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IMPLEMENTATION AND OUTCOMES OF AN ONLINE ENGLISH-PORTUGUESE
TANDEM LANGUAGE EXCHANGE PROGRAM DELIVERED JOINTLY ACROSS
A U.S.-BRAZILIAN UNIVERSITY PARTNERSHIP: A CASE STUDY

A dissertation submitted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy at Virginia Commonwealth University.

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DEDICATION

It is with profound love, respect, and devotion that I dedicate this dissertation to my wife Naira, and our daughters, Natalia Renée, Sophia Julianne, and Lucia Josephine.

You were my lifeline throughout this grueling and humbling process. You gave me the energy and inspiration that I needed to complete this dissertation and you never stopped supporting me. You made sacrifices every day. I marvel at your patience and goodness, and I dedicate this work, and my life, to you.

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LIST OF ABBREVIATIONS

ACTFL	American Council on the Teaching of Foreign Languages
CALL	Computer-assisted language learning
CMC	Computer-mediated communication —includes email, video-conferencing, IRC and other forms of CMC. It can be text-based, oral, and/or visual, synchronous or asynchronous, one to one, one to many, or many to many, instructor to learner, learner to learner. It can also be time and place dependent or independent.
DLE	Distance language exchange
IUP	International university partnership
L2	The target language
LL&T	Language learning and technology
LRC	Language resource center
NBLT	Network-based language teaching —refers to the pedagogical use of computers connected to local and/or global networks. NBLT research explores what happens when learners are brought together with texts, media, and other speakers of the language in computer-mediated contexts of interaction.
SLA	Second language acquisition
TLE	Tandem language exchange
ZPD	Zone of proximal development —a concept developed by social constructivist Lev Vygotsky (1896 – 1934). It refers to the difference between an individual’s capacity to learn with and without assistance from another individual.

Abstract

IMPLEMENTATION AND OUTCOMES OF AN ONLINE ENGLISH-PORTUGUESE TANDEM LANGUAGE EXCHANGE PROGRAM DELIVERED JOINTLY ACROSS A U.S.-BRAZILIAN UNIVERSITY PARTNERSHIP: A CASE STUDY

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The purpose of this study was to investigate a class-to-class online English-Portuguese “Teletandem” program that was conceived, negotiated, and implemented cross-collaboratively between the foreign language faculty and language resource center (LRC) staff at two large state universities—one in the United States and the other in Brazil. Ten English language students in Brazil were paired with 10 Portuguese language students in the U.S. for a 10-week Skype®-based tandem language exchange (TLE) project that was jointly delivered online across an international university partnership.

A qualitative case study design was used to examine the attitudes, perceptions, views, and behaviors of the teachers, students, and LRC staff who participated in the project. The objective of the study was to shed light on the factors that facilitated and hindered teletandem design, implementation and sustainability. Participant feedback was interpreted and contextualized by

the researcher to provide rich descriptions of how Teletandem was optimized and how it impacted student learning.

The findings suggest that Teletandem is an innovative, low-cost, high-impact language learning activity with vast pedagogical implications. As a lab supplement to traditional instruction, it enabled students at both sites to accelerate L2 development through authentic immersion and practice while making social connections with native speakers abroad. In addition, the results showed that—for many students—Teletandem heightened intercultural awareness, boosted confidence in the L2, and strengthened fluency skills while rendering a transformational learning experience.

CHAPTER 1. OVERVIEW

Tandem Language Exchange (TLE) is a powerful language acquisition strategy that enables foreign language learners to develop linguistic and cultural competencies by sharing their native language with fluent, and ideally, native speakers of the target language (L2). TLE enables paired learners to exchange their respective languages and cultures through a mutually-beneficial partnership that is facilitated through a series of autonomous and reciprocal sessions, in which both participants have something to learn and something to offer (Kötter, 2002; Little & Brammerts, 1996; Telles & Vasallo, 2006).

This dissertation specifically examined the online version of TLE, which Belz (2002) describes as a learning environment that consists of pairs or groups of “distally-located students embedded in different sociocultural contexts and institutional settings” (p. 61). The primary focus of this study was to analyze video-mediated online language exchanges that are jointly delivered in cooperation with foreign colleges and universities, and to explore the potential of online TLE being used as a supplement to traditionally-taught foreign language courses in higher education settings.

Online TLE, also known as Teletandem, enables students to use Internet-based video chat and webconferencing applications to interact with native speakers studying English at foreign schools. Teachers can use programs like Skype® and GoToMeeting® and many others to create telecollaborative learning activities that will allow students to experience the target language in a real authentic immersion environment. Such opportunities were not even realistic 10 years ago.

Practice of the L2 through face-to-face tandem learning, has long been regarded by foreign language educators as a viable means of strengthening communicative competencies in the L2. Traditional language learning models like role play in the classroom, repetitive drills, listening to audio recordings, and watching films are all sensible ways to practice the L2, but none of these activities offer the authentic, interactive and meaningful experience that TLE provides. Driggers (2008), however, points out that the tandem method has one major limitation; the lack of structured instruction. According to Driggers (2008), TLE and conventional classroom instruction actually complement each other. Perhaps together, they could comprise a more complete foreign language curriculum that blends structured learning with free-flowing conversation. The two methods could reinforce each other to provide a comprehensive learning experience that culminates in something far more meaningful than a final grade.

In an increasingly globalized world that faces difficult economic and geopolitical challenges, it is essential that U.S. colleges and universities produce more linguistically and culturally competent graduates, who embrace diversity, and are better prepared as global citizens. Pairing U.S. students with peers at foreign schools for dialogue and collaboration in online academic settings is a step toward achieving these goals. Participation in cross-collaborative curricular activities between domestic and foreign students can render the kind of transformative learning experience that can impact a student for life.

Wang and Sun (2004) call for change in the teaching of foreign languages at the institutional, conceptual, and practical levels in order to keep up with today's surging technological advancements. The Pew Center's Internet and American Life Project (2010) shows a gradual increase in the number of Americans who use the Internet for video calling—from 20% in April 2009 to 23% in the summer 2010.

With over 650 million registered users worldwide in 2011, Skype® is quickly becoming the tool of choice for TLE, although many other video chat applications can be used (see Appendix A). The emergence of these powerful and often free applications may result in a major shift in the way immersion and practice activities in foreign language college courses are carried out in the future. Even when Skype® was primarily an Internet phone service, it was called a “disruptive technology” that may threaten the traditional industry of teaching foreign languages by allowing students to do familiar language learning tasks in new innovative ways (Godwin-Jones, 2005). Skype® and Facebook® and a plethora of social networking tools on the Internet continue to create opportunities for studying and practicing foreign languages that most colleges and universities never before afforded; not because it was impossible, but because it was too expensive and required complex videoconferencing equipment. Having state-of-the-art technology was not enough. In order to develop telecollaborative learning activities like language exchange, there must be interest on both sides. There must be a partnership.

The term the “tandem language exchange” (TLE) is used to refer to the general practice of telecollaboration in all of its forms: textual, visual, in-person. The online video-mediated version of TLE is often referred to as e-tandem, online tandem, teletandem, distance language exchange (DLE), and telecollaborative language learning. There are slight variations in the literature as to which activities are involved in each version, but the central tenets of TLE are always the same—paired learners share their native (or near-native) language through a series of autonomous, reciprocal, and mutually beneficial sessions. Time spent on each language is evenly divided. TLE builds language and cultural competencies through social interaction and intercultural exchange. Tandem-based learning fosters communicative relationships across cultural and geographical borders without the need for travel (Belz, 2003; Telles & Vasallo,

2006). However, TLE is still perceived by many foreign language educators to be burdensome and difficult to implement (Belz, 2001; O’Dowd & Eberbach, 2004).

Despite the challenges, it is hard to ignore the fact that technology and the Internet have eliminated many of the obstacles that once made video-mediated TLE an unrealistic instructional strategy. This study relies on this rationale to justify the continued exploration of TLE and its use as a supplement to traditional foreign language instruction in higher education settings.

TLE can be structured and task-based (Integrated tandem) or conversational and free-flowing (Free tandem). Students can find partners outside of class on their own, or TLE can be delivered in a class-to-class setting. This study used Telles and Vasallo’s “Teletandem” model to implement a class-to-class online English-Portuguese language exchange between the Portuguese language students at a U.S. university and the English language students at a Brazilian university. Teletandem is a video-mediated form of TLE that employs the core concepts of TLE and has its own unique set of principles and modalities (Telles & Vasallo, 2006).

Statement of the Problem

The integrated use of distance TLE in U.S postsecondary schools is still fairly uncommon and TLE research in this area is also quite limited (Diggers, 2008). There is no leading authoritative source in TLE pedagogy, policy, and practice. TLE practitioners and researchers acknowledge that many factors can impact the outcome of a TLE program. Communication, cooperation, and technical resources are all implicated in the processes that lead to the successes and failures of TLE. If these areas are weak, there could be problems. Thus, implementation is an important consideration of TLE that is often overlooked.

TLE brings innovation and authentic immersion to an antiquated foreign language curriculum that is still being used in most U.S colleges and universities (Cziko, 2004). Cziko (2004) argues that conventional methods provide a restrictive language learning environment and cites the following factors as major hindrances of second language (L2) acquisition in the traditional language classroom:

1. Limited exposure to the L2.
2. Limited opportunities for L2 production.
3. Limited opportunities for L2 communication in authentic settings.
4. Over-exposure to nonnative L2 as produced by classmates.

Foreign language instruction in U.S. post-secondary schools is largely based on an antiquated teaching model that has been the standard of practice for decades. Tape-based language labs were used in the 1960s and 1970s as a means to provide learners with more exposure to the target language (Roby, 2004). Today's language resource centers (LRC) offer vastly improved tools and technologies designed to supplement learning and reinforce concepts taught in the classroom. Contemporary self-study applications such as Rosetta Stone® and Tell Me More® provide a rich interactive experience. However, even the most sophisticated software-based language learning programs can only offer a simulated immersion experience. On the other hand, Teletandem provides a real authentic immersion experience (Telles & Vasallo, 2006). With online TLE, the barrier of physical distance between the learners is irrelevant. The live interactive nature of telecollaboration makes it an exceptionally viable strategy for language immersion and practice, particularly in college settings.

Researchers agree that TLE can significantly improve communicative skills and enhance cultural awareness (Belz, 2002, 2003; Butler & Fawkes 1999; Calvert, 1992; Cziko, 2004;

Diggers, 2008; Kötter, 2002; Little & Brammerts, 1996; O'Dowd, 2000, 2006; O'Dowd & Ware, 2009; Vasallo & Telles, 2006; Wang, 2004a, 2004b; Zourou, 2009). Is TLE is a viable supplement for immersion and practice in traditionally taught foreign language courses? This is one of the main questions posed by this study. If TLE is in fact an effective learning strategy, then why is its use not yet widespread in American colleges and universities?

The study reports on the experiences of teletandem students, teachers, and other participants directly involved in the design and implementation of a real teletandem program. The objective of the study was to shed light on the processes, contexts, and tools of Teletandem based on the participants' perceived outcomes, and the researcher's observations and interpretations of the data.

Cooperation with foreign schools is an essential component of TLE, and for this reason, international university partnerships (IUP) are explored in-depth in the literature review. Globalization and the Internet have heightened the importance of international collaboration between the teachers and students of domestic and foreign institutions. Online TLE may be a viable tool for fostering these connections through its integration in the foreign language curriculum and beyond.

Of all the challenges facing higher education today, perhaps none is more important than globalization (Stromquist, 2002a). Globalization impacts every nation, society, economy, and political structure in the world (De Wit, 2002). Stromquist (2007) affirms that the radical shift toward internationalization in university environments is a direct response to globalization. By reaching out to institutions abroad, U.S. colleges and universities can internationalize their campuses, foster multicultural understanding, address real world problems and improve their rankings (Van de Water, Green, & Koch, 2008).

Developing and implementing a sustainable plan for international cooperation, however, remains a challenge for many institutions. Research shows that the goals and expectations of IUPs are often unrealistic (Baum, 2007). The organization and planning required to support IUPs is labor intensive (Green, Eckel, & Luu, 2007). The language used to promote university partnerships typically conveys the idea that cooperation advances the interests of an institution's stakeholders, but the rhetoric often exceeds the promised results (Baker, Gardner, & Curry, 2008).

Tambascia (2005) maintains that the effort to internationalize a university is actually the by-product of an institution's intentions to boost its own prestige and rankings. According to Tambascia, however, ambitious partnership agreements can later be stalled by lack of funding, shortage of personnel, and stakeholder misconceptions of internationalization. Tambascia (2005) identifies inadequate communication, tension between administration and faculty, and cross-cultural relationships as factors that commonly inhibit the development of jointly delivered programs between domestic and foreign schools.

International university partnerships can be particularly complex at the teaching level. There is no one-size-fits-all approach. All partnerships are unique in purpose and in scope. Many hurdles must be overcome in order to position a department or its faculty to harness the potential benefits of an academic partnership with a foreign school (Van de Water et al., 2008). Above all, there has to be mutual interest. After a partner school is identified, however, how exactly are programs negotiated, scheduled, and delivered? How are contacts initiated and established across the two campuses? How are cross-collaborative relationships cultivated? Staff development, teacher mobility, and technology resources are likely to be important factors to consider when implementing language exchanges, but in what context and to what extent?

More importantly, what can a reader of this dissertation expect to learn about implementation of online TLE exchanges with foreign schools? After all, curricular joint ventures with foreign schools offer a wealth of possibilities when delivered optimally (Eckel, Hartley, & Affolter-Caine, 2004). However, cooperation with foreign schools can also be a laborious undertaking with significant challenges—a reality that is often overlooked by policy makers and administrators (Green et al., 2007).

A flourishing IUP should lead to heightened interaction between foreign and domestic students, and increased international faculty collaborations. Regrettably, many institutions often fail to reach their internationalization goals, because ultimately IUPs fail to reach teachers and students at the instructional level (Palvetzian, 2005; Van de Water et al., 2008). In order for real internationalization to occur on an academic campus, real opportunities must exist for domestic and international students to learn from each other inside and outside of the classroom (Green, 2005). This is the piece that remains elusive for many educators involved with international partnership initiatives (Van de Water et al., 2008). Policy makers and administrators are often hard pressed to bring about meaningful interaction between domestic and international students through broad international alliances. TLE seems to achieve this goal seamlessly, innovatively, and economically.

There have been few attempts at exploring the underlying principles and processes of international cooperation in the microcosms of academic working communities (Ollikainen, as cited in De Wit, 2002). Partnering with a foreign school to deliver Teletandem is a complex undertaking that can quickly overwhelm the “unwary teacher” (O’Dowd & Ware, 2009). TLE and other types of curricular joint ventures remain fairly uncommon in the United States. This is

one of the reasons why foreign language teachers remain largely untrained to oversee dynamic programs such as Teletandem.

Many U.S. schools are just now starting to embrace partnerships with foreign schools as a means to achieve their internationalization goals (Gardner et al., 2008). There are many types of international cooperation agreements and there is much to learn about their potential value and impact on teaching and learning. Too often, however, administrators and policy makers make premature commitments and sign international agreements without first consulting with the faculty and students (Van de Water et al., 2008).

Hence, IUPs are generally institutional in scope. IUP initiatives are organized at the higher levels of administration and seldom result in real opportunities for faculty and students to collaborate with their peers at partner schools. Today, U.S. colleges and universities are primarily driven by economic and political rationales. This model reflects a trickle-down economy in academia in which students and faculty rarely enjoy the benefits of strategic initiatives such as internationalization.

One U.S. institution with 15 international partner schools reported notably low levels of student and faculty involvement 4 years after the original agreements were signed. According to this school's annual IUP reports (2009), mobility was limited to exploratory campus visits by high-ranking administrators. The reports also showed that the site visits had no direct impact on student learning. One partnership director described the university's aggressive internationalization initiative as being "a mile wide but only an inch deep" (Anonymous, personal communication, February, 2009). Ineffective management of IUPs is a common problem in higher education (Van de Water et al., 2008).

