one exchange but then the other school did not go on with it.</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

24. Tell me more if you wish, or jump to the next page:

**About you**

You are at the final section now. We would like to know details about you that will help our analysis. In order for us to validate the representativeness of the results of this questionnaire, we would like to ask you a few personal questions.

**PLEASE NOTE:**

All information provided will be kept strictly confidential and used only for research purposes, will never be released to any other organisation or company, and will never be used to sell you anything.

25. Please enter your first name

26. Please enter your last name

27. Please enter your email address

28. My age is between:

<p>| | | | | |</p>
<table>
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<tbody>
<tr>
<td>1</td>
<td>20 - 30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>31 - 40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>41 - 50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>51 - 60 +</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

29. I am

<p>| | | |</p>
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<tr>
<th></th>
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<th></th>
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<tbody>
<tr>
<td></td>
<td>male</td>
<td></td>
</tr>
<tr>
<td></td>
<td>female</td>
<td></td>
</tr>
</tbody>
</table>

30. Could you tell us the country where you work?

31. This is the last question. You can give us your feedback on areas not covered or comment on the survey itself.
Thank you for completing this survey.
Your survey will be very useful for us.

7.4 Appendix D: Approvals and Consent

Dear Teacher

Thank you for your participation in the Youngcast Research Project. My major need at this stage is to follow you on the preparation of the exchanges and observe and record your students-to-student eTandem videoconference exchanges in action. After that, I would also like to arrange an online interview with you at the end of each experience. I would also like to videorecord these meetings. To enable this to occur, the consent form I sent to you need to be signed by you and by any students in the class to be observed.

Please contact me soon for more information and to arrange a suitable time.

Yours sincerely,

Sergi Roura
Youngcast Research Project Consent Form for Teacher

I [Print Name] ......................................................... consent to participate in the above project, the purposes of which have been explained to me to my satisfaction.

Please initial each of the following statements to indicate that you have read and understood them and that you give your consent in relation to each of them.

(a) I consent to the research gathering information about my teaching and the school learning environment through the use of surveys, interviews, direct observation, audio recording, video recording and computer recording/logging of data ______________.

(b) I consent to be interviewed at times agreed with the researcher and for the interview to be recorded through the use of surveys, direct observation, audio recording, video recording and computer recording/logging of information ______________.

(c) I consent to the use of the recorded video material for the purposes of conference presentations and teacher professional development, on the condition that I have the prior right to veto the use of any specified data that identifies me for such purposes and that I will be provided with the opportunity to view and approve of all such information prior to its use in this way ______________.

(d) I consent to the researcher utilising any material that is used in my teaching and the school learning environment for the purposes of the research. My authorisation will be required in each case where this involves the removal of material from the teaching and school learning environment ______________.

(e) I acknowledge that I am free to withdraw from the project at any time and to withdraw my consent for the use of any data that could in any way identify me and to delete any information that identifies me ______________.

(f) I acknowledge that the purpose of the project is for the improvement of teaching and learning ______________.

(g) I have been informed that the data will be treated as confidential and securely stored so as to be available only to researchers who has formally agreed to the above conditions for the use of the data, consistent with the above conditions and subject to legal requirements ______________.

[Teacher’s Signature] .......................................................... [Date] ............... I [Print Name] .......................................................... , Principal of [Print School Name] .......................................................... authorise the researcher to work with the teacher

Teacher’s Initials

above under the conditions specified herein. ............ [Date]
7.5 Appendix E: Sections from online interviews

Section 1: Ethical consent section from the mindmap

The ethical consent section allowed me to clearly inform interviewees on these three points:

1.1. Informed consent - The interview will be recorded in order to gather data for a study on what are the developmental paths experienced by SL teachers in the process of eTandem videoconference integration in their classrooms.

1.2. Anonymity - Anonymity of data used for the study will be guaranteed.

1.3. Confidentiality - Any information that comes to the researcher while engaged in the interview will remain confidential as the data might be aggregated for analysis by categories and it will not be linked to individuals.
Section 2: **Material section from the mindmap**

The material section (Figure 3.6) allowed me to have straight access to recordings of teacher-to-teacher videoconferences and students’ videoconferences, emails, and lesson plan sheets from the teachers interviewed. I also prepared a coding graph from a first analysis of data with QSR Nvivo (2014) software done from these initial resources received (Appendix E).

![Material](image)

Section 3: **A timeline section**

A timeline section (Figure 3.7) of the different phases of the Learning Circle Structure, where I refer to specific information from the material gathered.
Sample of analysis with QSR NVivo software

Background information on the different sections of the research study, together with the teachers’ accounts were initially analysed with the QSR NVivo (2014) software. Table 7.4.1 shows information on the types of data (Source) analysed that guided the investigation of those critical incidents that SL teachers encountered in Year 2 and Year 3 of the study on planning the physical space. Figure 7.4.1 shows a visual chart of this data.