In 2001, the American Council on Education (ACE) began to explore the extent to which institutions were actually committed to internationalization. A study was designed to measure internationalization at 188 U.S. colleges and universities by examining the following dimensions of institutional internationalization: (a) articulated comment, (b) academic offerings, (c) organizational infrastructure, (d) external funding, (e) investment in faculty, (f) international students and student programs.

The report's findings show that foreign language education is simply not in the forefront of the internationalization movement in higher education (Green, 2005). The study also reported that 78% of comprehensive universities in the United States opt for international festivals and jointly organized conferences as the chief strategy for promoting contact with international students. Of these schools, 51% scored medium on promoting contact with international students, 45% scored low, and none scored high (Green, 2005).

Technology can play a prominent role in the facilitation of IUPs, but it is often overlooked. There are many free online applications ideal for telecollaborative teaching and learning. These tools have become ubiquitous in social and academic settings. In order to achieve the research goals within the proposed time frame, the study relied on Skype® to conduct the teletandem sessions. Both participating schools used Skype® primarily because it is free and it is well supported. In addition, Skype® was selected for its ease of use, reliability, and functionality.

W3 Internet statistics show exponential growth of web users, particularly in Africa, Asia, the Middle East, and Latin America (Internet World Stats, 2009). A growth rate of 399.3 % in global Internet use was reported between 2000 and 2009 with a total number of users nearing two billion globally (Internet World Stats, 2010). The next generation of learners will grow up

knowing only an Internet-driven world. This fact alone is compelling enough to motivate educators in all fields to stay abreast of technology trends and explore new ways to harness their potential in education.

Purpose of the Study

The purpose of the study was two-fold. The first objective was to explore ways of optimizing the design, delivery, and implementation of Teletandem through cooperative partnerships with foreign schools. The second objective was to describe how Teletandem impacts student learning when delivered through a series of class-to-class exchanges with a foreign school. This was achieved by reporting on teletandem outcomes as perceived by the participants and as interpreted by the researcher. On a broader level, the study explored the dimensions and rationales that shape joint curricular ventures in the context of international university partnerships. The study provided intensive rich descriptions and analyses of Teletandem that may be useful to other TLE researchers and practitioners.

A real teletandem program was observed as it was delivered jointly by the instructors and LRC staffs of two large state universities—one in Brazil and the other in the United States. The researcher reported on the linguistic, cultural, and pedagogical nuances of the participants' interactions. The study was predominantly concerned with how U.S. and Brazilian language educators communicated, negotiated, and cooperated in order to develop, implement, and sustain Teletandem.

The researcher used a qualitative case study design to explore the potential benefits of Teletandem as well as its limitations and drawbacks. Through intense analysis of the ongoing collaboration and cooperation between the students, instructors, and LRC staff of both participating schools, the researcher strived to identify problems and pinpoint best practices.

The use of teletandem in the foreign language curriculum is likely to increase given the unprecedented use of online social networking and face-to-face video-chat applications. Therefore, it is important to study how the teletandem model fits in foreign language curriculum of the future. Human interaction and learning through network technologies go hand in hand with research advancements in the intersecting fields of distance learning and web-based foreign language education (Zourou, 2009).

In 2003, the Executive Council of the Modern Language Association (MLA) formed an Ad Hoc Committee to address the challenges and opportunities facing foreign languages in higher education in a post 9/11 world. The committee called on language departments to consider new structures for foreign language study in a geopolitically, economically, and technologically changed world. The committee also recommended shifting from an antiquated curriculum to a dynamic interdisciplinary model that uses technology to enhance learning and is also experiential in nature. Teletandem seems to fit these criteria. Therefore, this study sought to better understand how online TLE partnerships impact student learning and how they can be optimally designed and implemented.

Overview of the Literature

The overview of literature covered many intersecting topics in the fields of second language acquisition (SLA), telecollaborative learning, internationalization in higher education and cooperation with foreign schools. The research topics reviewed prior to conducting the study were:

1. Social constructivism and cognitive development theory.
2. Interactive research in second language acquisition (SLA).
3. Internationalization in higher education.

4. International cooperation with foreign schools.
5. History of tandem language exchange.
6. Video-mediated online tandem language exchange (TLE)
7. Implementation of Teletandem through cooperative partnerships with foreign schools.

The core concepts of language exchange reflect the theories presented in Lev Semenivich Vygotsky's, *Thinking and Speech*, first written in 1934 and later published in English as *Thought and Language* (1962), long after Vygotsky's death. This book is regarded by modern psycholinguists as the cornerstone of social constructivism and cognitive development theory. Vygotsky established the intrinsic connection between silent inner speech and oral language with the development of mental concepts and cognitive awareness. Vygotsky's Zone of Proximal Development (ZPD) and the concept of "scaffolding" reflect the idea that the amount of guidance is adjusted to fit the learner's current performance. One of the objectives of TLE is to develop communicative skills through a series of conversational sessions intended to result in reduced dependence on guidance and assistance from native speakers.

Interactions in Online Education, Implications for Theory and Practice, edited by Charles Juwah (2006), provided a comprehensive framework for developing competencies in online and distance education. This framework was appropriate for examining critical issues in designing, facilitating, and sustaining online TLE programs. Juwah's book reported on the theoretical and pedagogical perspectives on implementation of e-learning interactions. It focused on the design and practice of online peer learning programs and addressed concerns about professional development of online instructors.

Mackey and Goo's 2007 meta-analysis of interaction research in SLA provided a comprehensive reference of studies that addressed online collaborative L2 learning. Their

research suggests that interaction is beneficial to L2 development. Yet, whether interaction is beneficial to all aspects of SLA is not known (Mackey & Goo, 2007). Mackey and Goo's research builds on the research carried out by Keck, Iberri-Shea, Tracy-Ventura, and Wambaleka (2006) and Russell and Spada (2006). Their results suggested that interaction facilitates the acquisition of both lexis and grammar to a great extent, with interaction having a stronger immediate impact on lexis, and a delayed and durable effect on grammar (Mackey & Goo, 2007).

Stephen Krashen's (1981) *Second Language Acquisition Theory* and his *Five Hypotheses on Second Language Acquisition*, are central to the rationales behind the TLE paradigm. Krashen's one-dimensional, yet powerful theoretical model of SLA supports the idea that acquisition requires "meaningful interaction in the target language" (p. 5). According to Krashen, "speakers are less concerned with the form of their utterances and more with the messages they convey and understand" (p. 5). Krashen maintains that meaningful conversations with sympathetic native speakers can be very helpful in building fluency skills. Krashen's philosophy of language acquisition, like TLE, is founded on the principle that human interaction is essential to language learning.

The literature on internationalization in higher education calls for increased awareness of the importance of preparing the next generation of students to live and work in a global society. Van de Water et al. (2008) argue that internationalization in higher education has never been more important or more necessary than it is in today's globalized world. Stromquist (2002a) stresses that leadership, support, commitment, academic interest, and an optimal central office are the most important factors in advancing the internationalization process.

De Wit (2002) maintains that successful international cooperation is driven by quality relationships among stakeholders at all levels. International partnerships are solidified through personal relationships with stakeholders who possess strong cultural and communicative competencies. De Wit (2002) calls internationalization one of the most important developments in higher education today and points out that very little is actually known about it. DeWit (2002) and Stromquist's (2002a, 2002b) perspectives on internationalization are vital in understanding the broad range of viewpoints that impact this study.

The American Council of Education's, *Global Learning for All Series of Working Papers on Internationalizing Higher Education* (2005-08), comprises much of the literature used to explore international cooperation and IUPs. The literature on the impact of globalization on U.S. colleges and universities draws predominantly from the research and writing of Nellie P. Stromquist (2002a, 2002b) and Hans de Wit (2002). Dissertations by Levey (2006) and Rapoport (2006) provided insight on the practices, policies, and pedagogies of international partnerships and their impact on curriculum and instruction as well as on faculty development.

The literature review on TLE encompassed the work of Belz (2002, 2003); Butler and Fawkes (1999); Cziko (2004); Kötter (2002); Little and Brammerts (1996); O'Dowd (2000); O'Dowd and Eberbach (2004); O'Dowd & Ware (2009); Vassallo & Telles, (2006); Wang (2004a, 2004b); Warschauer (1997), and Zourou (2009) and many other scholars and doctoral students who have conducted studies on TLE. The body of literature is comprised of journal articles, dissertations, websites, and various studies on telecollaboration in the fields of language learning and technology (LL&T), computer-assisted language learning (CALL), computer mediated communication (CMC), and online video-mediated tandem exchanges.

The ongoing discussion on facilitating video-mediated distance TLE in U.S. schools has been quite broad and lacking in specificity. Research on the use of telecollaboration as an instructional tool is also limited (Belz, 2002; Telles & Vasallo, 2006; Zourou, 2009). There are considerable gaps in the literature on strategies, methods, and pedagogical frameworks for TLE. Zourou's study (2009) referred to previous TLE studies as "exploratory, pioneering, telecollaborative projects whose design, implementation and research methodology differ substantially" (p. 4). Zourou (2009) maintains that there is "a lack of substantial data for strategies, methods and pedagogical frameworks facilitating focus on language form through telecollaboration" (p. 4).

O'Dowd (2006) advises that many factors should be taken into account when organizing telecollaborative activities with foreign schools. For example, when will the L2 be used? When will the native language be used and in what context? What will students do and discuss? How will technology be integrated in carrying out the activities? What will the instructor's role be? These are some of the questions and issues that will need to be addressed when negotiating and implementing online TLE (O'Dowd, 2006).

Understanding how Teletandem works in the context of international cooperation is an area that has been largely ignored in previous studies (O'Dowd & Ware, 2009; Vasallo & Telles, 2006). The literature consistently supports the viewpoint that international cooperation in higher education is profoundly intricate and challenging. It is difficult to establish lines of communication and build trust with stakeholders from foreign institutions (Smith, 2001). Research shows that international cooperation is an ongoing, multifaceted, and complex process driven by personal relationships at all levels (Van de Water et al., 2008).

Research Questions

The research questions focus on two strands of inquiry. The first strand deals with the practice of designing and delivering teletandem programs jointly with foreign schools. What are the factors involved in developing teletandem projects and what steps can be taken to optimize the design and implementation processes? The second strand focuses on Teletandem as a pedagogical innovation. How does Teletandem impact student learning? What can inexperienced teachers, LRC staff, and language departments expect from online class-to-class teletandem exchanges when delivered in cooperation with foreign schools? Most importantly, how do participating students and instructors view Teletandem as a language learning strategy?

The following research questions guided the data collection and analysis of this study.

1. Which factors facilitate and hinder the design, implementation and sustainability of Teletandem?
2. How does Teletandem impact student learning?

Design and Methods

A simple case study design was used to analyze a teletandem partnership implemented jointly by the participating faculty and LRC staff of two large state universities in two different countries—the United States and Brazil. The methodology incorporated elements of ethnography and phenomenology to get close to each participant's personal experience of Teletandem on both sides of the project. The researcher was immersed as an observer and a participant at both sites. This was essential to get an insider's perspective on the nuances of online TLE and offer insights into how students made sense of Teletandem.

The U.S. students were enrolled in a third semester intermediate-level Portuguese language course at the U.S. institution. For them, Teletandem was a class activity. Brazilian

students of a comparable skill level were enrolled in various English language courses, however, for them, Teletandem was an extracurricular activity. This difference did not have an impact on the pairing of American and Brazilian students as 2 teletandem groups in a class-to-class setting. The names of the schools were not mentioned in order to protect the identities of the participants. This was an Institutional Review Board (IRB) requirement.

Instructors, LRC staff, and graduate assistants from both institutions collaborated and cooperated in organizing and planning the program for the student participants. Portuguese language learners at the U.S. school were paired with the English language learners at the Brazilian school. Twenty teletandem sessions were delivered in the LRCs of the two participating schools over a 10-week period. The sessions were integrated into the English and Portuguese language courses in which the students were enrolled.

The LRC staffs from the participating sites had already worked together on several teletandem pilots conducted prior to this study. These pilots were necessary to determine whether or not the study was feasible. The researcher had a role ensuring that the study was workable and achievable.

The focus of the study was on the cooperative activities involved with Teletandem and the relationships that emerged in the process of delivering Teletandem. Throughout the study, the Portuguese instructor at the U.S. school cooperated with the English instructor at the Brazilian school. Together, they implemented and delivered Teletandem to the students enrolled in their respective English and Portuguese language courses. The instructors worked collaboratively and openly in pairing students and designing activities that enabled learners to exchange words, cultures, and ideas during the teletandem sessions.

The researcher collected data through direct observation of daily participation in the program. Since the study was concerned with exploring the full realm of possibilities involving Teletandem, it relied on trained teachers, lab staff, and graduate assistants to facilitate the project with optimal technology resources. This minimized disruptions and anomalies. Both participating institutions offered fully-equipped and staffed LRCs, which made the sites ideal for this study. LRC staff participated in the study, primarily as facilitators. The Brazilian school used a dedicated teletandem lab housed within a larger LRC facility. LRCs are ideal instructional spaces for facilitating teletandem programs (Telles & Vasallo, 2006). The LRCs used in this project were equipped and staffed to provide the support and service that teachers needed to implement Teletandem.

Methods of data collection included observation, interviews with teachers, students, and other participants. Designated teletandem sessions were recorded. Raw data were recorded, transcribed, and digitized for the richest and most descriptive dataset possible. Field notes, internal documents, and other relevant documents were also examined. The interview questions were designed to explore the implementation process, the details of cooperation, and the impact of online TLE on student learning.

The researcher created descriptive, multidimensional categories from the main themes to form a framework for analysis. These categories inherently involve teaching, learning, SLA, computer-mediated communication (CMC), distance learning, online learning, international cooperation, internationalization and partnerships with foreign schools. All are implicated in the processes, contexts and tools of Teletandem.

In following Yin's (1994) case study model, the objectives of this single case design were to describe the real-life context in which Teletandem is integrated in the curriculum; disclose the

perceived outcomes of Teletandem; and identify the sources of tension, failure, and success in delivering Teletandem as a supplement to traditional foreign language instruction. Teletandem was explored through a variety of lenses, which allowed for the phenomenon to be revealed and understood from multiple perspectives.

The study paid close attention to the attitudes, perceptions, and expectations of the students, teachers, LRC staff and other participants involved with the project at both institutions. The study was focused more on drawing meaning from the participants' perceptions and interpretations than it was with measuring test scores and survey data. For this reason, the investigator also reported on how teletandem activities were implemented and regulated. It was anticipated that the rich descriptions drawn from the qualitative data would shed light on the factors that led to the successes and failures of Teletandem.

Validity and reliability were achieved through triangulation, member checks, referential materials, and peer consultation. Data triangulation was achieved through redundant analysis of interviews, field notes, internal documents, questionnaires, performance measures, and screen-captured teletandem sessions. Member checking as reported by instructors through informant feedback and respondent validation was also utilized with experienced language teachers and teletandem facilitators, who had an understanding of English and Portuguese. This technique was utilized to help improve the accuracy, credibility, validity, transferability, and external validity of the study. The researcher provided the teachers and LRC staffs with transcriptions of their interviews to check the authenticity of the interpretations.

The study is not generalizable in the traditional sense, but offers an evocative and realistic panorama of Teletandem that is best measured in qualitative terms. Maxwell (2005) argues that the value of a qualitative study may actually depend on its lack of external

generalizability in being representative of a larger population. McMillan and Schumacher (2006) suggest that the lack of generalizability may be the greatest strength of qualitative designs. Since the teletandem phenomenon is essentially founded on human interaction, in-depth qualitative descriptions were useful in illustrating the teletandem experience and the processes involved with its implementation.

Credibility was realized through disciplined data collection and a rigorous qualitative process that met the requirements of transferability, dependability, and confirmability (Hoepfl, 1997). An inventory of raw data, notes, reconstruction, and synthesis products such as text-chat transcripts, video-taped interviews and screen-captured Teletandem sessions were archived for thorough analysis.

The study was conducted in the fall of 2011. The academic calendars of U.S. and Brazilian universities were different, but an adequate amount of overlap during September and October provided a sufficient time frame for the proposed 10-week teletandem program. The sessions were delivered as a lab supplement to a standard intermediate-level Portuguese language course at the U.S. school. Teletandem was offered as an extracurricular activity at the Brazilian school, for which English language students needed to sign up for in advance. The class-to-class sessions were coordinated by the instructors and staff of the LCRs at both sites. The 60-minute sessions were equally divided per language per school. Thirty minutes was devoted to Portuguese and 30 minutes was devoted to English. Student pairs were determined by the instructors. The researcher spent 3 weeks at the Brazilian school and 7 weeks at the U.S. school collaborating with the instructors, observing the sessions, and interviewing the participants.

Summary

This study examined an English-Portuguese class-to-class teletandem program delivered across a U.S-Brazilian university partnership. The research focus was on Teletandem's impact on learning and on the processes involved in facilitating Teletandem through international cooperation. The researcher analyzed the contexts, themes, and nuances that account for the design, development, and implementation of Teletandem as perceived by teletandem students, instructors, LRC staff, and other program facilitators.

Online web conferencing and video chat programs have greatly enhanced the prospects for collaborative-driven distance education. However, the human connections have not flourished (Wang, 2004a). This phenomenon will also be addressed in detail.

There are many compelling reasons to study the practice of online language exchange in higher education and beyond. TLE is an ever-evolving model that is particularly relevant now with the emergence of online video chat and webconferencing. Considering its immense potential and relatively limited use in U.S colleges and universities, online TLE is an area worthy of further exploration. This study aims to provide foreign language teachers and department heads with a detailed primer on how online TLE works, how it impacts student learning, and what its benefits and limitations are.

CHAPTER 2. REVIEW OF LITERATURE

The literature review will provide a condensed body of current knowledge and theory used in the practice of designing and implementing online video-mediated language exchange programs in higher education settings and beyond. This body of information comes from an array of books, journal articles, dissertations, and web-based materials that report on e-tandem studies and other relevant research in the field. The primary topic of this research is online TLE. Other related themes and topics are addressed, but only in the context of online class-to-class language exchanges that are coordinated and delivered in cooperation with foreign universities.

There are many theoretical, practical, and pedagogical areas implicated in the implementation of online TLE programs and thus, a host of related topics are reviewed as inherent components of online TLE, also known as Teletandem:

1. Social constructivism and cognitive development theory.
2. Second language acquisition (SLA) theory.
3. Interactive research in SLA.
4. Language learning and assessment.
 - a. ACTFL – The National Standards and the 5 Cs, Proficiency Guidelines.
 - b. Evaluating teletandem sessions.
5. Internationalization in higher education.
 - a. Globalization.
 - b. International university partnerships (IUPs).

- c. Cooperation and collaboration with foreign teachers.
 - d. Interaction between domestic and foreign students.
6. Language learning and technology (LL&T).
- a. Enhancing teletandem learning and assessment with relevant tools.
 - b. Optimizing teletandem implementation and delivery.

The teletandem model (Figure 1) highlights the principal areas that will be addressed in this study. These areas were explored in the context of Teletandem in order to better understand how each topic is implicated in the development, implementation and outcomes of online language exchanges in higher education.



Figure 1. The teletandem paradigm.

The body of literature is connected through an intricate path of pedagogical, linguistic, cultural, and technological themes that intersect within the ever-evolving microcosm of online TLE in higher education. A major gap in TLE research is the area of joint implementation of online TLE programs with foreign schools. It is precisely this gap that the researcher has addressed in this study.

Social Constructivism and Cognitive Development Theory

The foundational principles of TLE coincide with Vygotsky's (1962) social constructivist view of language learning. Natural immersion in the target language is a critical factor in building fluency skills because human beings naturally construct language through socially-mediated interaction. Language learning should be authentic, interactive, social, and dynamic (Bronkhorst, 2006; Van der Zwaal, 2007). This is the fundamental rationale of TLE.

Vygotsky (1962) believed that the developmental processes of human learning occur predominantly through meaningful interaction. Vygotsky stressed the fundamental importance of social interaction in cognitive development, because according to Vygotsky, meaning and understanding are derived from social encounters.

One of the tenets of Vygotsky's theory is the *zone of proximal development* (ZPD). The ZPD is the difference between an individual's capacity to learn with and without assistance from another individual. The ZPD includes all of the functions and activities that a learner can perform only with the assistance of someone else; a process commonly referred to as scaffolding. Vygotsky's (1962) ZPD has many implications for foreign language instruction. One of them is the idea that human learning presupposes a specific social nature and is part of a process by which children grow into the intellectual life of those around them (Vygotsky, 1978). According to Vygotsky, an essential feature of learning is that it awakens a variety of internal

developmental processes that can operate only when the child is in the action of interacting with people in his environment.

According to Vygotsky (1978), cognitive skills and language learning are the products of activities practiced in the social institutions of an individual's native culture. As a result, the history of the society in which an individual is reared and a learner's own personal history, are the key factors that will impact how the individual will think and communicate.

Vygotsky was passionate about his views on language and thought. In his own words:

If language is as old as consciousness itself, and if language is a practical consciousness-for-others and consequently consciousness-for-myself, then not only one particular thought, but all consciousness is connected with the development of the word. The word is a thing in our consciousness. . .that is absolutely impossible for one person, but that becomes a reality for two. The word is a direct expression of the historical nature of human consciousness. . . . A word relates to consciousness as a living cell relates to a whole organism, as an atom relates to the universe. A word is a microcosm of human consciousness. (Vygotsky, 1978, p. 255)

Interactive Research in Second Language Acquisition

Interaction research in second language acquisition (SLA) has evolved into a multidimensional field that is predominantly concerned with how interaction promotes L2 development. Recent meta-analyses of interaction research compare the outcomes of a wide range of studies (Mackie & Goo, 2007). Mackie and Goo's (2007) meta-analysis provided an update in relation to the important findings reported by Keck et al. (2006), and included a search of the most commonly cited journals in the field of SLA: *Applied Linguistics*; *Applied Psycholinguistics*; *Canadian Modern Language Review*; *Computer Assisted Language Learning*;

Foreign Language Annals; International Journal of Educational Research; Language Learning; Language Learning & Technology (online); Language Teaching Research; The Modern Language Journal; ReCALL; Second Language Research; Studies in Second Language Acquisition, System, and TESOL Quarterly.

Mackie and Goo's (2007) study focused on the efficacy of human interaction in the acquisition of lexical and grammatical target items. They compiled a collection of studies in interaction research to fundamentally address the following question: How effective is interaction at promoting the acquisition of linguistic forms? Mackey and Goo's (2007) meta-analysis presented strong evidence that interaction plays a strong facilitative role in the learning of lexical and grammatical target items with a stronger immediate effect on lexis and a delayed and durable effect on grammar. Gass and Mackey (2007) noted cognitive concepts derived from psychology to show that interaction and learning are linked (p. 176). Mackey's methodical and comprehensive synthesis of the research on interaction consistently supports the fact that interaction has a significant effect on language learning (Mackey & Goo, 2007).

One of the most prevalent theories of interaction-driven L2 learning is Krashen's (1981) theory of SLA. Krashen, a world-renowned linguist and scholar, has many critics, but his ideas are also endorsed by many foreign language educators and his work provides a strong rationale for TLE. Krashen (1981) believes that human beings acquire language through comprehensible input. He rejects the use of conscious grammatical rules and tedious drills and instead promotes meaningful interaction in the target language. Krashen argues that best methods for SLA are those that supply "comprehensible input" in low anxiety situations. He endorses instructional strategies that allow students to produce language naturally as opposed to forcing L2 production through unnatural learning activities and corrective feedback (Krashen, 1985).

Krashen's Second Language Acquisition Theory fundamentally states that meaningful interaction in the target language is essential in learning a foreign language. According to Krashen (1981), "speakers" must be concerned, "not with the form of their utterances, but with the messages they are conveying and understanding" (p. 1). Krashen's theory (1981) is grounded on five principal hypotheses:

1. The Natural Order Hypothesis states that the acquisition of language follows a natural order, which is predictable.

2. The Acquisition/Learning Hypothesis distinguishes between two independent systems of achieving fluency in a second language; natural subconscious acquisition and forced learning through instruction.

3. The Monitor Hypothesis describes how adult learners can use conscious learning to develop language ability in self-pacing, self-editing, and self-correcting roles that enable L2 learners to monitor correctness and grammar.

4. The Input Hypothesis explains how the second language learner improves and progresses along the natural order upon receiving second language input in incremental steps. This natural way of receiving comprehensible input has also been expressed as $i + 1$, and has been referred to by some scholars as Krashen's version of Vygotsky's ZPD theory (Schütz, 2007).

5. The Affective filter hypothesis states that affective variables such as motivation, confidence, and anxiety play a facilitative, but noncausal, role in SLA. For example, low self-esteem, stress, and anxiety can potentially "raise" the affective filter and form a "mental block" that prevents comprehensible input from being used for SLA. Krashen stated that a mental block

caused by such affective factors “prevents input from reaching the language acquisition device” (Krashen, 1985, p. 100).

According to Krashen (1981), conscious learning cannot replace the function of subconscious acquisition. This model has been criticized by some foreign language teachers, linguists, and SLA scholars due to the prevailing consensus that learned knowledge does form part of true acquisition.

The Acquisition/Learning Hypothesis is the most controversial and the most widely cited of all Krashen’s theories. According to Krashen (1981), optimal second language performance comes from both the acquired system and the learned system. Acquisition is the product of a subconscious effort that takes place naturally.

Krashen’s Acquisition/Learning Hypothesis essentially states that learning is important, but that acquisition is essential in building fluency. According to Krashen (1981):

The best methods are those that supply comprehensible input in low anxiety situations, containing messages that students really want to hear. These methods do not force early production in the second language, but allow students to produce when they are ‘ready,’ recognizing that improvement comes from supplying communicative and comprehensible input, and not from forcing and correcting production. (p. 6-7)

Krashen (1985) maintains that language acquisition, “occurs only when comprehension of real messages occurs, and when the acquirer is not “on the defensive” (p. 6). Krashen conceded that in some cases, the teaching of grammar can result in language proficiency, but only when students are deeply interested in the L2, and the target language is used as a medium of instruction. In this scenario, according to Krashen, it is not the method that leads to language acquisition, but the fact that the language of instruction is the target language.

Even though the technical side of Teletandem is not complex, technology is still central to online TLE and thus, cannot be ignored. Teletandem is one of the many names used to describe online telecollaboration for L2 learners. Charles Juwah's 2006 book, *Interactions in Online Education: Implications for Theory and Practice*, provided a framework for the telecollaborative aspects of Teletandem. Today's technology offers unprecedented possibilities for online interactions. However, this does not mean that online video collaboration is the most appropriate strategy for every learning scenario. In order for online interactions to be meaningful and purposeful, they must be adequately and systematically designed, planned, and implemented (Juwah, 2006). In addition, successful online interactions rely heavily on students becoming tenacious, mature, and open-minded about their online partners. Students must be able to deal with unexpected outcomes, learn from others, and self-regulate their own learning and development (Juwah, 2006). These principles coincide with the basic tenets of Teletandem.

National Standards for Foreign Language Education

The learning objectives of TLE reflect the core themes and rationales outlined in the National Standards for Foreign Language, published by the American Council on the Teaching of Foreign Languages. This visionary document, *Standards for Foreign Language Learning: Preparing for the 21st Century*, first published in 1996, provided defined performance guidelines for assessment in the teaching and learning of foreign language. A revised third edition had been published at the time of this writing, but the framework commonly known as "The Five Cs (1996): Communication, Culture, Connections, Comparisons, and Communities" fundamentally has not changed.

1. Communication - the use of language in “real life” situations. TLE allows students to collaborate and build language learning partnerships through video-mediated interaction on the Internet. TLE provides an authentic immersion experience of unlimited variety and purpose.
2. Culture – This is an essential part of foreign language education. By directly experiencing another culture, students can develop a deeper appreciation of the target culture, as well as their own native culture. Students become more aware of other points of view, ways of life, and contributions to the world.
3. Connections – Language instruction should be connected with other areas of the curriculum. TLE is inherently flexible and interdisciplinary. Content from other subject areas is integrated with world language instruction through lessons that are developed around common themes.
4. Comparisons –Students are encouraged to compare and contrast languages and cultures. TLE sessions include both languages enabling students to discover patterns and analyze similarities and differences between languages and cultures.
5. Communities – Students are encouraged to accept that they live in a global society. TLE uses Internet-based video chat to give students opportunities to interact with native speakers of the L2 studying English at foreign schools.

The philosophy of the National Standards promotes the idea that “language and communication are at the heart of the human experience” (ACTFL, n/d(a), para. 3). This underlying principle envisions a future in which American students will develop and maintain competencies in at least one foreign language, modern or classical, and that learners from non-

English backgrounds will have every opportunity to develop proficiencies in their heritage language (ACTFL, 1996).

The *ACTFL Speaking Proficiency Guidelines (Revised)* rating of “Intermediate Low” adequately describes the skill level of the student participants. This coincides with the skill level required for the language courses in which they are enrolled. The Intermediate Low rating assesses participants who can handle a limited number of simple communicative tasks (ACTFL, n/db, p. 1). Conversation at this level is generally restricted to predictable topics necessary for survival in the target language. These topics relate to descriptions of self, family, daily activities, personal preferences, and immediate needs. It is expected that the participants will struggle to have a fluid conversation at the onset of the teletandem sessions.

Intermediate Low speakers express personal meaning by combining and recombining what they know and what they hear from their interlocutors into short statements and discrete sentences. Their responses are often filled with hesitancy and inaccuracies as they search for appropriate linguistic forms and vocabulary while attempting to give form to the message. Their speech is characterized by frequent pauses, ineffective reformulations and self-corrections. Their pronunciation, vocabulary and syntax are strongly influenced by their first language. In spite of frequent misunderstandings that may require repetition or rephrasing, Intermediate Low speakers can generally be understood by sympathetic interlocutors, particularly by those accustomed to dealing with non-natives. (ACTFL, 2012, p. 1).

International University Partnerships: History, Theory, and Practice

Facilitating teletandem exchanges with foreign schools is a process that begins with a partnership agreement. Whether a joint venture is realized at the institutional, departmental, or

individual level, some form of cooperation and collaboration must occur if a joint academic program is to be successfully implemented, delivered, and sustained. International university partnerships are hardly a new concept. Most scholars refer back to medieval times when dating the history of collaboration with foreign schools in higher education (De Wit, 2002). However, it is difficult to specify exactly how and when these matters became an administrative concern for institutions of higher learning. Scott (1998) argues that universities could not have been “international” in the Middle Ages, because nation-states did not exist then (p. 123).

According to Kerr (1990), higher education was exemplified by a convergent model of universal education until the end of the Reformation. De Wit (2002) believes this model was eventually replaced by a divergent one in which universities served the administrative, political, and economic interests of the nation-state. De Wit describes higher education from the end of the Renaissance to the beginning of the 20th century as predominantly nation-oriented. This coincides with the opinions of Kerr (1994) and Scott (1998), who maintain that the focus of higher education during those periods was directed more toward the development of national identity and less to cultural, social and intellectual enrichment (De Wit, 2002).

Before World War II, study abroad was viewed by many Americans as a necessary step in attaining cultural acceptance into the social elite classes (De Wit, 2002). Student mobility during this period was incidental rather than strategic, and flowed from the United States to Europe, and not the other way around (De Wit, 2002). After World War II, international education became more strategic and structured. Still, the U.S. government’s support of international education remained strong even during the Great Depression and through two world wars.

Franklin Delano Roosevelt (1941), stated in his third Inaugural Address:

A nation, like a person, has a mind—a mind that must be kept informed and alert, that must know itself, that understands the hopes and needs of its neighbors, all the other nations that live within the narrowing circle of the world.

Education abroad evolved and expanded significantly in the United States throughout the 20th century. In 1903, Rhodes Scholarships were founded for study at the University of Oxford (The Rhodes Trust, 2011). The Fulbright Program was established in 1946 under legislation introduced by then-Senator J. William Fulbright of Arkansas. The Fulbright Program, sponsored by the U.S. Department of State's Bureau of Educational and Cultural Affairs, operates in over 155 countries worldwide and has offered opportunities to over 300,000 Fulbright Scholars since the program's inception (U.S. Department of State, 2012).