<table>
<thead>
<tr>
<th>Source</th>
<th>Date</th>
<th>Tandem</th>
<th>Teacher</th>
<th>Ref</th>
<th>Nvivo Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-T VC²⁰</td>
<td>2011.11.05</td>
<td>Tandem 2</td>
<td>Jude and Sara</td>
<td>1</td>
<td>2.32%</td>
</tr>
<tr>
<td></td>
<td>2011.11.05</td>
<td>Tandem 2</td>
<td>Jude and Sara</td>
<td>1</td>
<td>1.26%</td>
</tr>
<tr>
<td></td>
<td>2011.10.07</td>
<td>Tandem 4</td>
<td>Mary and Gina</td>
<td>2</td>
<td>4.08%</td>
</tr>
<tr>
<td>E-mails</td>
<td>2011.11.07</td>
<td>Tandem 6</td>
<td>Cathy</td>
<td>3</td>
<td>0.92%</td>
</tr>
<tr>
<td>S-S VC²¹</td>
<td>2012.05.05</td>
<td>Tandem 6</td>
<td>Students VCs</td>
<td>1</td>
<td>0.28%</td>
</tr>
<tr>
<td></td>
<td>2012.05.05</td>
<td>Tandem 6</td>
<td>Students VCs</td>
<td>1</td>
<td>7.93%</td>
</tr>
<tr>
<td>Interviews</td>
<td>2012.04.12</td>
<td>Tandem 7</td>
<td>Pat</td>
<td>1</td>
<td>3.61%</td>
</tr>
<tr>
<td></td>
<td>2012.03.23</td>
<td>Tandem 7</td>
<td>Ari</td>
<td>2</td>
<td>4.42%</td>
</tr>
<tr>
<td></td>
<td>2012.04.17</td>
<td>Tandem 3</td>
<td>Anna</td>
<td>2</td>
<td>3.06%</td>
</tr>
<tr>
<td></td>
<td>2012.06.02</td>
<td>Tandem 4</td>
<td>Mary</td>
<td>2</td>
<td>10.88%</td>
</tr>
<tr>
<td></td>
<td>2012.08.09</td>
<td>Tandem 6</td>
<td>Enid</td>
<td>2</td>
<td>2.03%</td>
</tr>
<tr>
<td></td>
<td>2012.03.06</td>
<td>Tandem 4</td>
<td>Mary</td>
<td>3</td>
<td>12.60%</td>
</tr>
<tr>
<td></td>
<td>2012.03.22</td>
<td>Tandem 4</td>
<td>Gina</td>
<td>3</td>
<td>6.73%</td>
</tr>
<tr>
<td></td>
<td>2012.04.02</td>
<td>Tandem 8</td>
<td>Jerry</td>
<td>3</td>
<td>8.35%</td>
</tr>
<tr>
<td></td>
<td>2012.04.19</td>
<td>Tandem 8</td>
<td>Tere</td>
<td>5</td>
<td>15.08%</td>
</tr>
<tr>
<td>Group Interviews</td>
<td>2012.11.06</td>
<td>Tandem 8</td>
<td>Jerry, Tere and Jordina</td>
<td>5</td>
<td>6.85%</td>
</tr>
<tr>
<td></td>
<td>2012.11.14</td>
<td>Tandem 8</td>
<td>Jose, Iu Elia</td>
<td>11</td>
<td>25.00%</td>
</tr>
</tbody>
</table>

⁹ YYYY.MM.DD
²⁰ T-T VC = Teacher-to-teacher videoconferences
²¹ S-S = Student-to-student videoconferences
Table 7.4.1: References coded in Nvivo categorised as physical space

Figure 7.4.1: References coded in Nvivo categorised as physical space
### 7.6 Appendix F: Original transcription from teachers’ accounts

SL teachers usually communicated on their native language. On the following lines, I have used either original references from teachers, if in English or translations from Catalan or Spanish. Original transcriptions of the references used from their accounts are found on Appendix E, if not already in English. Each reference is indicated with a number [01, 02...].