During the Cold War, American institutions had limited agreements with friendly nations, mainly in Western Europe. Universities of the Soviet Union and Eastern and Central Europe practiced international cooperation within the boundaries of Communism. Essentially international cooperation during the Cold War was polarized. The developing world was not yet a significant force in international education during this period (De Wit, 2002). Nevertheless, the United States still emerged as the leading country in the practice of education abroad after World War II (De Wit, 2002).

During the 1960s and 1970s, international education burgeoned in the Third World, predominantly through U.S.-led development assistance projects (De Wit, 2002). This was a particularly important period for the United States on the global stage, because by sending the brightest American minds abroad to interact with international scholars, the United States was able to orient foreign perspectives toward U.S. policies in areas that had not yet been influenced

by communism. De Wit (2002) refers to this export of western ideas and academic structures as neocolonialism.

The most vibrant and interesting period for international education took place within the last 50 years, and it continues to evolve today. The U.S. government has supported partnerships between U.S. and foreign schools since the end of World War II (Morfit, Gore, Akridge, 2007). Unprecedented advancements in technology have heightened the impact of globalization in virtually all sectors of society—particularly in higher education. Globalization has shifted the direction and purpose of international education in all countries. As a result, educational institutions in the United States and around the world are now addressing internationalization in their strategic planning initiatives.

Few scholars disagree with the assertion that technology, marketization, and new economic realities all make competitiveness a dominant rationale for international cooperation today (De Wit, 2002). Institutions are motivated predominantly by political and economic rationales in developing strategic plans for internationalization. This may explain why the need for online language and cultural exchanges is not a dominant theme of most internationalization movements.

There are many types of institutional partnership agreements. The American Council on Education (ACE) identified three broad categories of agreements: (a) friendship and cooperation, (b) broad institutional agreements, and (c) specific program agreements.

International university partnerships (IUP) vary in complexity, purpose, and scope (Van de Water et al., 2008). Potential activities for IUPs include short and long-term student/teacher exchange programs; dual degree programs; delivery of U.S. courses at the partner school; collaborative research; jointly-sponsored lectures; and other events such as international

festivals, sharing of resources, joint applications for funding to support the partnership, and many other joint ventures.

IUPs offer a framework for institutions to quickly internationalize their campuses, enrich their programs, and boost their rankings. The common aim of IUPs is to achieve a level of internationalization appropriate for the institution and to have a positive impact on core institutional activities.

However, international cooperation is a complex endeavor and IUPs are difficult to sustain. In a 2008 study, Özturgut (2008) outlined political, economic, sociocultural, and educational challenges as the principal hindrances of a Sino-U.S. joint-venture campus in the People's Republic of China involving China American University, China Investment Company, and American University in the United States. Özturgut cited lack of interpersonal and cross-cultural communication skills on both sides as the main challenges. Özturgut argued that more research is needed to understand how American universities are addressing outcomes and assessment measures of American education in China in order to ensure the relevance and quality of partnership programs (Özturgut, 2008).

Rapoport's (2006) study on the impact of international programs on pedagogical practices of Russian school teachers reported that teacher exchange experiences positively impacted the pedagogies and practices of participants, expanding the range of their instructional approaches and making teachers more linguistically competent and more culturally sensitive. The international experiences opened new opportunities for instructors to view education from a global perspective and apply these new viewpoints to their daily teaching (Rapoport, 2006).

Rapoport's (2006) study also uncovered negative aspects of cooperation as well. According to Rapoport, the factors that decrease the efficacy of curricular outcomes in

cooperative ventures include lack of awareness of program goals, lack of knowledge of the host country's educational systems and administrative structures, inadequate translation, confusing language, and lack of administrative support for international programs. Language, culture, and relationships are at the core of an IUP's purpose. Fundamental differences in language and cultural differences can result in miscommunication and mistakes, which can impede progress (Olson, Green, & Hill, 2006).

A recent study of seven regional IUPs in Sweden showed that differentiated strategic partnerships are necessary in order to meet the different, ideological, generative and capacity building needs of schools and teachers. Another recent study of more than 100 United States-Africa higher education partnerships (Morfit et al., 2008) that are part of the U.S. Agency for International Development (USAID)-funded Higher Education for Development (HED) Program, revealed five key strategies for developing IUPs:

1. Partnership models should be based on cooperation that benefits both institutions.
2. High-level administrative support ensures a greater chance for success.
3. Having a clear understanding of partner roles and expectations is essential.
4. Having a backup plan is also essential.
5. Sustainability must be built into early planning activities.

Implementing the appropriate administrative structure is critical in developing and sustaining IUPs. Although a chief international officer and/or executive director of international education will coordinate and guide the process of internationalization, it is imperative that the strategy be centered on students and faculty. Successful partnerships tend to be decentralized and academic in nature (Van de Water et al., 2008). Administrative efforts should be focused on organization, documentation, and support. The international office should also devise a plan to

promote and publicize partnerships. Most importantly, IUP administrators should be open to seeking advice from experienced colleagues, professional agencies, and organizations dedicated to the advancement of international education through IUPs and other teacher/student exchanges.

Some presidents and chancellors of American universities eager to internationalize their campuses have signed IUP agreements prematurely without adequately assessing the institution's needs or consulting with faculty and students. Such agreements may trigger resentment among stakeholders (Van de Water et al., 2008). Research shows that institutions with more systematic, visible and tactical planning have more success in reaching faculty and students (Olson et al., 2006). An open, well-communicated plan will lead to sustained support by leadership as well as broad engagement by students and faculty. These factors are consistently identified in the literature as critical to implementing productive and sustainable IUPs.

Globalization and Internationalization in Higher Education

Globalization has heightened competition and given rise to the entrepreneurial revenue-conscious university. Currie and Subotsky (2000) contend that a managerial ethos has emerged in higher education that is characterized by a market-driven approach grounded in economics, politics, culture and technology. Some scholars refer to this trend as academic capitalism. In these models, teaching and learning tend to be more fragmented.

Stromquist (2002b) maintains that the trends of globalization significantly impact education. "We are seeing a veritable economic and technological and, thus cultural revolution that is simultaneously affecting values, institutions, practices, and futures" (p. 87). Globalization is important because it impacts and is impacted by virtually all sectors, economies, classes and cultures in the world. Globalization is everywhere. Stromquist (2002b) advises educators to respond to the complexity of globalization with an interdisciplinary perspective. "Globalization

forces are bringing together multiple issues and exposing the powerful intersections of economics, politics, culture, and technology” (p. 93).

Scholars tend to agree that globalization directly impacts education (Coulby & Zambeta, 2005). What remains unclear, however, is how globalization impacts learning and whether or not institutions are actually prepared to deal with globalization. What are the implications of internationalization? Are IUPs a sound strategy for internationalization, or are they merely a short-range marketing tool? Many scholars believe the marketization of education will result in debased and diminished academic structures. According to Raduntz (2005), the primary consequence of entrepreneurialized education systems is a decrease in academic quality and scope.

Globalization is occurring at a rate that institutions, governments and societies are struggling to keep pace with, and it would appear that little can be done to stop or even slow it down. The unprecedented advancement of technology is largely to blame. Some scholars welcome innovation, but others worry that technology, the Internet, and social media reflect capitalist modes of production and consumption (Stromquist, 2002a).

Internationalization initiatives should also be concerned with the task of producing linguistically and culturally competent graduates. Roberts (2003) lists empathy, compassion, justice, commitment, reliability, and respect for others as the primary attitudes and values that make good global citizens. According to Roberts (2003), building values that lead to global citizenship are as important as acquiring skills and knowledge. Both are desired outcomes of internationalization in higher education.

StudentPoll 2000 and similar studies indicate that immersion through study abroad is an effective way to learn new languages, connect with other cultures, and develop a superior

understanding of global issues (Green, Hesel, & Bartini, 2008). The findings of the StudentPoll 2000 showed that over 55% of American high school students are at least “fairly certain” that their undergraduate education will provide an international perspective (Green et al., 2008). Online TLE provides new ways of achieving these goals without the need for costly travel.

Tandem Language Exchange (TLE): History, Theory, and Practice

The Lancasterian System of Education, also known as the “mutual system,” was developed by Joseph Lancaster in the early 1800s in Manchester, England (Encyclopædia Britannica, 2012). The method, based on Andrew Bell’s monitorial systems, allowed advanced students to teach less advanced ones. Ultimately, Lancaster was trying to be efficient with his teaching staff. The method was reintroduced in 1968 in a host of educational partnerships between French and German schools. In 1979, Jürgen Wolff developed procedures for organizing individual Spanish-German tandem programs in Madrid, Spain (Calvert, 1992). In 1982, Wolff partnered with Marisa Delgado, Bernhard Leute, and Gracia Martín Torres to develop a TLE network based out of Madrid (TANDEM Fundazioa, 2009). This is the basis for the creation of the former Centro Cultural Hispano-Alemán TANDEM, which has since become Escuela Internacional TANDEM.

Eventually the TANDEM®Fundazioa Foundation was established by tandem users throughout Europe in order to improve academic cooperation and ongoing teacher training. The central office for this organization is located in Donostia/San Sebastian, Spain and still holds the trademark rights to the name TANDEM, which was originally coined by Michael Friedrich and Jürgen Wolff. Another major force in the evolution of the tandem learning method in Europe is the International E-Tandem Network, founded by Helmut Brammerts and David Little in 1992.

This group evolved into the Tandem Server Bochum under the direction of Helmut Brammerts and Karin Kleppin.

In 2006, an online video-mediated model of TLE was developed for Brazilian college students with limited opportunities for international travel. The program was named Teletandem Brasil: Foreign Languages for All. This model was introduced at the Assis, São Paulo campus of the Universidade Estadual Paulista (UNESP). The program has since flourished with a teletandem research center, dedicated teletandem facilities, and teletandem partnerships with universities in the United States, South America, Europe and Asia. In the last 10 years, a host of TLE schools, websites and other online partnering services have emerged as a result of the increasing popularity of online TLE.

Despite the unprecedented potential of video chat technology, online TLE is still relatively uncommon in U.S. schools. Still, language educators and TLE researchers generally view tandem-based language practice in a positive light. Online TLE can lead to enhanced communicative competence (Wang, 2004b), intercultural understanding (Lee, 2009), personal enrichment (Xiao, 2007), electronic literacy (O'Dowd & Ware, 2009) and social opportunities (Vasallo & Telles, 2006). Research shows that TLE can contribute to the development of learner autonomy, linguistic accuracy, and fluency (Belz, 2003; Ware & O'Dowd, 2008; Warschauer, 1997); intercultural awareness (O'Dowd, 2006; Lee, 2009; Ware, 2005); online intercultural communication skills (O'Dowd & Ritter, 2006); and electronic literacy (Telles & Vasallo, 2006).

Many researchers have pointed out the disadvantages of TLE as well. It can be limited by time, costs, scheduling, technical problems, and other factors. Furthermore, it offers no clear learning path and lacks structured instruction (Driggers, 2008). For practitioners, it is useful to

understand both the benefits and the drawbacks of online TLE in order to harness its full potential as a learning intervention.

Belz (2002) describes online tandem collaboration as pairs or groups of distally-located students embedded in different sociocultural contexts and institutional settings. According to Butler and Fawkes (1999), real-time, video-mediated immersion with native speakers is more effective than artificial role-play in the classroom. Xiao's (2007) study showed that video-mediated language exchange with native speakers resulted in better performance by the participants in the experimental group than those in the control group in terms of fluency, accuracy, and complexity. Lee's (2009) study showed that video-mediated exchange can provide the authenticity of the target culture and language in multiple dimensions as it allows learners to experience subtle nuances such as gestures, facial expressions, and intonation.

Wang (2004a) provided a new taxonomy of interaction in computer-mediated communication (CMC) in which three levels of interaction were identified: written interaction, oral interaction, and oral-visual interaction. The teletandem model addresses all three levels. Wang (2004a) maintains that "oral-visual interaction" through online tandem collaboration is "the most viable" TLE scenario when distance separates two learners (p. 391).

Lee (2007) described her 2005 online TLE project as focused on the "social processes and interactive contexts that underlie collaborative efforts and the virtual learning conditions" (p. 636). Lee recommended three fundamental strategies for unlocking the full potential of online TLE: (a) using carefully designed tasks to engage learners, (b) making appropriate selection of linguistic context, and (c) including sufficient network training. Lee (2007) stressed the importance of using effective pedagogical principles during the implementation phase.

“Instructors must articulate specific instructional goals and procedures. In addition, the introduction of new technological tools must be thoughtfully planned and executed” (p. 637).

O’Dowd and Ware (2009) suggested that telecollaboration activities are most effective when they are task-based. Activities must lend themselves to fostering meaningful student interaction through exercises and activities that enable students to be expressive and to feel comfortable in the tandem learning environment. Task-based learning has been identified by SLA researchers as one of the core components of foreign language instruction. TLE design must be engaging and dynamic so that a meaningful encounter can take place. O’Dowd and Ware (2009) underscored the importance of approaching collaborative task design with an “openness to alternative pedagogical beliefs and aims, and a willingness to adapt as much as possible to other approaches” (p. 185). O’Dowd has contributed significantly to the field of telecollaborative language learning and has explored many areas of online TLE from many perspectives. However, research on TLE implementation and design is actually quite limited, particularly in the context of international cooperation. This study aimed to address these gaps in the research.

Summary

In a distance-learning environment, the ideal scenario for an international language and cultural exchange is through the use of online video chat and webconferencing programs. These powerful tools allow students to have a face-to-face conversation using relatively simple tools; a computer, a web camera, and a microphone. Most researchers agree that online TLE is a viable model for creating authentic language immersion opportunities for language learners. Video-enhanced distance language exchange enables learners to experience real human interaction with real native speakers located in a country where the L2 is spoken. This is a component of SLA

that has been fundamentally lacking in traditionally taught foreign language classes (Appel & Mullen, 2000; Belz, 2002, 2003; Butler & Fawkes, 1999; Calvert, 1992, Driggers, 2008; Lee, 2007; Lee, 2009; Little & Brammerts, 1996; O'Dowd & Eberbach, 2004; Telles & Vasallo, 2006; van der Zwaal, 2007; Xiao, 2007, Wang, 2004a).

The fundamental TLE model has been practiced and studied in many contexts and in many settings. Many tools and technologies have been used to facilitate TLE partnerships since the 1980s. Now, Teletandem uses online video chat to take TLE to a whole new level. The widespread use of laptops, cell phones, and the Internet, coupled with the immensely popular trend of social networking and the cost effectiveness of online video chat, make a compelling case for the use of online TLE in the foreign language curriculum, particularly in higher education settings.

CHAPTER 3. METHODOLOGY

This study used inductive and investigative strategies to explore a teletandem language exchange project delivered across a U.S.-Brazilian university partnership. A simple case study design was used to analyze patterns, describe relationships, and interpret understandings and meanings (tacit and explicit) in order to make sense of Teletandem in both social and academic contexts. The research lens of the study had two focus areas: (a) implementation of Teletandem in higher education settings, and (b) the participants' descriptive account of teletandem impact on learning.

The researcher drew from both ethnographic and phenomenological strategies to observe a 10-week, 20-session English-Portuguese teletandem program delivered in the LRCs at two large state universities—one in Brazil and the other in the United States. Twenty teletandem sessions were integrated in two intermediate level courses at both schools. Ten students learning Portuguese in the United States were paired with 10 students learning English in Brazil. Student participants possessed comparable skills in the target language.

The study reflects the five major characteristics of qualitative research (Merriam, 1998):

1. The researcher understood the phenomena from the participants' perspective.
2. The researcher was the primary instrument for data collection and analysis.

3. The study was conducted mainly in the field.
4. The investigation was inductive.
5. The outcome of the study was “richly descriptive.” (Merriam, 1998, p. 8)

In attempting to replicate the characteristics of an exemplary case study (Yin, 2009), the researcher relied on a set of circumstances that produced a “significant, engaging and complete study that considered alternative participant perspectives” (p. 186-187). This was done to produce the widest range of insights into the human, social, and pedagogical dimensions of Teletandem.

This was a bilingual study that was conducted in English and Brazilian Portuguese. The data collection process and virtually all other aspects of the study were carried out in both languages. Observations were made and the data were analyzed from both American and Brazilian perspectives. However, the interviews in Portuguese were translated into English in the transcription process. This was done for the purpose of textual analysis.

Sites and Participants

The field work for this study was conducted at two large state universities—one in Brazil and the other in the United States. The U.S institution’s website reported an enrollment count of 32,000 students in 2010. The Brazilian school’s website reported 47,000 students in 2010 at 23 campus locations. The names of the institutions are not revealed in order to protect the identities of the participants. This was an IRB requirement. Therefore, the two schools are herein referred to as the U.S. and Brazilian sites, schools, and institutions.

The students were all college-aged L2 learners, between 18 and 25 years old. The U.S. students were enrolled in an intermediate-level Portuguese language course in which Teletandem was integrated. The Brazilian students participated in the interactions as a class, but they did not

receive academic credit for their participation. For the U.S. students, Teletandem was a lab supplement to the Portuguese language course in which they were enrolled. Precise demographic information was unknown until the pre-teletandem phase of the project began, 4 weeks prior to the study. The sites were selected based on factors of feasibility. There were many similarities between the two universities, but there were also inherent differences. The Brazilian school had an established teletandem program with many knowledgeable and experienced teachers and LRC staff. The U.S. school had no other teletandem partnerships in place at the time of this study. Since the U.S. team was relatively inexperienced in Teletandem programming, a pilot program was conducted 6 months prior to the study to assess the feasibility of carrying out the study in the most optimal research setting.

As mentioned in Chapter 1, Teletandem is not commonly practiced in the United States. Since there was no teletandem program in place at the selected U.S. school, the researcher had to be involved in setting up the study. However, the teaching side of the project and all of the teletandem activities were designed and implemented by the teachers and LRC staffs. The instructors on both sides received administrative, technical, and instructional support from the LRC staff and the researcher as needed. Once the sessions were in progress, the researcher's direct involvement was minimized.

The LRCs at both sites were appropriately equipped and staffed for high-level teletandem activities. The sessions were carried out in the computer labs of the LRCs. Both centers offered optimized computers, webcams, headsets (with microphones) and high-speed Internet. All relevant hardware and software tools were configured and tested at the U.S. site prior to the study. This was done to achieve the most seamless delivery of TLE sessions possible. The researcher was not involved with the configuration and testing of resources at the Brazilian site.

The participants of the study were: (a) the researcher, (b) the instructors, (c) LRC staff, and (d) the students. The researcher was a participant-observer in all of the environments where teletandem was coordinated and delivered. However, the primary role of the researcher was to observe and collect data. During the 10-week span of the program, the researcher spent ample time at the Brazilian and U.S. sites.

The researcher acknowledges concern over the potential bias stemming from the researcher's role as an active participant in the study. The researcher's enthusiasm for online TLE is a legitimate concern with reference to objectivity. Yin (1994) recommends that researchers ask good questions, interpret good responses, be good listeners, be adaptive and flexible, be informed of issues related to the study, and be unbiased by preconceived notions. The researcher's participation in the project may have actually strengthened the validity of the study. The researcher was adequately trained and prepared for the investigation. This enabled the researcher to provide a richly descriptive and accurate account of the practice of Teletandem in higher education settings. To further control for bias, the researcher consulted and collaborated with other teletandem researchers at the Brazilian school with similar research goals. They acted as disinterested peers and their insight was helpful in uncovering biases and other assumptions on the part of the researcher.

The researcher observed the language instructors, who worked with the LRC staff during the pre-teletandem phase and during the actual sessions. This was necessary in order to carry out the sessions effectively and without disruptions. The LRC staffs at both schools were led by highly qualified instructional technologists and graduate student assistants. These participants worked together as interconnected teams of facilitators throughout the study. Their role was to provide the language teachers and students with essential technical and logistical support.

Language resource centers have a significant role in facilitating TLE programs with foreign schools. The instructors in this study planned the teletandem topics and activities and they prepared the students for the sessions, but it was the LRC staff that had oversight over the technical and logistical procedures involved with carrying out the sessions. The instructor and LRC staff of the U.S. school cultivated strong collaborative relationships with the Brazilian teachers and LRC staff. These interactions were closely observed.

The LRC staff supported the instructors with routine tasks associated with implementing Teletandem, which included but were not limited to the following:

1. Configuring computers.
2. Setting up Skype® accounts.
3. Pairing students.
4. Scheduling sessions.
5. Conducting sessions.
6. Adjusting learner pairs as needed when students were absent.
7. Providing on-site support during sessions.
8. Recording and archiving individual sessions.
9. Retrieving Skype® text-chat logs after each session.
10. Keeping track of correspondence with facilitators at the partner site.

The LRC staffs were present before, during, and after each teletandem session to ensure that tools and technologies were working properly. In addition, they provided on-site support to teachers and students during the sessions. Communication between LRC staffs and instructors across both sites was mainly carried out via e-mail and Skype®. These correspondences were also documented and archived by the researcher for continued analysis. The instructors and LRC

staffs at both sites were introduced to one another 4 weeks prior to the study. During this period, these key participants worked together to organize the project and schedule the teletandem sessions.

The LRC staffs were also responsible for overseeing the configuration, integration, and maintenance of the computers and Skype® accounts. This was an important consideration. Students used the preconfigured LRC Skype® accounts instead of their own personal accounts, so that the researcher and instructors could have access to the text-chat logs saved with each session. The Skype® chat logs were analyzed as research data.

The LRC staff also created backup accounts in MSN Messenger® and Oovoo® in the event that Skype® would be down during any of the sessions. They supervised the use of TechSmith Camtasia Studio® software and the Evaer® recorder plug-in to record individual teletandem sessions through Skype®. The recorded sessions were digitized, archived, and viewed as research data. In addition, the U.S. LRC staff worked with the U.S. instructor to explore ways of enhancing Teletandem with other tools and technologies, such as Sanako® Lab 300 classroom management software. Hence, the LRC staffs had an integral role in this study. Their perceptions, interpretations, and meanings provided clues as to the evolving role of LRCs in coordinating and implementing class-to-class teletandem exchanges in higher education settings.

The LRC staff assisted the instructors at each respective school with the task of organizing and delivering the sessions smoothly. This was achieved despite the fact that there were many differences between the U.S. and Brazilian schools. Inconsistencies in time zones, class scheduling, and teaching methods made session planning a challenge. Inexperienced

instructors would be hard pressed to deliver a class-to-class Teletandem program without the reinforcement of an LRC or other technology support unit.

Fluency skills in the L2 varied from student to student, which was expected. In general, communicative skill levels in both groups were “Intermediate Low”. This rating was based on the placement level as per the *ACTFL Speaking Proficiency Guidelines* (Revised, 2012).

The U.S. students were enrolled in an intermediate-level Portuguese language course. They became participants because they were enrolled in the class that was selected for the study. They had no knowledge of the project until it was announced when classes began. They were told that Teletandem was going to be a lab supplement and they had the option to do a different lab supplement. None of the students opted out. All chose to participate in Teletandem.

The majority of Brazilian students were preparing for careers as English teachers. They were enrolled in various English courses, but Teletandem was not an integrated lab supplement in any single language class as it was at the U.S school. This inconsistency was due to the fact that the Brazilian school only offered Teletandem as an extracurricular activity. Nevertheless, the same two groups met consistently throughout the study. They came together during each session as two distally-located classes, in which individual students were paired with a learning peer from the partner school. Therefore, this discrepancy did not have much bearing on the study. The class-to-class structure was set in advance and the sessions were organized and scheduled accordingly.

A total of 20 students (10 at each site) participated in the study. There was one instructor at the U.S. school whereas there were several instructors involved with Teletandem at the Brazilian school. Each site had an LRC and each LRC had one primary staff member with a

small staff of student assistants. In Brazil, several graduate students interested in teletandem as a research topic became involved in the project as observers and peer debriefers.

Research Design

A case study design was used to explore two phenomena: the impact of Teletandem on student learning, and the processes and tools involved in the implementation of class-to-class teletandem programs delivered jointly with foreign schools.

Multimethod strategies were employed in order to gather a wide array of text, media, and survey data. The collective thoughts, ideas, meanings, and actions of the participants were closely analyzed through observation, in-depth interviews, and other artifacts such as text-chat logs, e-mail correspondence, videotaped sessions, and recorded teletandem sessions.

The research planning was an integral part of this study. It was impossible to finalize strategies before data collection began (Patton, 1990). For this reason, the study was inductive. There were no concepts or theories to test (Merriam, 1998). There was no priori hypothesis. The study simply explored Teletandem in search of clues that might shed light on the implementation processes. The study was also concerned with how online TLE impacts learning. Varied investigative strategies were used to examine the teletandem experiences of students, instructors, and LRC staffs. The researcher explored, described, examined and interpreted the phenomena through a mix of data sources. Participants provided rich descriptive opinions about Teletandem that allowed the researcher to explore the full diversity and reach of Teletandem. To arrive at this level of inquiry, the study focused on what participants said, did, needed, expected, and desired within the relationships bound by Teletandem.

Procedure

Twenty sessions were carried out over a 10-week period (see Appendix B). Two 1-hour sessions were scheduled each week (see Table 1). An extra week was added in case a session had to be cancelled. This ensured that at least 20 complete teletandem sessions would be observed and analyzed. Each teletandem session was 1 hour in duration. Thirty minutes were designated to speaking Portuguese and 30 minutes to speaking English.

The sessions were conducted synchronously in the computer labs of the LRCs at both institutions. The Skype® program was used during the sessions. MSN Messenger and Oovoo were installed on the computers at both sites as backups and user accounts were created at every computer station at both sites.

The teletandem program was developed by the instructors at both schools through a cooperative partnership that relied mainly on Skype® and e-mail for communication and interaction. The instructor, researcher, and LRC staff were present in the physical spaces where the sessions were held. The researcher was present at the U.S site for 7 weeks and at the Brazilian site for 3 weeks.

Data Collection

The data for this study were collected predominantly through qualitative case study methods that included observations, interviews, program evaluation questionnaires, field notes, chat logs, e-mails, recorded sessions and relevant internal documents. Data collection was conducted in three phases: (a) the pre-teletandem phase, (b) the teletandem phase, and (c) the post-teletandem phase.

Table 1

Data Collection

	Pre-program phase Researcher at U.S. school	Weeks 1-5 Researcher at U.S. school	Weeks 6-8 Researcher at Brazilian school	Weeks 9-10 Researcher at U.S. school
Documents	Skype® text chat logs E-mails Internal documents	Skype® text chat logs, E-mails, text from U.S. student journals	Skype® text chat logs E-mails	Skype® text chat logs E-mails
Video taped interviews		Portuguese instructor LRC facilitator 7 U.S. students	English instructors LRC facilitator 7 Brazilian students	
Observations	Field notes Personal journals	All sessions Field notes Personal journal Video tapings in lab	All sessions Field notes Personal journal Video tapings in lab	All sessions Field notes Personal journal Video tapings in lab
Recorded/captured teletandem sessions		Sessions 3, 4 & 5 were recorded at U.S. school	Teletandem sessions were not recorded at Brazilian school.	
Teletandem evaluation questionnaires				Participants at both sites submitted Teletandem evaluation questionnaires electronically

During the pre-teletandem phase, the researcher collected field notes, internal documents, e-mails, and other relevant correspondence. The researcher made observation notes throughout the setup and planning phases of the program. The instructors and LRC staff were interviewed either in person or via Skype®. The researcher had no contact with the student participants during the pre-teletandem phase.

The teletandem phase was comprised of the sessions themselves. During this phase, data were collected primarily through observations and interviews with instructors, LRC staff, and students. Data were gathered in the form of field notes, recorded/screen-captured teletandem sessions, videotapings of the sessions within the lab environments, and transcripts of Skype® text-chat logs produced during the sessions. In addition, students were asked to maintain an electronic journal/blog in which they reflected on their teletandem experiences immediately following each session.

After the final session, students were asked to complete an evaluation survey to express their own opinions about Teletandem (see Appendix C). The purpose of the survey was not to measure skills improvement, but to better understand Teletandem from the student perspective. Not all 20 students could be formally interviewed by the researcher. Thus, the survey was devised to ensure that all students had the opportunity to provide input. A total of 7 Brazilian students and 7 U.S. students were formally interviewed. The interviews were videotaped and transcribed. The interview protocol can be found in Appendix D and the student consent forms are in Appendix E.

Some of the teletandem sessions at the U.S. school were recorded. Several applications were used to generate audio and video files of the Skype® sessions. The digitally captured sessions gave the researcher a direct view into the student interactions. Individual teletandem

sessions were not recorded in Brazil, however, non-intrusive videotaping of the teletandem room environment was permitted at both sites. This footage effectively captured the reality of Teletandem in a language lab setting.

During the post-teletandem phase, the researcher interviewed the instructors and LRC staff. Interviews were videotaped and later transcribed. Questionnaire responses were also transcribed and archived. This rich dataset rendered specific examples that show how class-to-class Teletandem programs can be designed and implemented and how they impact student learning when delivered as a supplement to traditional language instruction. Observation of the participants' behavior as well as inquiry into their insights and opinions provided the information needed to address the research questions.

Data Analysis

This study used inductive and investigative strategies to examine the teletandem experiences of students, teachers and LRC staff in a higher education setting. Data analysis was an iterative and progressive process throughout the project. As the fieldwork progressed, the researcher learned from the data gathered. Ideas were refined in accordance with what was being observed and perceived by participants at the selected sites.

The researcher used a comprehensive mix of data sources to examine the impact and outcomes of a teletandem program on college-level L2 learners. The practices and pedagogies associated with implementing Teletandem were explored as the program was carried out across the U.S.-Brazilian university partnership. The researcher looked for recurring ideas and meanings in the data to form themes and concepts that would shed light on the factors that facilitated and hindered Teletandem. This analytical style incorporated intensive reflective analysis.

The researcher rigorously analyzed the data for nuances of meaning. Frequent interim analysis was conducted throughout the study to track evolving ideas (McMillan & Schumacher, 2006). The researcher used discourse analysis and the modern hermeneutic tradition to interpret and make sense of the unstructured raw data. The researcher also used a personal journal throughout the study to capture daily and weekly reflections of experiences, observations, and interactions with participants. In addition, the researcher relied on 15 years of experience as an LRC director to interpret the data, identify themes, glean insight, and develop meaningful conclusions. These ideas were documented in the researcher's personal field journal. The journal helped to increase the validity of the study by enabling the researcher to identify personal biases imposed on tools, methods, participants, and/or data sources.

Categories and codes were developed to facilitate the organization, retrieval, and interpretation of the data. Preliminary coding categories were derived from the themes and contexts articulated in the literature and research questions. The themes and contexts were developed into focused categories and refined themes. Rich descriptions of observations, interviews, and other data sources were used to classify and contextualize Teletandem as a language learning supplement. The participants' personal accounts of Teletandem were useful in preserving participant meaning and heightening the trustworthiness of the data. The metaphors used by participants (including the researcher) illuminated references to pedagogical, linguistic, cultural, and social perspectives and contexts related to teletandem implementation and impact on learning. These descriptors enabled the researcher to make conclusions based on the interpretations of the analyzed data.

In qualitative research, data collection and analysis are a simultaneous activity (Merriam, 1998). This was particularly true of this study. For this reason, an emergent design was necessary because the study was continually evolving.

The researcher used inductive data analysis to reduce and reconstruct voluminous amounts of qualitative data through a systematic process of coding and categorization. The categories and concepts were derived primarily from the observations, interviews, recorded teletandem sessions, and student reflections. New codes were continually being developed to track emergent phenomena. Descriptions and comparisons of key metaphors illuminated factors implicated in the processes, contexts, tools, and participants of Teletandem. Connections between categories were made after open coding. These relationships were clarified and explained from American-Brazilian perspectives and from teaching, learning, and facilitative perspectives. The metaphors were processed into refined themes and concepts from the saturated categories in order to construct a meaningful summary of Teletandem. Table 2 illustrates the preliminary coding categories from etic and emic perspectives.