<table>
<thead>
<tr>
<th>Page</th>
<th>Participants</th>
<th>Translation original scripts in Catalan or Spanish from interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>[03]</td>
<td>[Group interviews – Jordina with Jerry and Teresa]</td>
<td>Però es que no és tan fàcil a l’escola</td>
</tr>
<tr>
<td>[04]</td>
<td>[Interviews – Tandem 4 – Iu with Gina]</td>
<td>Si fuesen mayores, si tuviesen mas autonomía ... pero con segundo difícil porque incluso la herramienta tampoco la conocen</td>
</tr>
<tr>
<td>[05]</td>
<td>[Group interviews – Jordina with Jerry and Teresa]</td>
<td>Nosaltres tenim aules relativament ben dotades, tenim uns tècnics externs especialitzats en software lliure que fan tot el suport. A pesar de tot això, ens hem quedat penjats moltes vegades. Per què? Perquè ho mires des d’una pantalla digital, després sona un soroll [...]; el volum està bé. L’altra cop ho vam provar i no se sentia però ara se sent un soroll. O de sobte salta perquè tenim la tecnologia però no les línies</td>
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<tr>
<td>[06]</td>
<td>[Group interviews – Jerry with Teresa and Jordina]</td>
<td>Et diria que el que desencisa deuen ser els problemes tecnològics, m’ho imagino i la gent està molt engrescada i te la tecnologia però quan s’hi posa i hi ha dificultats, el primer dia les superen però a la llarga et va desmotivant</td>
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<tr>
<td>[07]</td>
<td>[Group Interview – Teresa with Jerry and Jordina]</td>
<td>La gent t’he ganes però si es troben moltes complicacions, si tens una hora per fer l’activitat i estas mitja hora intentant connectar-te perquè hi ha hagut un problema perds ... i els nanos també desconnecten</td>
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<tr>
<td>[08]</td>
<td>[Interviews – Tandem 4]</td>
<td>Nosaltres havíem preparat sis grup de 4; havíem provat mitjançant les dues línies de l’escola que es pogués parlar els sis a traves</td>
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<td>[09]</td>
<td>[Interviews – Tandem 1 – Alex]</td>
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<td></td>
<td>L’estres que tu tens de dir ‘no funciona’ i la perdue de temps perquè saps que ... i potser ho has provat el dia abans o amb el professor de Suissa i funcionava i vingue, ja estavem tranquilis</td>
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<tr>
<td>[11]</td>
<td>[Group interviews – Jordina with Teresa and Jerry]</td>
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<td></td>
<td>És el que dius perquè jo quan hem fet el projecte a la meva escola amb l’especialista d’anglès, els dos som persones molt competentes amb l’ordinador per fer servir tot el que haviem de fer servir i sempre teniem problemes i jo faig videoconferències setmanalment amb amistats i no tinc mai cap problema.</td>
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<tr>
<td>[13]</td>
<td>[Interviews – Tandem 3 – Elia]</td>
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<td></td>
<td>D’altra banda si que un cop esta engegat i un cop es coneixen i han fet aquesta primera trobada si que pot ser mes fàcil que en facin una més sovint però també se’ls hi ha de donar temps perquè es preparen allò que han de fer</td>
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<td>[15]</td>
<td>[Email – Tandem 8 – Jerry]</td>
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<td></td>
<td>Tendrem a punto un plan B, como acordamos. Si no nos funcionan las videoconferencias múltiples, lo haríamos todos juntos en una sola</td>
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<td>[16]</td>
<td>[Emails – Tandem 8 – Jerry]</td>
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<td></td>
<td>Todo esto necesita tiempo, no es fácil, y podemos ir asegurándonos de lo que podemos hacer. De momento, mientras lo vamos experimentando, comentamos con Tere de centrarnos en el trabajo en el Blog conjunto y preparar otras conexiones de todo el grupo.</td>
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<td>[17]</td>
<td>[Group interviews – Jerry, Teresa and Jordina]</td>
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<td></td>
<td>Per a mi, els projectes d’innovació ja són complicats; els projectes d’intercanvi entre escoles ja són complexes; quan hi afegeixes un tema tecnològic, a més a més</td>
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<td>[18]</td>
<td>[Emails – Tandem 8 – Jerry]</td>
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<td></td>
<td>Los técnicos no nos dan soluciones porque el problema no es técnico. El problema es la conexión de internet en el estado español que es muy cara pero muy mala. El ancho de banda que nos llega a la escuela no es suficiente. Aunque lo probemos, ese es el inconveniente principal</td>
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<td>[19]</td>
<td>[Interviews – Tandem 4 – Gina]</td>
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<tr>
<td></td>
<td>Nosotros tenemos varios sofás habilitados [...] y llega la conexión y los niños están acostumbrados a salir con el ordenador.</td>
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<td>[20]</td>
<td>[Emails – Tandem 8 – Jerry]</td>
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<td></td>
<td>La idea era conectar-nos per cable. Els tècnics ens diuen que no ho fem per Wi-Fi perquè és inestable per aquest tipus de connexió.</td>
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<tr>
<td>[21]</td>
<td>[Interviews – Tandem 4 – Iu]</td>
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<td></td>
<td>El treball en grups petits tècnicament és impossible. Nosaltres ho varem provar i no dona la línia. Les dues línies de l’escola, al contactar tanta gent des de Skype, no t’ho permet</td>
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<td>[23]</td>
<td>[Interviews – Tandem 8 – Jerry]</td>
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<td></td>
<td>Si que és veritat que una escola de Londres o Anglaterra pel canvi d’horari ens és molt mes fàcil coordinar-nos i poder establir contacte</td>
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<td>[24]</td>
<td>[Interviews – Tandem 4 – Mary]</td>
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<td></td>
<td>Nosotros en el pasado hemos hecho videoconferencias con Sudamérica y el problema era la diferencia de horario</td>
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<tr>
<td>[25]</td>
<td>[Interviews – Tandem 4 – Elia]</td>
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|   | El único problema que veo es [...] organizarnos en cuanto a las videoconferencias por las diferencias de nuestros horarios escolares. [...] Nuestro
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<tr>
<td>26</td>
<td>Mary]</td>
<td>horario de clase, que cambia cada semana, me limita mucho.</td>
</tr>
<tr>
<td>27</td>
<td>[Interviews – Tandem 4 – Mary].</td>
<td>Yo necesito tener fechas de aquí a junio, para poder llamar y reservar el auditorio y preparar a los chicos.</td>
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<td>28</td>
<td>[Interviews – Tandem 3 – Anna].</td>
<td>Gina, por ejemplo, tiene periodos fijos; ella ve a sus clases los lunes a las once todos juntos.</td>
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<td>29</td>
<td>[Interviews – Tandem 3 – Anna].</td>
<td>Yo no hubiera tenido problema para hacer una al mes pero los niños de Elia parece que andaban viajando.</td>
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<td>31</td>
<td>[Interviews – Tandem 3 – Anna].</td>
<td>En Enero no podíamos hacer con la transición de un semestre a otro y al tener esa transición perdía a unos alumnos y ganaba a otros y teníamos que cambiar los grupos. […] y hasta que ahora en Abril pudimos hacer esta y en Mayo la otra. Al principio se pospuso muchísimo.</td>
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<tr>
<td>32</td>
<td>[Interviews – Tandem 3 – Anna].</td>
<td>No es obligatorio estudiar español. Algunos alumnos lo toman; entonces algún semestre tengo mucha gente y en otros muy poca gente. También una vez al año enseño lo que aquí llamamos español 3 y 4 y entonces cambia el nivel de los alumnos y cada semestre son alumnos nuevos. Puedo tener los mismos alumnos de español 1 a 2 pero no necesariamente.</td>
</tr>
<tr>
<td>33</td>
<td>[Interviews – Tandem 3 – Elia]</td>
<td>Un mes i mig tenint en compte que els veus dos o tres vegades a la setmana potser és una mica massa i que els hi costa trobar un dia ja que són grups de 3 i 3 d’allà i són 6 alumnes que han de trobar un dia i que els hi vagi bé quedar a tots amb les mil històries que tenen</td>
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<td>35</td>
<td>[Interviews - Tandem 7 – Ari].</td>
<td>La gent està molt interessada però una mica esperant a veure com funciona la primera experiència</td>
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<td>Interview</td>
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<td>[36] [Interviews – Tandem 8 – Jerry].</td>
<td>Si no es fa en equips una persona acaba sent un franci•trador [...]. Fixat que potser aquí aquest ha estat un dels motius que ha fet que no anés bé. En els nostres missatges tenies cinc persones mes en les que posàvem en còpia; en canvi la Tere no tenia ningú [...]. Això és un element a tenir present.</td>
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<td>[37] [Emails – Tandem 6 – Cathy].</td>
<td>María (mi colega) y yo</td>
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<td>[38] [Interviews – Tandem 6 – Maria].</td>
<td>Ayudando a Cathy yo solo voy cuando o antes de las conferencias.</td>
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<td>[39] [Interviews – Tandem 6 – Enid].</td>
<td>El fet de fer la preparació abans de fer la VC m’ha restat hores d’altres coses del currículum que he de fer i per tant vaig mes de bòlit també.</td>
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<td>[40] [Interviews – Tandem 4 – Gina with Iu].</td>
<td>Iu ha sido una ayuda importante, vamos; ademas de pincharme para que me metiese en el proyecto.</td>
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<td>[41] [Interviews – Tandem 8 – Gina with Iu].</td>
<td>La parte técnica la lleva ella.</td>
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<td>[42] [Interviews – Tandem 4 – Iu with Gina].</td>
<td>Nos concordamos bien porque Gina es buena; yo le digo ‘haz esto’ y ella lo hace - es un chollo.</td>
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<td>[43] [Interviews - Tandem 3 – Anna].</td>
<td>Yo estoy ganando experiencia. Yo la verdad no sabia que calificar como videoconferencia.</td>
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<tr>
<td>[44] [Interviews – Tandem 3 – Anna].</td>
<td>Trate de meterme en otro proyecto pero nunca recibí nada. Era una muchacha que también estaba en la universidad haciendo un proyecto universitario. Mis alumnos debían escribir diez ensayos uno por semanas y los alumnos de allá lo corregían ... ... nuestros alumnos tienen las cosas ya escritas pero nunca escuché nada de ellos me dijo que tenia problemas de conseguir alumnos de mi edad.</td>
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<td>[46] [T-T VC – Tandem 1 – Alex].</td>
<td>Esto para nosotras es nivel superior, eh?</td>
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<td>[47] [Interviews – Tandem 8 – Jerry].</td>
<td>Jo, que tinc més experiència, ho faré d’una manera i la Cristina ho farà d’una altra però és la única manera de començar i de que sigui real. Perquè una persona faci de coordinadora no por haver simulació o ho fa o no ho fa. Una vegada ha fet un petit aprenentatge si llença i ja en sabrà més la propera vegada.</td>
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<td>[48] [Interviews – Tandem 8 – Jerry].</td>
<td>A l’escola teníem clar que començava liderant-ho jo però que d’alguna manera una vegada iniciar hi havia d’haver altres persones que havien d’animir i la Cristina a primària i la Marta secundària lideraran els propers tàndems i jo faré un suport i no el lideratge</td>
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perquè jo sóc una persona inquieta però no podem estar sempre els mateixos innovant amb tot. Hem de passar el lideratge a altra gent que ja ha vist com funcionava.