Verification Strategies for Establishing Reliability and Validity

The researcher enhanced design validity through persistent fieldwork, verbatim participant accounts and other low-inference descriptors, member checking, and digitally recorded and archived data collected in the field. Multimethod strategies permitted triangulation of data across inquiry techniques (McMillan & Schumaker, 2006). Reflexivity was enhanced through the use of peer debriefers and a field journal. Table 3 illustrates how the research questions were mapped to the research methods.

Table 2

Coding Categories From Etic and Emic Perspectives

Category	Researcher	Instructors	LRC staff	Students
1. Implementation [IMP]	Teaching and research, finding partner school	Instruction	Innovation	Orientation
2. Teletandem design [TTD]	Programming	Curriculum	Operations	N/A
3. Sustainability [SUS]	Faculty training, dedicated resources	Building online communities	New LRC role, renewed purpose	N/A
4. Technology and tools [TECH]	Instrumental	Practical	Technical	Facilitative
5. Instructional focus [FOCUS]	Dynamic and engaged learning, student-centered, self-discovery	Supplement to traditional instruction, authentic immersion and practice	Instructional design, harness tools, enhance curriculum	Enhanced curriculum
6. Role of the LRC [LRC]	Instrumental	Practical	Central	Facilitative
7. Logistics and project setup [LOG]	Routinization	Calendars, time zones, scheduling	Technology integration	N/A
8. International university partnerships [IUP]	Joint curricular ventures with foreign schools, partner search, internationalization	Collaboration, cooperation, “transculturality” is an emergent theme	Connectivity	Interactions with foreign students

Table 2 - continued

Category	Researcher	Instructors	LRC staff	Students
9. Best practices [BEST]	Optimizing tools, processes, contexts, and participants	Teaching, student orientation, strategic planning	Dedicated instructional support, session management	No technical problems
10. Pairing students [PAIR]	Relationships, comparison of linguistic, social, educational, and cultural contexts	Partner compatibility, student absences, late arrivals	Online video-mediated cross-collaborative learning.	Friendship, sharing, feelings of awkwardness
11. Student reflection [REF]	Program evaluation	Language and cultural assessment	Online journals and mediação	Self-assessment
12. Impact on learning [IMPACT]	Second language acquisition, interaction-driven SLA, social constructivism, ACTFL Standards, the 5 Cs	Authentic immersion and practice, cultural enrichment, enhanced fluency, high impact learning activity, ACTFL Proficiency Guidelines	N/A	Enhanced L2 development, enhanced cultural competencies, enhanced confidence in L2, enhanced motivation

Table 3

Mapping Research Questions to Research Methods

Research question	Methods	Items
Research question 1 Implementation	•Observation of instructors, mediators, and students	Field notes (text and audio) Video recordings of teletandem sessions Digital images Screen-captured teletandem sessions w/audio and text transcripts
	•Student interviews	Interview protocol
	•Instructor and facilitator interviews	Interview protocol
	•Instructor evaluation of Teletandem	Teletandem evaluation questionnaire
	•Student evaluation of Teletandem	Teletandem evaluation questionnaire
Research question 2 Impact on learning outcomes	•Observation of students	Field notes (text and audio) Video recordings of teletandem sessions Digital images Screen-captured teletandem sessions w/audio and text transcripts
	•Student interviews	Interview protocol
	•Instructor and facilitator interviews	Interview protocol
	•Instructor evaluation of Teletandem	Teletandem evaluation questionnaire
	•Student evaluation of Teletandem	Teletandem evaluation questionnaire

In order to achieve construct validity, Yin (2009) suggests defining the phenomena in terms of specific concepts and relating them back to the objective of the study and identifying operational measures that match the concepts. Yin recommends making a case study as operational as possible.

Internal validity is more difficult to establish in exploratory case studies than in experimental and quasi-experimental designs, because the research objective is more focused on emergent trends. To control for experimenter bias, the researcher behaved neutrally at all times, avoiding language that might steer participants. In addition, detailed field notes on matters of bias were maintained to prevent the study from becoming a narrative of opinions.

External validity is perhaps the biggest concern surrounding case study research. Yin (2009), however, minimizes the issue of generalizability by differentiating between statistical generalization in survey-based research and analytical generalization in case studies. The researcher strived to generalize results and findings to broader, previously known theories of TLE and Teletandem. In order to build plausible explanations for links among the major categories, the researcher continually peeled back layers of emergent themes throughout the study.

This study aimed to present the most honest rendering of how participants viewed teletandem implementation and impact on learning. In Merriam's (1988) view, the internal validity in qualitative studies is strengthened when the perspective of participants "uncovers the complexity of human behavior in a contextual framework and presents the holistic interpretation of what is happening" in the context of the phenomena studied (p. 168). The lack of rigorous control measures necessitated triangulation, member checks, and participant review throughout

the research process (Maxwell, 2005). The success of the study depended on the researcher's ability to analyze and interpret the data.

Assumptions, Limitations, and Delimitations

The researcher acknowledges that some assumptions were made in preparing this case study. It was generally assumed that the researcher would be unbiased, that the interview questions were focused, and that the participants responded honestly to Teletandem and to questions about Teletandem. The researcher also acknowledges limitations stemming from the researcher's own enthusiasm for TLE and IUPs. These limitations may have introduced potentially influential anecdotal data. Some subjectivity was inevitable.

The most significant limitation of this study was generalizability. For this reason, the researcher relied less on quantitative measures and more on a rich descriptive illustrations of teletandem implementation and impact on learning from which generalizations could be derived.

This study is specifically concerned with online video-mediated TLE, also known as Teletandem. TLE models that do not involve online video-mediated interaction (e.g., face-to-face tandem, text-based tandem, E-pals and iso-immersion programs) were delimited. Literature on L2 learning styles, language aptitude, psycholinguistics and sociolinguistics were also delimited as these topics were clearly beyond the scope of the study.

Institutional Review Board and Ethical Assurances

This study was conducted under the approval of the institutional review boards of both participating universities (see Appendices F and G). The specific procedures regarding research ethics varied between the 2 participating schools. However, both universities had strict rules regarding the use of human participants in social science research. Therefore, the identities of the participating schools and all of the participants were kept confidential. All activities that met

the definition of both “human subjects” and “research” were approved before the study was conducted. Participants were fully informed about the study and its purpose prior to the data collection phase. All participants on both sides of the partnership were asked to sign a disclosure/consent form.

CHAPTER 4. FINDINGS AND ANALYSIS

This study was predominantly concerned with shedding light on the factors that facilitate and hinder the design, implementation, and sustainability of online language exchanges in college classroom settings. The researcher also explored the impact of Teletandem on student learning when used as a supplement to traditional instruction. The findings were based on the participants' perceived outcomes and the researcher's own observations. Discourse and conversation analyses were used to examine the data. The findings were also based on the researcher's observations of the participants and interpretation of the data.

A rigorous effort was made throughout the study to look for themes and patterns in every facet and phase of this project. Aspects of ethnographic and phenomenological methods were employed to collect and analyze the data. Conversation analysis (CA) and discourse analysis (DA) as methodological approaches were employed to study social interaction and the role of discourse and communication in Teletandem programming. The analysis was based on observations and interviews of the instructors, students, and the LRC staff who provided support throughout the project.

To better understand how Teletandem impacted student learning, the students were asked to talk about their experiences and give their opinions and ideas on Teletandem as a model for immersion and practice. It was appropriate to make comparisons throughout the project. There were two languages, two instructors, two LRCs, two students per teletandem pair, two schools, two departments, two countries, two continents, etc.

Many of the words and metaphors used to describe online TLE were consistently similar. Furthermore, findings showed that there was consensus among U.S. and Brazilian students that connectivity and compatibility problems were the biggest hindrances. Students expressed similar views, attitudes, and perceptions about teletandem design. For example, students generally preferred having one partner as opposed to having multiple partners. One Brazilian student commented:

When you have one partner, the conversation evolves from session to session. You have the chance to become friends. You share more than language. You share ideas and personal things about yourself, and as the conversation gets deeper, you take the language to a new level to express yourself more profoundly.

One U.S. student said:

I prefer having the same partner, because with a new partner, I seem to have the same discussion over and over—introducing myself and asking my partner the same questions: What's your name? Where do you live? What do you study? Have you ever been to America?

The U.S. students also felt that Teletandem was an appropriate supplement in relevant courses and at targeted levels. Most students felt that Teletandem, as a learning activity, was far more effective and enjoyable than conventional language lab exercises, role play in the classroom, and viewing of films and videos. Another U.S. student said: “Learning a language from a text book is the most inane thing a person can do. I much preferred Teletandem to doing exercises in the book.” One of the Brazilian students maintained that, “We learn about the language in class concepts and grammar in class. Through Teletandem, we have an opportunity to practice the language.”

Teachers on both sides echoed this sentiment and generally expressed similar views about Teletandem, too. The U.S. teacher said:

This hybridized way of teaching and learning is a more complete way of approaching foreign language education. When classroom instruction is supplemented by immersion activities that support the classroom teaching, it helps students to grow and develop confidence. The end result is that students have a better grasp of what they are learning because it becomes more meaningful to them.

The tone and shape of the American and Brazilian perspectives illustrated key differences between the cultural, social, and linguistic values of the 2 groups. One of the Brazilian instructors, who had spent many years living in the United States, commented:

Our students are careful not to offend their American partners with strongly opinionated discourse. They are aware of the fact that their values and views of the world are considerably different, so they try and keep the conversations personal and fun.

Research Question 1 dealt with implementation. Themes were grouped into two areas: teletandem design and teletandem logistics. Design themes included: (a) instructional design, (b) tools and technology, and (c) the role of the Language Resource Center (LRC). The logistical themes included: (a) finding a sound institutional partner, (b) pairing students, (c) international cooperation, setting up a teletandem project, and best practices.

Research Question 2 dealt with teletandem impact on learning. The themes uncovered were organized predominantly in accordance with the participants' perceived outcomes. This section is structured as follows: (a) measuring teletandem effectiveness and impact on learning, (b) student perceived outcomes, (c) teacher perceived outcomes, (d) LRC staff perceived outcomes, and (e) the researcher's observations and field notes.

Research Question 1

The first research question dealt with teletandem implementation, an area that the researcher noted as underrepresented in the literature. The findings for this question, as perceived by the participants, and as interpreted by the researcher, can serve as a primer for the “unwary” and inexperienced teacher, who may be planning to introduce Teletandem as a supplemental immersion activity in the curriculum.

Teletandem Design

Technology and tools. In Brazil, Skype® was used to facilitate teletandem sessions. At the U.S. school, an array of tools and technologies were integrated in the implementation process. This was done to provide the U.S. instructor with optimal tools for assessment and teletandem class management. Sanako® Lab 300 electronic language lab software was the program that connected all of the lab computers to the main teacher’s console. A Skype® plug-in called Evaer was installed to record Skype® audio and video generated during Skype® calls.

Key features of Sanako® Lab 300 digital language lab software were used to create an optimal classroom environment for the instructor. The Lab 300 application provided powerful classroom management tools that enabled the U.S. teacher to preside over multiple Skype® interactions simultaneously. The Thumbnail of a Group feature of Lab 300 provided the U.S. instructor with a thumbnail view of the student workstations in the lab. The U.S. instructor essentially had one-click access to view and/or listen to individual student Skype® sessions. This was a very powerful function and helped to bring order to an otherwise hectic environment in which 10 teletandem sessions took place simultaneously. The Brazilian team did not use additional software to enhance Teletandem.

The Sanako® Duo Media Player (see Figure 2) is the client program of the Lab 300 software that enabled U.S. instructors and students to have a line of communication during the

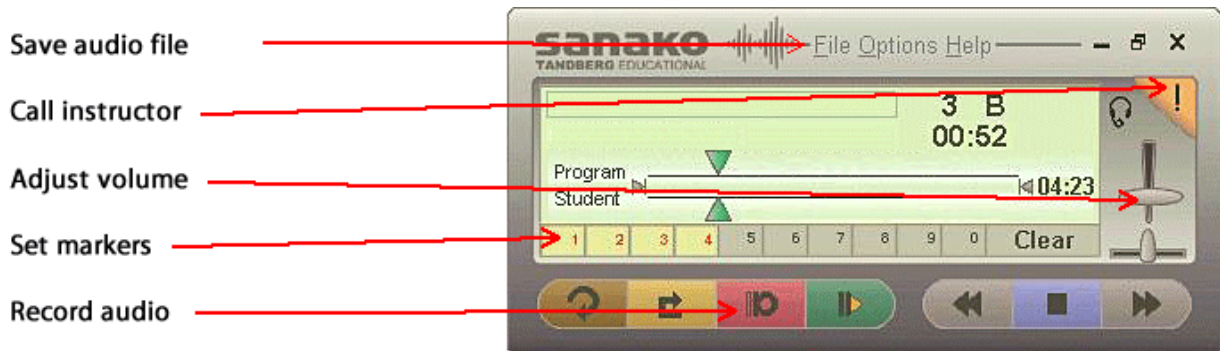


Figure 2. Screenshot of Sanako® Duo student media player and the primary functions used for teletandem sessions. Duo is the client program of Sanako® Lab 300.

sessions. Students used the Duo media player to “call” teachers, and teachers could use Lab 300 to monitor students without disturbing the other student interactions (see Figure 3). The Lab 300 software allowed the U.S. instructor to remain at the console with one-click access to all of the teletandem conversations. Lab 300 provides options to monitor with or without the student’s knowledge. This was particularly useful in cases when the instructor felt his/her presence might inhibit the student. The U.S. instructor was able to assess students during the sessions with Sanako® Lab 300.



Figure 3. U.S. instructor's view from console computer.

In Figure 4, the instructor's view from the console computer shows the classroom layout in Sanako® Lab 300. The classroom lab workstations are situated directly in front of the main teacher's console as the U.S. teacher viewed them. Lab 300 also provided a class management tool called Thumbnail of a Group (Figure 5), thumbnail views of the student monitors. It gave the U.S instructor a panoramic view of the student desktops.



Figure 4. Screenshots of Sanako® Lab 300 interface (left) and Thumbnail of a Group (right).

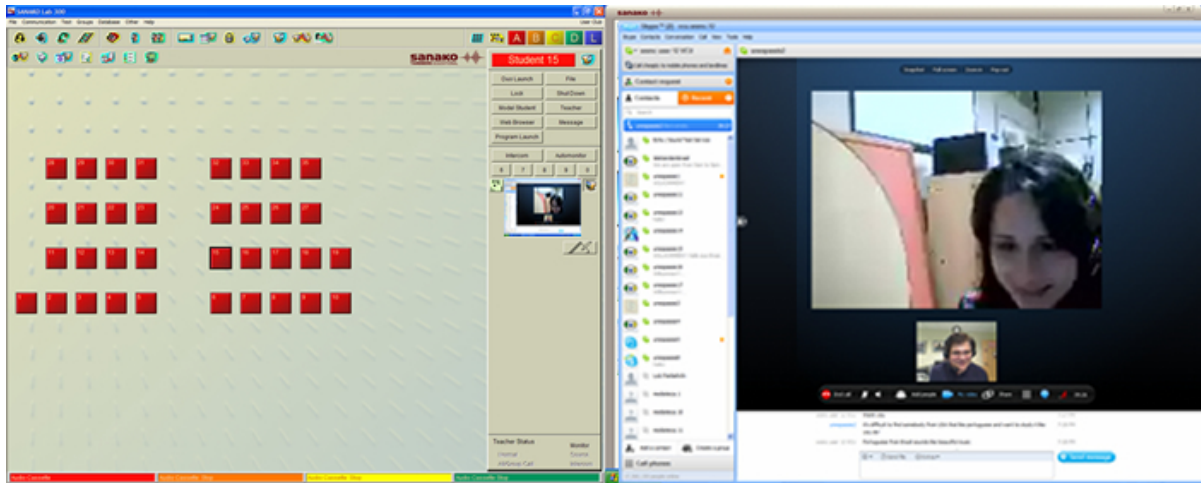


Figure 5. Screenshots of Sanako® Lab 300 interface (left) and full view of student monitor - When a thumbnail (Figure 4, right) is double-clicked, a new window opens (Figure 5, right) showing the full view of the selected student's monitor with an array of assessment and collaborative controls.

The Sanako® program enabled the instructor to conduct the sessions without physically having to move from one workstation to the next, resolving issues while monitoring the student conversations for assessment. The instructor was able to make quick decisions and keep the sessions flowing smoothly while monitoring the conversations from a central location in the classroom. The U.S. instructor and LRC staff member determined that this was the optimal scenario for teletandem assessment with the available resources at the U.S. site. During the sessions, for example, if a student had a problem, with one click they could signal to the teacher at the main console through the Sanako® program—without disrupting the flow of the session. The instructor could respond swiftly by simply clicking on the student desktop icon in Sanako® or on the thumbnail of the desktop to see the student desktop and access the student audio.

The instructor and LRC staff had their hands full with 10 paired learners—each one engaged in their own teletandem conversation. When one student had a problem, whether instructional or technical, the instructor and LRC staff had to respond. When this happened, the other nine U.S. students were essentially left without support. If there were no other problems, everything was fine, but if a second or third problem emerged, the environment became chaotic very quickly. This is evidenced in the video footage of the teletandem room environment at the U.S. school.

The instructor's dual monitor screen view shown in Figure 4 enabled the U.S. teacher to preside over all the teletandem interactions with precision and control. Moreover, the instructor actually had a thumbnail view of each learner pairs Skype® session. The red squares on the left screen represent the student stations in Sanako® Lab 300.

By double-clicking the thumbnail, an enlarged view of the student's monitor opens (Figure 5). This view provided instructors with the capability of taking over the student's

desktop controls (Control) or sharing resources (Collaborate). Enabling the instructor to have this landscape view of the room and student monitors, while an LRC staff person presided over the lab environment, was deemed by the U.S. LRC staff as an optimal way to manage teletandem sessions.

The console was connected to every student station in the room. The client program used by the students was Sanako® Duo Media Player, the client program of Sanako® Lab 300. Duo was available on every student desktop. Students used Duo to record the audio of teletandem sessions. Furthermore, Duo enabled students to electronically notify or beep the instructor during the sessions without having to quit Skype® or leave their workstation. Having this capability was immensely helpful.

Instructional Focus and Design. The U.S. and Brazilian project teams approached Teletandem differently in many respects. The U.S. team's focus was more practical. The U.S. instructor and LRC staff explored Teletandem in the programmatic sense—underscoring aspects having to do with design, technology, and cooperation. The Brazilian team's focus was more research-oriented. Their interest in Teletandem was more social, cultural, linguistic, and pedagogical. A first-time teletandem instructor might assume that the strategies and goals must be the same for both sides, but this was not the case. Providing increased opportunities of immersion and practice with a native speaker was a common goal for both sides. However, many of the rationales, pedagogies, and program structures were clearly different.

For example, in Brazil, “*mediação*” was held after every teledandem session. The students briefly came together with the instructor to reflect on that day's session. The U.S. learners maintained journals in the Blackboard® course management system to accomplish what Brazilian participants were able to achieve in the *mediação*. In Brazil, teachers and students used

Teleduc®, a course management tool similar to Blackboard®, to disseminate course information, documents, and other digital artifacts.

These slight variations in teletandem programming did not impede the implementation process. It was appropriate that each school determine its own strategies and respect and accommodate the teletandem needs and goals of the partner school. Teletandem was semistructured for the U.S. students, but it was relatively unstructured for the Brazilian students.

At the U.S. institution, the instructor assigned themes for each session and prepared task-based activities that enabled students to connect class-taught concepts to a natural conversation with a native speaker. During the sessions, students would often get off topic. The Brazilian participants did not view this as a problem because they expected to do free and unstructured tandem. However, the American students had tasks to complete, so staying on topic during the sessions was a concern.

Three strategies used by the U.S. instructor to track student progress and monitor pairing dynamics were:

1. Recording and archiving the Skype® sessions.
2. Having the students reflect on their experiences in an online journal
3. Monitoring the conversations live through the use of Sanako® Lab 300 software

The researcher noted that recording the Skype® sessions was a particularly useful tool for assessment. Sessions were never recorded in Brazil because they were viewed as private conversations. Recording online teletandem sessions was not a difficult process, but it required some additional steps. The Evaer plug-in was used at the U.S. school to record the sessions as avi video files and audio mp3 files. Recording Skype® video was a processor-intensive process that (at times) affected the video stream, making it freeze and drop out intermittently. The

recording of Skype® audio was not as intensive and, therefore, resulted in more reliable and less problematic recordings. The Sanako® Duo Media Player was used to record the teletandem audio of individual sessions. The scrubbing feature on the Duo media player—being able to click and drag to rewind and fast-forward audio content—was most helpful in reviewing many hours of teletandem conversations.

One of the Brazilian instructors pointed out that the personal nature of a teletandem conversation makes the handling of recorded session data a particularly sensitive matter. Another key consideration was the possibility that some students might feel nervous and lose confidence in their L2 skills just knowing that they were being recorded.

Role of the Language Resource Center. The online language exchange observed in this study required the expertise and support of two LRC facilities and their trained staffs. LRCs are essentially modernized versions of the long-standing concept of the language lab. The purpose of LRCs is to provide instructional technology support to a language departments' faculty and students. The LRC staff in Brazil was comprised primarily of language teachers and graduate students who were knowledgeable and experienced in computer-mediated communication, foreign language instruction, and other relevant subject areas.

There were many similarities between the two LRCs. There were also some fundamental differences in how the facilities were structured and how they served their respective faculty and students. In general, however, the main purpose of the LRCs was to harness technology in support of a more engaging, dynamic, and interactive language learning experience for the students.

The center at the Brazilian school was a smaller facility. There was one full-time staff person, who oversaw a group of student workers. The user base of the Brazilian LRC was

comprised of a much smaller group of students, who were mainly future English teachers in training. The LRC at the U.S. school employed one specialist and a small staff of student assistants. The U.S. LRC had a larger user base that came from the general student population. The majority of U.S. students took foreign languages to fulfill an academic requirement. The U.S LRC was more developed in terms of services and resources. The Brazilian LRC, however, was more advanced in the area of research and teaching. Both LRCs were adequately equipped for Teletandem.

The U.S. LRC staff had never implemented an online TLE program prior to participating in the pilots of this study. However, their IT expertise coupled with their interest in Teletandem, made the U.S. school a particularly good fit for this study. Together with the researcher, the LRC staffs of both schools worked collaboratively throughout the project.

Having access to the LRC was necessary for several reasons. First, most foreign language teachers who teach conversation and fluency courses are typically part-time instructors. They might not be prepared to organize and implement an online teletandem exchange without training or support. It would be out of proportion to expect one inexperienced teacher to oversee the multiplicity of tasks involved with Teletandem. With the support of the LRCs, the researcher noted that teachers had more time to focus on teaching and assessment, while the LRC staff handled the technical and logistical components of Teletandem. It was a complementary match.

The LRC staff was responsible for carrying out specific tasks that were vital to the implementation process. Installing, configuring, and testing the Skype® accounts was a rudimentary step in the implementation process, but it would be a mistake to trivialize this. This aspect of Teletandem was very unforgiving when mistakes were made. Testing proved to be absolutely necessary. Checking the webcams and audio and video settings prior to the sessions

was vital. The LRC staff presided over the sessions. They videotaped sessions, took pictures, and set up session recordings with the use of Sanako® Duo Student Media Player and the EVAER plug-in for Skype® call recording. After the sessions, the LRC staff was responsible for collecting session recordings and text chat logs and archiving them as retrievable media and text files. These processes were time-consuming but fairly straight-forward.

The LRC staffs at both sites were able to provide ample support to their respective teletandem teachers and students. The LRC staff at the U.S. school was introduced to a new set of tasks associated with international cooperation that they had never been expected to perform. Teletandem had already become routinized at the Brazilian school at the time of this study. The teletandem labs in Brazil were not necessarily better or more technologically advanced than the U.S. labs, but the teletandem operation was smoother in Brazil because Teletandem was already a routine activity there.

Teletandem Logistics

In order to take Teletandem from concept to reality, an array of basic operations and logistical tasks had to be performed to ensure that the program could be designed and implemented. These activities were central to the project and were reported in detail.

Finding a sound institutional partner. Perhaps the most grueling undertaking of all in this study was the search for a partner school. This was noted frequently and consistently throughout the study. The researcher and other members of the U.S. team perceived the search process to be quite frustrating and discouraging. Navigating the institutional search phase of Teletandem required immense tenacity and persistence. The U.S. LRC staff member stated:

Identifying and selecting the right partner institution was complicated. The setbacks and failed attempts would wear on any instructor. When Teletandem did not go well, the

students were disappointed, the instructor was frustrated, and a sense of discouragement was prevalent. However, it pays to be persistent. Having a good partner will greatly enhance the chance for success.

The initial phase of Teletandem involved a myriad of simple and complex details. There was no handbook or step-by-step manual for finding the optimal teletandem partner institution. It was understood by the U.S. team that if the partnership did not work out, repeating the laborious search process would be inevitable.

There were many factors considered during the search. The U.S. team asked the following questions repeatedly throughout the search process:

1. What makes a good partner?
2. Which criteria are most significant in selecting teachers and departments of foreign schools for online TLE activities?
3. Which foreign schools are adequately staffed and equipped to explore an organized online language exchange?
4. Which foreign schools are available and willing to explore online TLE?

The criteria used to select the Brazilian school, was based on faculty, teletandem experience, resources, and interest. In the event that a sound partner could not be found, the U.S. team considered asking learners to find their own partners through Facebook® and online TLE sites such as *My Language Exchange*, *The Mixxer*, and many others. However, this would have defeated the purpose of the study, which was to examine class-to-class teletandem implementation across joint curricular partnerships in higher education settings.

The U.S. team members agreed that having a focused and enduring search plan was essential. Time zone differences and unaligned academic calendars were some of the factors

considered during the search process. The researcher noted that differences in academic structure, instructional philosophies, and institutional policies were also critical issues that had to be addressed before Teletandem could be realized. Negotiating the programmatic details with the instructors and LRC staff of the Brazilian school was an intricate process, but it was not overwhelming.

The first attempts to organize class-to-class teletandem sessions were mired in problems. Communication was slow and strained. Moving projects forward was taxing. The original plan was to develop a Spanish-English teletandem program, but ultimately, a large Brazilian state university was selected. This was due to the fact that one of the Brazilian school's campuses housed a highly developed teletandem program with multiple TLE partnerships with other American, European and Asian universities. The school's teletandem program was designed to create opportunities for Brazilian students to interact with native speakers of Chinese, Japanese, Italian, Spanish, French, and English.

After 6 months of planning the project, coordinating the campus visits, and getting approval from the two schools, language departments, and research ethics boards, the researcher in cooperation with the U.S. LRC staff and instructor, entered into a joint academic venture with the Brazilian school. In reality, the partnership was between the two LRCs and the users of the LRCs—namely, the teachers and students of the respective language departments. Virtually all of the activities, processes, and functions of Teletandem occurred in the LRCs of the participating schools.

When it was determined that the Brazilian school was the best match for Teletandem, the U.S. team changed the L2 from Spanish to Brazilian Portuguese. The programmatic details were negotiated and implemented by the instructors and LRC staff of the two schools. For the

purposes of this study, they agreed to collaborate on this project without a signed institutional memorandum of understanding (MOU). The possibility of entering into a formal agreement at a later time was discussed, but an official MOU was not required for this study.

Differences in academic calendars, time zones, and cultural values were all factors that were addressed throughout the search process. The time zone difference between Brazil and the United States (Eastern Standard time) is 1 to 3 hours, depending on the time of year. The Brazilian academic calendar began in early March and the U.S. calendar began in late August. The holiday breaks were different, too. Despite these constraints, the project teams were able to work out a schedule that allowed for two sessions per week for 10 weeks, for a total of 20 sessions (See Appendix B).

Cultural differences were abundant. There were many interesting differences noted in the attitudes, behaviors, and perceptions of the U.S. and Brazilian participants. The Brazilian teachers often referred to a concept called “*transculturalidade*” (Eng = transculturality)—a phenomenon that occurs when two speakers of different language and cultures interact in a reality in which equal consideration is given to both languages and cultures. Transculturality in online language exchange was a widely studied research topic at the Brazilian school, and one that had not been previously explored at the U.S. school.

International cooperation and communication. Once the Brazilian institution was selected for the project, the U.S. team, comprised of the Portuguese language instructor, the LRC staff, and the researcher initiated contact with the faculty and staff at the Brazilian school to address scheduling and other programmatic details. Communication was conducted seamlessly via email and Skype®. In the e-mail correspondence shown below, one of the Brazilian instructors passes on information to the U.S instructor before going out of town. The purpose of

the e-mail was to ensure that the students and LRC staff were ready for the upcoming session. The instructors and LRC staff on both sides were copied on the email. This exemplifies the fluid communication that existed between the two teams in planning and coordinating the sessions.

Colegas,

Segue, em anexo, listagem da parceria neste semestre.

Na próxima sessão, terça-feira, dia 10, estarei em SP e Raisia e Lígia vão assessorar a interação. Conto também com a colaboração do José, monitor do Centro naquele horário (18h30 – 19h30). Os alunos brasileiros devem chamar seus parceiros nos respectivos Skype IDs da tabela, uma vez que nossos computadores tem apresentado problemas.

Obrigado,

Rosário

English Translation:

Colleagues,

Attached is the (student/partners) list for the (teletandem) partnership this semester.

Next session, Monday, the 10th, I will be in São Paulo and Raisia and Ligia are going to preside over the interaction. I am counting on Jose's collaboration also, the LRC staff member (who works) at that time (18h30 – 19h30). The Brazilian students should call their partners with the right Skype IDs listed in the table (of the attached spreadsheet), one time our computers presented problems.

Thanks,

Rosario

This e-mail correspondence shows two things: (a) the instructor's major concerns are the date, the times, and the Skype® usernames, and (b) the instructor used e-mail to connect

students, LRC staff, and the U.S. instructor. Throughout the project, new cross-collaborative relationships were cultivated through an interconnected group of language teachers, LRC staff, and graduate students. The topics of their discussions mostly involved scheduling, pairing students, compatibility issues, LRC support, and use of Skype®, but often the conversations were social in nature. Teletandem was progressively explored and implemented through processes of negotiation and cooperation between the participants on both sides. Teletandem is founded on relationships—at the student level, at the instructor level and at the institutional level.

At the time of this study, the Brazilian school, according to its program director, had overseen “close to 150 teletandem partnerships” with other universities, mainly in the United States and Europe. Its faculty members were very experienced in Teletandem.

The U.S. team lacked teletandem experience, but was motivated and prepared to explore online TLE in-depth. The researcher described the Brazilian instructors and LRC staff as reliable and highly motivated. Previous exploratory initiatives with other foreign schools had not produced such positive outcomes. The U.S. team viewed good communication with the partner school as essential to delivering Teletandem. When attempts to connect students and conduct sessions were not successful, disappointment and frustration set in. This is clearly expressed in the following passage from the U.S. LRC staff member’s interview: “The most critical factor is reliability. You know a school is unreliable when there are gaps in communication, unanswered e-mails, sessions being cancelled, and students not showing up.”

The partnership with the Brazilian school was remarkably successful. All of the sessions were carried out. There were minimal technical glitches. The two teams worked together on many activities, discoveries were made, and many new relationships were forged through Teletandem. The teams got to know one another quite well considering the fact that they never

actually met in person. Things went so well, in fact, that before the study was completed, the U.S. and Brazilian teams had already begun discussing plans for future teletandem projects.

The U.S. team made several key observations that were perceived by the researcher to be one of the major findings of this study—Teletandem, delivered repeatedly, became routine very quickly. Eventually, the implementation tasks were routinized and new working relationships between the stakeholders at the two schools were formed. When this happened, coordinating sessions became a simple and repetitive language lab activity, and overseeing new projects became as routine as any other lab activity. This challenges the preconceived notion that class-to-class teletandem projects are inherently complicated. The U.S LRC staff member contributed many insightful comments to the ongoing discussion of this topic:

It was hard at first, but things became routine very quickly. We just knew what to do and when to do it, because there was good communication on both sides. We knew all of the players in Brazil. With Skype® and e-mail, it was easy to communicate. You cannot deny that distance was a factor, but it did not impede our ability to cooperate and coordinate together. The students benefited from Teletandem, and the teachers and staff were enriched by their interactions with the Brazilian instructors, graduate students, and other staff. I attribute this success to good relationships, good communication, good tools, good vision, and commitment on both sides.