| [49] | [Interviews – Tandem 8 – Jerry]. | Jo, per exemple, hi he dedicat moltes hores. Implica moltes hores i el mestre ha de tenir clar que implica un sobre esforç de coordinar-te i engrescar els mestres de la teva escola, de pensar com ho podem fer, de contestar els emails |
| [50] | [Email – Tandem 8 – Jerry]. | Los proyectos internacionales, al principio, cuestan de coordinar, pero luego son maravillosos. Debemos perseverar!!!!! No se desanimen!!!!!!! Vamos a conseguirlo!!!!!! |
| [51] | [T-T VC – Tandem 8 – Tere]. | Esperamos poder trabajar juntos y esperamos hacer un proyecto muy interesante. Tenemos mucha ilusión por poder trabajar juntos y estamos seguros que nos pondremos de acuerdo. |
| [52] | [Interviews – Tandem 3 – Anna]. | Yo no hubiera tenido problema para hacer una al mes pero los niños de Elia parece que andaban viajando […] y hasta que ahora en Abril pudimos hacer esta y en Mayo la otra. |
| [53] | [Emails – Tandem 1 – Hill]. | Veo un poco complicado hacerla antes de diciembre porque tenemos que evaluar de nuevo a los chicos para poner notas. |
| [55] | [Emails – Tandem 6 – Cathy]. | Lamento tener que comunicaros que hubo un problema con el número de estudiantes que se apuntaron a nuestra clase. Al principio nos dijeron que iban ha haber 30 estudiantes, sin embargo la administración se equivocó y solamente se apuntaron unos 8 estudiantes, lo que causó la cancelación de la clase de los miércoles. |
| [56] | [Interviews – Tandem 3 – Anna]. | Con la transicion de un semestre a otro … perdia a unos alumnos y ganaba a otros y teníamos que canviar los grupos. |
| [59] | [T-T VC – Tandem 2 – Jude to Sara]. | Es una pena porque habíamos empezado a trabajar muy bien, no? Y sobretodo eso, que se te veía muy animada para hacerlo; pero bueno, es lo que es y que le vamos a hacer. |
| [60] | [Interviews – Tandem 6 – Maria]. | Cathy tiene una persona que la substituye pero ella no tiene ni idea. |
| [61] | [Emails – Tandem 6 – Berta]. | No m'he posat al dia d'una baixa que m'ha durat quasi tot el primer trimestre. |
| [63] | [Interviews – Tandem 3 – Anna]. | Teniendo contacto con otras personas del mundo me parece genial para ellos y es algo que la directora aquí y muchos de los maestros lo han avalado |
| [64] | [Emails – Tandem 8 – Jerry]. | A la nostra escola, estem coordinats amb els professors de secundària [...]. Estem molt contents d'establir aquesta comunicació entre els professors de les diferents àrees de primària i secundària. És important emfatitzar la disponibilitat de la Marta i la Cris, perquè no és massa normal en altres escoles i fins i tot amb altres companys de la mateixa escola que això pugui passar. Gràcies |
Teachers’ accounts on planning the virtual setting

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<tr>
<td>[65]</td>
<td>[Interviews – Tandem 8 – Jerry].</td>
<td>El pacte és que tot ho fem amb còpia, fins i tot la mestra d’anglès que no hi participa també està en còpia perquè pugui anar seguint que és [...]. Això també és un aprenentatge ... està informat de tot el que implica el contacte, no només el producte final.</td>
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<tr>
<td>[66]</td>
<td>[Interviews – Tandem 8 – Jerry].</td>
<td>La moguda a l’escola ha estat una moguda que contava amb el recolzament de l’equip directiu que tenia molt clar quins eren els objectius que el departament d’anglès tenia molt clar que això era una idea que s’havia de fomentar que es va mirar.</td>
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<td>[67]</td>
<td>[Email – Tandem 8 – Jerry].</td>
<td>La situació dels mestres a nivell de temps ja veus que és dramàtica. Ens en sortim pels pèls i no arribem a tot. Ho sento. M’agradaria poder dedicar-hi més temps...però no hi arribó. A pesar de tot, és la millor professió del món ;) ;) I és una sort poder-nos-hi dedicar. Una abraçada. Jerry.</td>
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<td>[70]</td>
<td>[Emails – Tandem – Mary].</td>
<td>La escuela ha decidido empezar a dar clases con el método de la Universidad de Cumbria (Communicative method), por lo que ahora estamos como locos intentando cambiar TODO. La verdad es que ya habíamos empezado a experimentar este año pero resulta que ahora lo tenemos que aplicar a todas las clases y los niveles. Es como empezar de cero.</td>
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<td>[71]</td>
<td>[Emails – Tandem 6 – Berta].</td>
<td>Bon dia, Sergi. Em sap greu però t’he de dir que ara mateix em veig incapàc de fer aquest projecte.</td>
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<td>[72]</td>
<td>[Emails – Tandem 6 – Enid].</td>
<td>El handicap és que l’escola de Nova Jersey està dins del seu programa ... contemplem que hi han unes hores que les destinen a preparar aquestes videoconferències.</td>
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<tr>
<td>[73]</td>
<td>[Interviews – Tandem 8 – Jerry].</td>
<td>També ens vàrem posar d’acord en que els nois i noies de 3er d’ESO que ajudaven amb la tecnologia també rebrien el suport d’un altre company de 3er amb una bona competència lingüística. D’aquesta manera, aquests ‘duos’ reforcen la cooperació entre iguals del mateix nivell i de diferents nivells. Cada grup també tindrà 4 nens de primària.</td>
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El subir ya los videos, entrar y rellenar la plantilla o estás tu (coordinador TIC) detrás ayudando, incluso para montar el aula si no está preparada con el cañón para ese día para que puedan realizar la videoconferencia o estás detrás de toda esta parte técnica o el profesor por el solo no lo hace.

“Yo lo hago, si tu me lo preparas, si a mi no me supone esfuerzo. Si a mi me supone un esfuerzo añadido, no, para que?”.

Ells van dir que a la seva escola eren molt estrictes i que no podien utilitzar el bloc i van proposar l’edmodo

El número uno es para la seguridad de los alumnos; en caso de que los papas me digan de qué hablan, yo les puedo enseñar más o menos que son cosas pertenecientes a la escuela 100%

De momento, mientras lo vamos experimentando, comentamos con Tere de centrarnos en el trabajo en el Blog conjunto y preparar otras conexiones de todo el grupo, tal como hicimos la última vez ¿Qué te parece?

Em va demanar si conec ‘edmodo’ Si que ho conec, encara que no ho he utilitzat mai amb nens i nenes. Però vam trobar interessant provar-ho. … i la idea és que els alumnes facin les seves presentacions personals (cadascú en l’idioma adequat) abans de la videoconferència. Ho intentarem!!!

Ells treballen en Wordpress. Aquí tens el bloc personal dels alumnes de la seva escola: http://blog.d30.me

Vamos a ver, si no tienen tiempo van a ir mas al grano: coger el email

Per part meva, la valoración es que ha sigut per manca de compromís de l’altra part. Sinc erament, havíem quedat moltes vegades i s’anava pospostant que no anava bé però les coses per part nostra estaven a punt i hauríem quedat. Una mica més de comunicación per l’altra partner hauria facilitat les coses. Ens vam engrescar molt i per part d’ells vam trobar una certa manca de compromís

Pues mira, yo tenía la videoconferencia planeada y he estado esperando saber de Gina para confirmar. Hasta la fecha no se nada. Anteriormente hemos hecho videoconferencias con otras escuelas y la única manera de que funcione es con planeación y comunicación. Desafortunadamente, creo que todas estamos bajo presión en cuanto a tiempo y se ha complicado

Encara no ser massa be perquè la Tere s’ha despenjat. Deixem-ho millor per l’any vinent. Aquest missatge no l’ha contestat. Una cosa que s’ha mort de no contacta que no pas de que no hagi passat alguna cosa

Aquestes setmanes hem estat pendents de passar les ‘competències bàsiques’ i hem hagut de preparar també unes ‘sessions de bones pràctiques’ per uns professors que ens han vingut a veure com fem classe. A més hem fet festa el dia 20, així doncs ja veus que no tinc temps de tenir la feina a punt pel 27 tal com desitjava. Procuraré que pugui ser pel dia 5.
<p>| 94 | [Interviews – Tandem 6 – Mabel]. | A veces contestan. […] La última videoconferencia no sabía si la íbamos a hacer o no porque me contestó cuando nosotros estábamos de vacaciones. |
| 95 | [Interviews – Tandem 4 – Maria]. | La comunicación no estaba allí yo le mandaba un correo a Natalia y lo contestaba al cabo de una semana […]. Nosotros utilizamos el correo en el colegio constantemente; nosotros abrimos nuestro correo 10 veces al día porque es la forma de comunicarnos con los padres y los alumnos. |
| 96 | [Interviews – Tandem 3 – Elia]. | No, básicamente era aízox, no se, también es difícil la teva impresión pero la comunicación con la Anna también es una mica com, ummm, difícil, trobo jo. Vull dir que, saps, no se, és com, per exemple, li vaig dir: ‘prepàra’t algunes preguntas que els meus alumnes hagin de fer als teus quan tinguin la seva … quan quedin per fer la segona videoconferència sobre on viuen i ta. Em va passar unes preguntas en plan: hay playa? Ho vaig trobar tan poc … és que no ho vaig poder fer servir perquè em van semblar molt, bueno, eren molt absurdes, saps? |
| 98 | [Interviews – Tandem 7 – Ari]. | La primera videoconferencia va ser molt frustrant[…]; el dia anterior asaig general amb tota la parafernalia […]; fins i tot hi havia alumnes que aquella hora tenien una altra classe i van demanar permis als professors perquè dexessin venir als alumnes i va anar passant l’estona i va ser un a mica trist. |
| 99 | [Emails - Tandem 8 – Tere]. | Me alegra y sorprende recibir este email. Gerard, hace dos semanas te mande un email sobre el blog y para continuar la conversación sobre nuestra cita el martes. Además, teníamos cita de Skype para la semana pasada. No he hecho nada para preparar porque no oí nada de ti. No tengo ni idea que hacemos el martes y estoy un poco incómoda continuar. |
| 100 | [Emails - Tandem 8 – Jerry]. | No entiendo muy bien qué ha pasado :( ni tampoco qué he hecho mal … si es que me he equivocado en algo. Ni tengo constancia de no haber contestado tus mensajes. […] No tengo ningún e-mail tuyo sobre la videoconferencia de la semana pasada a la que haces referencia. Estoy muy sorprendido con tu mensaje y me gustaría poder arreglo la situación. |
| 101 | [Interviews – Tandem 7 – Ari]. | Etapa de “quedamos luego” […]. La Patricia no contestaba durante bastant temps però va contestar, afortunadament, i vàrem continuar. |
| 102 | [Interviews – Tandem 7 – Pat]. | Siento que a lo mejor, no se, porque ya no volvi a recibir nada de Ari. |
| 105 | [Emails – Tandem 2 – Jude]. | Desafortunadamente tengo malas noticias. El departamento ha decidido adoptar un sistema completamente nuevo para dar las clases y como consecuencia este año vamos a estar muy liados escribiendo unidades didácticas y creando materiales, ya que no vamos a comprar libros, CDs ni nada por el estilo. Me temo que esto supone que no voy a poder a continuar con el proyecto debido a este trabajo añadido. Ya siento la decepción, quizás el año que viene. Un saludo, Jude. |
| 107 | [Email – Tandem 6 – Jose]. | Hoy es el día de la videoconferencia. Nos encontramos a las 16h (GMT+1), es decir, a vuestras 10h. |
| 109 | [Interviews – Tandem 4 – Gina]. | Hubo un rollo allí de primeras fechas y demás; el mismo rollo que le he dicho a Iu: “Mañana tenemos videoconferencia o no? porque no he recibido respuesta. |</p>
<table>
<thead>
<tr>
<th>Page</th>
<th>Participants</th>
<th>Translation original scripts in Catalan or Spanish from interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>[110]</td>
<td>[T-T VC – Tandem 8 – Jerry with Martha and Cris].</td>
<td>Nosaltres no volem fer simulació, […] nosaltres el que volem fer és que hi hagi intercanvi real … . En aquest sentit no voldríem fer res enllaunat</td>
</tr>
<tr>
<td>[111]</td>
<td>[T-T VC – Tandem 8 – Jerry with Martha and Cris].</td>
<td>… que els estudiants s’hagin d’espavilar davant de la càmara a parlar, a comentar, a dir […]. Nosaltres no volem fer simulació. Nosaltres el que volem és fer les videoconferències perquè els nostres alumnes s’expressin, explorin i intercanviïn</td>
</tr>
<tr>
<td>[112]</td>
<td>[Interviews – Tandem 8 – Jerry].</td>
<td>Jo els hi insistia molt en el tema que hi havia d’haver una espècie de ‘speaker’ …</td>
</tr>
<tr>
<td>[114]</td>
<td>[Student-to-student videoconferences - Tandem 6 - VC 03].</td>
<td>No se, nos dijo nuestra maestra que … iban a tener preguntas sobre, no se, sobre nuestra ciudad.</td>
</tr>
<tr>
<td>[115]</td>
<td>[Interviews – Tandem 2 – Elia].</td>
<td>Si, si, si, no hi ha cap mena d’empatia, no? No ser ni cop els hi surt, no? … de fer alguna cosa així tan freda</td>
</tr>
<tr>
<td>[117]</td>
<td>[T-T VC – Tandem 8 – Jerry (with, Marta and Gemma)].</td>
<td>Fer un PowerPoint perque el vegin d’allà i d’aquí avui en dia trobo que …</td>
</tr>
<tr>
<td>[118]</td>
<td>[Group Interviews – Jerry with Teresa and Jordina].</td>
<td>Quan contactem els nanos hi ha d’haver la possibilitat de la improvisació, del comentari, del diàleg informal entre els nanos que també fa lligam. Que puguïs preguntar i que puguïs fer el que tu vulguis però jo no crec que les activitats no hagin d’estar preparades</td>
</tr>
<tr>
<td>[119]</td>
<td>[Group Interviews – Jerry with Tere and Jordina].</td>
<td>No ens estem tan sols posant en contacte tres classes que es comuniquen per Skype sinó que estem posant en contacte dues classes que treballen a l’aula, on hi ha moments que ens comuniquen i moments que no [Group Interviews – Jerry with Tere and Jordina].</td>
</tr>
<tr>
<td>[120]</td>
<td>[Group Interviews – Jerry with Tere and Jordina].</td>
<td>Una videoconferència sembla que tot es molt pim-pam pim-pam però clar si tu el que estes demanant és que la gent faci un treball i que després ho comenti doncs hi ha un moment en que la videoconferència està oberta mentres els nanos estan treballant</td>
</tr>
<tr>
<td>[122]</td>
<td>[Email – Tandem 4 – Gina].</td>
<td>Empezamos bien</td>
</tr>
<tr>
<td>[123]</td>
<td>[Emails -Tandem 4 - Iu].</td>
<td>Comienzo movidito Bona tarde Sergi! Como verás, parece que no te vas a aburrir con nosotras, visto el comienzo que hemos tenido</td>
</tr>
</tbody>
</table>
No crec que sigui un tema de feeling perquè ... No és que la vegi desagradable. No és això. No, és que ella s’ho treballa molt poc és, bueno, lo just, saps? Saps que et vull dir?

Si tu vas a otro centro contàctame porque yo estoy con ganas de hacer esto contigo, sabes

Ja nos conocemos y ya es diferente; ya pones una cara a la persona que está al otro lado

Lo que li interessa en el nano és descobrir qui hi ha a l’altra banda

Jo pensava que, lo típic dels adolescents, que em veurien i em dirien que va ser una merda; però la veritat és que no, no, no. Tots dient que ‘quina pena’, que ‘ho hem de seguir provant’, que ‘no passa res’, que ‘ja se sap’ ... contents, contentíssims

Fins i tot dir-te que a la Jornada de pares de portes obertes hi ha un grup d’alumnes que ensenyen l’aula d’idiomes i un va dir: ‘Ari, si et deixes les videoconferències’. Em va cridar molt l’atenció perquè vaig veure que per ell són molt interessant que es facin, pero bien identificados sino,,, no van a saber que preguntarse

A mi me gustaría también emparejar a los muchachos y que vayan escribiendo sobre los temas también entre una conferencia y la otra

Un desastre, en aquest sentit. Jo crec que ens hem saltat aquesta part de fer aquest ‘warm up’ que una mica inicies tota la tasca i que d’algun manera ... i que ja això els motívats més pel dia que es tinguessin de trobar i fer alguna cosa més formal d’algun manera

Que te parece si nosotros grabamos un podcast muy cortito de quienes son y todo eso ... yo lo cuelgo en el youngcast, la pagina, lo veis primero y ellos se tienen que preparar una respuesta a esto

Una vegada creat el bloc, ens trobem que els alumnes de la Tere no poden accedir-hi com a usuaris perquè tenen Google acadèmic [...]. Nosaltres tampoc podem perquè ara els nens i nenes menors de 14 anys no poden tenir compte de Gmail

Jo aprofitant que estaven de viatge vaig dir que enregistrissin una petita presentació ... per saludar-se ... i el grup tàndem ho miraven i els hi feien algun comentari

Por la experiencia; para que los chicos aprendan un poquito de cultura [...]

[124] [Interviews –Tandem 3 – Elia].

[125] [T-T VC – Tandem 2 – Jude].

[126] [Group Interviews – Iu].

[129] [Group Interviews – Iu with Jose and Elia].

[130] [Interviews – Tandem 3 – Elia].

[131] [Group Interviews – Jerry with Teresa and Jordina].

[133] [Interviews – Tandem 7 – Ari].

[134] [Interviews – Tandem 7 – Ari].

[135] [T-T VC – Tandem 7 - Pat (with Ari)].

[136] [Interviews – Tandem 4 – Gina].

[137] [Interviews – Tandem 3 – Elia].

[142] [T-to T VC – Tandem 2 – Sara].

[143] [Emails – Tandem 8 – Jerry].

[144] [Interviews – Tandem 3 – Elia].

[145] [T-T VC – Tandem 4 –]
Mary with Gina.

El que feia la presentació ho feia amb la segona llengua i el feedback amb la llengua dels que havien fet la presentació i al in revés

Entonces es como una primera cosa que si no me entienden this way, I have to find the other way

Ellos pueden decir como se llaman, que les gusta [...] por lo menos tienen que hacerlo ... hablar de su pueblo en español para que puedan practicar mas el español

Primero mis alumnos son principiantes y los de Elia son mas avanzados

A partir de Enero voy a tener el nivel 3 que generalmente son estudiantes muy buenos porque ya hablan un poco mas de español. A esos si que los puedo engage mas en una conversación pero a los de nivel 1 seria “hola, me llamo tal y tal”

Depende también de que mes estamos

Nosotros esta videoconferencia no sabíamos de que iba a ir. Las preguntas nuestras eran poco menos que improvisadas

En Enero no podíamos hacer con la transición de un semestre a otro y al tener esa transición perdía a unos alumnos y ganaba a otros y teníamos que cambiar los grupos. [...] y hasta que ahora en Abril pudimos hacer esta y en Mayo la otra. Al principio se pospuso muchísimo

Lamento tener que comunicaros que hubo un problema con el número de estudiantes que se apuntaron a nuestra clase. A principio nos dijeron que iba a haber 30 estudiantes, sin embargo la administración se equivocó y solamente se apuntaron unos 8 estudiantes, lo que causó la cancelación de la clase de los miércoles

Sempre el mateix perquè van fer canvi de grups, ja que a l’Anna els alumnes li canvien cada semestre i per lo tant fem el mateix amb els nous alumnes. L’any vinent uns altres alumnes

It is not required to take Spanish. Algunos alumnos lo toman; entonces algún semestre tengo mucha gente y en otros muy poca gente. También una vez al año enseño lo que aquí llamamos español 3 y 4 y entonces cambia el nivel de los alumnos y cada semestre son alumnos nuevos. Puedo tener los mismos alumnos de español 1 a 2 pero no necesariamente

Consiguientemente, como María y yo queremos continuar a trabajar con ustedes y creemos en el valor educacional de este iniciativa, decidimos integrar el Youngcast Project en una de nuestras clases de español. El problema es que este cambio va a causar aplazar la fecha de la videoconferencia hasta enero 11 a las 10 de la mañana (US Time)

Optativa ... quan ho traslladem a un crèdit comú tindrà un valor dintre del trimestre ... estem una mica de prova
<p>| [166] | [Interviews – Tandem 4 – Gina]. | Si es con segundo no es ningún problema porque estamos divididos por niveles ... y con los de nivel alto siempre preparamos actividades alternativas. Se nos queda corto lo del currículum |
| [168] | [Interviews – Tandem 7 – Ari]. | Com que estic en una matèria optativa que m'he de buscar molt la vida vaig anar a buscar coses que em semblessin interessants i mira per on vaig trobar això [...]. A la programació enguany no sortia lo de la videoconferència perquè tampoc ho sabiem. Però com que estem fent lo de la matèria optativa on podem fer de més o de menys doncs ha anat molt bé |
| [169] | [Interviews – Tandem 6 – Enid]. | La preparació abans de fer la videoconferència m'ha restat hores d'altres coses del currículum que he de fer i per tant vaig mes de bòlit també |
| [170] | [Interviews – Tandem 6 – Maria]. | Para mi fue muy difícil porque uno tiene que darle un currículum al comienzo del año y yo no les dije que había estas […]. Para mi no es cómodo |
| [174] | [Interviews – Tandem 1 – Hill with Alex]. | Potser no tan puntualitzar tan quin tipus d'estructures faran servir sinó buscar l'excusa de “anem a fer la presentació de la ciutat” i a veure que ens surt. No ser si es una mica agosarat pel fet de que clar no marques tant ... és una possibilitat |
| [175] | [Interviews – Tandem 1 – Hill with Alex]. | El currículum? Lo refuerza perfectamente: explicar su vida, the simple present, the present continuous, sus aspiraciones de futuro ... ... buscaremos todas las conexiones posibles a las programaciones |
| [176] | [Interviews – Tandem 8 – Jerry]. | Nosaltres lligat amb el currículum i amb l’escola ho ha estat totalment i també ha estat lligat al projecte integrat de llengües i a un projecte en anglès de l’escola |
| [177] | [Interviews – Tandem 3 – Anna]. | En España, me imagino que empiezan a aprender inglés des de pequeños y los míos a penas tienen un semestre o dos y nunca han escuchado español |
| [178] | [T-T VC – Tandem 8 Jerry with Martha and Cris]. | Nosaltres en el sentit de tenir-ho consolidat en el sentit de tenir-ho pedagònicment integrat dins del currículum no crec que es pugui més perquè ja ho tenim clar des d’aquest punt de vista i també des del punt de vista competencial de que és un treball molt ric en competències |
| [179] | [T-T VC – Tandem 8 Jerry with Martha and Cris]. | Nosaltres lligat amb el currículum i amb l’escola ho ha estat totalment i també ha estat lligat al projecte integrat de llengües i a un projecte en anglès de l’escola |
| [180] | [Interviews – Tandem 4 – Gina]. | Hacemos muchas horas de inglés, hacemos extra-escolares, estamos preparando los exámenes de Cambridge, incluso los pequeños […] y si que se nota y los pequeños han empezado con un sistema norteamericano […] y yo lo noto. Yo noto la diferencia de hace un par de años que llegaban los niños con apenas capacidad lingüística |</p>
<table>
<thead>
<tr>
<th>Referéncies d'Original references from Table 19</th>
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<tbody>
<tr>
<td><strong>Tandem 8</strong></td>
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<td><strong>- Email</strong></td>
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<td><strong>SL use</strong></td>
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<tr>
<td><strong>References on the subcategory</strong></td>
</tr>
<tr>
<td>Aquí sí que era un problema també el fet de que una estona parliarm en anglès i una estona en espanyol ... perquè si jo puc entendrem en espanyol perquè puc està parland en anglès. Bueno, potser no passa res; potser hi ha d’haver grups en els quals parlem en espanyol i ens entenem en espanyol només i en un moment determinat connectem amb altres grups on nosaltres som els que no en sabem i parlem amb ells en anglès. Jo això de parlar amb dos idiomes no és gens significatiu. No significatiu; no és gens real; és molta simulació.</td>
</tr>
<tr>
<td><strong>SL level</strong></td>
</tr>
<tr>
<td>La Talia comentava que ells fins ara havien treballat coses com els animals o els vegetals i que havien de treballar de ben nou vocabulari i nocions per poder-se desenvolupar en les situacions que els estem preparant. Cal que abans de cada videoconferència dediquem un temps a poder preveure aquestes estructures perquè els nois i noies sàpiguen què i com dir el que han de dialogar. Sobre la competència lingüística que mostren els alumnes: vam coincidir que els costa molt llençar-se a parlar per vergonya. Tot i que fem immersió, tant a Chicago com a La Garriga, costa que utilitzin la llengua de manera natural. Els hem d’insistir molt.</td>
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<tr>
<td>Interview 1 - Mary</td>
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<tr>
<td>Interview 1 - Anna</td>
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<td>Interview 1 - Pat</td>
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<td>Interview 1 - Tere</td>
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