The researcher and LRC staff members consistently noted throughout the search and planning phases that the routinization process was a positive step toward sustaining Teletandem. The second major finding was that the processes and contexts of Teletandem were far more successful when the partnership reflected a hybridized sociolinguistic friendship manifested with online videoconferencing tools. The Brazilians called this phenomenon “transculturality”.

Pairing students. Students and instructors generally agreed that compatibility between the students is necessary for the teletandem partnership to grow and evolve. The depth and complexity of the compatibility can only be determined by the participants. One Brazilian student felt a positive teletandem experience hinged on this factor alone:

When the students have nothing in common, the conversations are not interesting. When the students feel comfortable with each other, they are more inclined to open up about themselves. When this happens, the sessions turn into an ongoing conversation that becomes more and more compelling over time. The opposite is true when students are not compatible.

Another student suggested that the pairs should be changed during the first three sessions in order to allow learners to choose a partner with whom they felt comfortable: “It’s definitely worth meeting different students in the beginning to get the right language partner. It’s important to find the right match. Having a partner who is difficult to talk to can make the sessions unpleasant.”

The U.S. team was not in favor of allowing students to choose their own partner. One concern was that a selection process could quickly turn into a personality contest. The other concern was that some students would not be selected. Several students reported that an incompatible match could lead to awkward and uncomfortable moments during the interactions.

The students differed in opinion on how partners should be set. Some had no preference as to who their partner would be, but others expressed a strong desire to be paired with someone who fit a particular profile in terms of gender and personality type.

The Brazilian team expressed a preference for random pairing, but underscored the importance of monitoring the learner pairs to ensure that students felt comfortable with their

partners. In Brazil, this monitoring was done during the mediação sessions. U.S. students were encouraged to make a concerted effort to foster a quality relationship with their teletandem partner regardless of compatibility.

Since the student participants were essentially in the same age group, 18 to 25 years, the implication of age was simply not perceived as a major factor in this study and was therefore not examined. However, the researcher acknowledged that age might be a significant factor in other teletandem settings. For example, one Brazilian student commented that Teletandem might not be appropriate for younger learners:

Teletandem requires a high level of maturity. Younger students may lack the maturity for Teletandem. That's not to say that younger learners would not benefit from Teletandem—they may or may not. Nevertheless, having to deal with maturity issues adds an extra layer of complexity to Teletandem, particularly for the teacher.

Virtually all students at both sites expressed preference of keeping the same partner, regardless of gender, age, and/or personality type. One Brazilian student commented:

Having one partner allowed the conversation to evolve over time. The themes and topics of our discussions became more complex with each session and our language skills improved as a result. Having multiple partners essentially meant repeating the same conversation over and over again.

The U.S team used a personality questionnaire for the pilot, but dropped it when Brazilian instructors expressed a preference for random pairing. Several Brazilian participants pointed out that a good match on paper might not necessarily translate into a good teletandem partner. Hence, using a personality survey may not always result in good pairs.

There was also the possibility that only one of the partners would truly be satisfied. In this situation, some students might try and conceal dissatisfaction with their partner to avoid hurting their partner's feelings. One student stressed that students know when an interaction is overly awkward. Students who felt their partner was not a good match, described Teletandem as strained and uncomfortable. If after three or four sessions, incompatible pairs cannot find any common ground, instructors might consider changing partners.

The Brazilian students were wise to not expect an ideal personality match. They anticipated big differences and this was one of the aspects of teletandem that made the experience so valuable for them. The Brazilian students were aware of the social and cultural differences; they welcomed them and reflected on them.

My partner [in the U.S.] likes to talk a lot and sometimes she interrupts me. I don't think she does it to be rude. I think she is just excited and happy. Most Brazilians, not all of course, but most, would consider that rude. I do not consider it rude. To me, it is just language practice. My partner from England never interrupts me. It may or may not be a cultural thing. I don't know, but I don't say anything when my American partner interrupts me. I just listen to what she has to say and try and learn from it.

One Brazilian student underscored the importance of coming to Teletandem without any preconceived notions: "U.S. foreign policy is not very popular in Brazil, so I try not to make those connections when I meet with my American partner."

Teletandem provided an opportunity for students in rural Brazil to peer into a world that inaccessible to most Brazilians. Few Brazilian students will ever have the chance to study and live in the United States or in Europe, so they tend to perceive Teletandem as an invaluable opportunity to interact with students of other languages and cultures and to help those students to

learn about Brazil and Brazilian Portuguese. Regardless of whether the match has chemistry or not, every student pair has the opportunity to learn and to share. One American student had an interesting perspective on the matter:

One of the reasons Teletandem is so intriguing is because there is always a sense of mystery surrounding your partner. After all, it is someone that you've never actually met, but you really get to know the person well over the course of the program. After three or four meetings, the conversations start to become quite personal. You begin exploring topics that you're not used to talking about with your regular friends or even with your close friends. There are going to be differences. You have to accept that.

She knows that she helps me when I explain something and I know that I'm helping her. It really helps that we have the same skills in the target language because it helps us both to be less inhibited about making mistakes in the target language.

I know I have an idea about her sense of humor, and I know about the things she likes and her boyfriend's name. I know her family and she's seen my house and I introduced her to my roommate, so I think we know each other pretty well for only having met on Skype®.

There were some students on both sides who complained about having an incompatible teletandem partner after the first sessions, but in general, students were accepting of their language-learning peers and made an effort to be engaging, even when the match was not ideal. Eventually, the learner pairs became adjusted and complaints about incompatibility diminished.

The most important consideration for both teams was to conduct the sessions without disruptions. The U.S. instructor consistently reminded students of the importance of "building trust to break down barriers" and enhance self-confidence. Several Brazilian instructors were

quick to rebut that building trust and confidence, in part, depended on the compatibility between the paired learners.

In general, students on both sides conducted themselves with maturity and tact and this was most helpful to the teacher and LRC staff. There was only one instance in which two U.S. students complained about the same Brazilian student who had a mild form of epilepsy. This student apparently had not disclosed his condition to anyone, and when he seized during some of the sessions, the U.S. students were unaware of what was actually happening. The seizures were minor and inconsequential in the mind of the Brazilian student, but the American students, unaware of the condition, perceived the behavior as intentional. The Brazilian team reassigned the epileptic student to another teletandem class with a different school. Other than this one outlier case, there were no major problems involving incompatible partners.

It should be noted that most of the participants, including the researcher, the instructors, and the LRC staff were of the opinion that the Brazilian students, in general, conducted themselves more maturely than the American students. There were visual cues that led the U.S. team to make this general assessment. Some of the American students were observed slouching in their chairs during the sessions, making rude comments, and showing up late more often than the Brazilian students. These behaviors were noted by the U.S. instructor and observed by the researcher on several occasions. Instructors on both sides agreed that lack of maturity can be an impediment to Teletandem.

Another key factor to consider in regard to the learner pairs was student attendance. When a student did not show up to a teletandem session, his/her Brazilian partner was essentially left without a partner to complete the session. This was a major problem.

During this study, absences were generally minimal and they tended to balance out on both sides. There were never more than one or two students absent on either side. Subsequently, the need to make adjustments as a result of student absences was minimal.

One strategy used to deal with absences was having the LRC staff member or instructor fill in when a student on the other side was left without a partner. The Group Calling feature in Skype® was also employed to make pairs of three when one student remained without a partner.

Pairing the students during the sessions was a process that had to happen quickly or session time would be lost. After Teletandem became routine, the students knew the teletandem drill, because they learned what to do at the start of each new session. They knew who they had to call, which Skype® username to use, which Skype® account their partner was using, and how to navigate the Skype® interface for optimal telecollaboration.

The LRC staff at the U.S. school archived all of the recorded teletandem sessions and chat log text generated during the sessions. Coupled with the student journals, these artifacts were helpful to the researcher, instructor, and LRC staff in making adjustments at pivotal points in the program. After reviewing the individual teletandem interactions, the researcher noted that the most successful teletandem pairs were typically the students who were consistently motivated and present for each session.

The sessions allowed for 30 minutes in each language. There were a total of 20 sessions. In essence, the program was scheduled with a specific number of hours—10 hours to be precise, or 600 minutes per language. Logically, less time spent interacting in the target language translated into less time practicing and being immersed in the language. Late arrivals and no-shows were not tolerated at the Brazilian school. According to Brazilian team members, students with two unexcused absences were dropped. The American students had more flexibility,

because they were officially enrolled in a class and were required to complete teletandem as part of the course requirements and as part of their grade.

Setting up the project. The instructors and LRC staff on both sides agreed that a teletandem project should always include a student orientation prior to the actual sessions. This is particularly helpful when working with students who have never experienced Teletandem. Many of the issues and problems that commonly occur during Teletandem can be addressed in a pre-teletandem orientation as they were in this study.

The U.S. orientation session was intended to inform students about Teletandem in advance so that they would not experience any unsettling surprises, and so that they would appreciate the fact that they were about to enter into a partnership with a real person with real objectives and real expectations. Anything less than a total commitment from the students on both sides was perceived as a potential hindrance that might result in delays and missteps.

For this reason, the Brazilian teachers felt that Teletandem in middle and high school settings would come with an additional set of problems—mainly stemming from maturity issues. The U.S. teacher also expressed the importance of student maturity in Teletandem:

Good cooperation is the responsibility of the students, not just the teachers. A project can deteriorate quickly when students do not show up or conduct themselves in a manner that is less than courteous, thoughtful, and culturally sensitive. In Teletandem, maturity matters. The partnership demands it. Instructors must find a way to convey to their students how serious the commitment is and ensure that they appreciate the opportunity and are inspired, energized, and motivated by it.

Maturity issues may still come up with young college learners. Student conduct was not the primary focus of this study; but there were instances, particularly on the U.S. side, in which

lack of maturity was a problem. For example, on several occasions one of the American male students openly stated that he wanted to be paired only with attractive females. The same student would slouch in his chair and yawn while his partner was speaking. Even though these instances did not reflect the behavior of all students, they were noted as potentially problematic maturity issues.

There were technical problems and there were people problems. The findings of this study suggest that the majority of troubles with Teletandem resulted from complications with people, rather than with tools and technology.

Having a backup plan to deal with inevitable predicaments greatly improved the efficacy of Teletandem. The U.S. team discussed in advance how it would handle student absences, complaints of incompatibility, and technical issues. The U.S. LRC staff member underscored that there was very little room for error during session implementation, primarily because “there was so little time to get students paired up, connected, and talking in time to get the full 30 minutes in for each side.”

Both teams used lab/classroom spaces in the LRCs of each respective school. The administrative structures of the two centers were unique, but there were strong parallels between the two sites in terms of purpose and design. Therefore, both are referred to as LRCs throughout this study. All of the strategies used by the U.S. team throughout the implementation and delivery processes of this teletandem project are outlined in Table 4.

Throughout the implementation process, the researcher referred to previous studies to create checklists for the project that enabled the U.S. team to address implementation issues before, during, and after the interactions.

Research Question 2

Perceived Outcomes of Teletandem Impact on Learning

The U.S. and Brazilian participants generally perceived Teletandem as an appropriate learning intervention for the skill level of the students observed in this study. Both groups agreed that Teletandem was a highly effective method for building fluency skills and enhancing intercultural awareness. Both groups also agreed overwhelmingly that having one partner was better than having multiple partners.

These views were expressed in different ways, but the fundamental rationales and objectives of Teletandem were perceived similarly by both groups. There were also key differences in the ways both groups viewed various aspects of Teletandem. The researcher strived to bring these dissimilarities to light to determine whether these contrasts had an impact on student learning.

The data analysis was focused more on interpreting the participants' own views and attitudes about Teletandem. Throughout the data collection phase, the researcher repeatedly asked the following questions:

1. What did the participants say?
2. How did the participants feel?
3. What did the participants do?
4. How did the participants react?

Table 4

Strategies Used by U.S. Team to Optimize Implementation

Teletandem implementation task	Strategies used
Finding a sound partner.	<ol style="list-style-type: none"> 1. Initiated web search, prepared a standard letter of inquiry in English and in the target language. 2. Created lists of potential partners, contacted schools, Created a network of contacts. 3. Created a file on each potential partner school. 4. Initiated exploratory e-mail discussions with contacts abroad.
Developing a good relationship with the partner school.	<ol style="list-style-type: none"> 1. Communicated regularly via e-mail and Skype® with faculty and LRC staff of partner school 2. Responded to e-mails in a timely manner. 3. Suggested Skype® to the contact person. 4. Kept Skype® on continually to receive incoming calls.
Scheduling teletandem sessions, dealing with time zone differences.	<ol style="list-style-type: none"> 1. Planned teletandem calendar in advance. 2. Demonstrated willingness to be flexible with partner school. 3. Found ways to work around time constraints and scheduling restrictions.
Avoiding technical problems with connections, bandwidth, audio, and video signals, etc.	<ol style="list-style-type: none"> 1. Installed, configured, tested computers and software in advance. 2. Obtained authorization from network services department to conduct full-class Skype® sessions, resolved bandwidth and firewall issues. 3. Created Skype® usernames and exchanged account information with partner school. 4. Set up Skype® program and settings in advance. 5. Configured and tested Skype® video recorder plug-in. 6. Used a hand-held device with Skype® during the sessions for mobility.
Harnessing instructional technology.	<ol style="list-style-type: none"> 1. Discussed tools during the orientation session to ensure students knew how to navigate Skype®, use the text chat feature, use Sanako® Duo Media Player, troubleshoot basic audio and video issues, and adjust settings. 2. Used Sanako® Lab 300 software for classroom management and assessment during sessions. 3. Recorded and archived Skype® session audio and video, videotaped class sessions, saved session chat log text.

Table 4 - continued

Teletandem implementation task	Strategies used
Teletandem design.	<ol style="list-style-type: none"> 1. Trained instructor to use Sanako® Lab 300 for classroom management and student assessment during sessions. 2. Held an orientation session for students. 3. Trained students to record session audio and video. 4. Assigned task-based activities with themes. 5. Asked students to document their experiences in online Blackboard journal. 6. Used recorded and archived session audio (and video) for skills assessment and student reflection. 7. Exported and archived text chat logs from each Skype® session to serve as a self-reflection tool for students.
Dealing with student tardiness and absences.	<ol style="list-style-type: none"> 1. Made students accountable for tardiness and unexcused absences. 2. Students contacted each other in advance via e-mail and Facebook® to plan for missed days in advance.
Sustaining a teletandem partnership.	<ol style="list-style-type: none"> 1. Treated faculty, staff, and students at partner school cordially and respectfully. 2. Planned a campus site visit to partner school. 3. Discussed possibility of signing official memorandum of understanding (MOU). 4. Discussed possibility of creating opportunities for enhanced student/teacher mobility. 5. Collaborated on joint grant and research projects.

Student Perceived Outcomes

The student participants in the U.S. and in Brazil responded favorably to Teletandem. In general, students expressed positive feedback about the sessions and their experiences. Each learning pair was unique, so there was no way to accurately measure the impact of Teletandem on each student, but it was possible to generalize by observing student behavior during the sessions, by viewing recorded teletandem interactions, and by gleaning insight from the student perceived outcomes.

The online exchanges were well-received by both groups of students. Participants commonly expressed a strong preference to the L2 with a native speaker as opposed to using software or simulated role play in class. One student described Teletandem as a more “natural” way to practice the L2.

Students generally agreed that being immersed through Teletandem on a regular basis resulted in a high impact learning experience that was effective, enriching, and fun. “In class you don’t learn slang, you don’t learn expressions used in everyday language, because you’re not exposed to the spoken language and you don’t learn to speak the language the way it is spoken by native speakers.”

Teletandem helped students to better understand their own native language and culture, because they shared it with someone who appreciated it and desired to learn more about it. The reciprocal nature of Teletandem made the sessions dynamic and engaging. Students had no choice but to collaborate. They had to interact and be engaged. Exchanging the language was not enough. They had to be immersed in both languages and cultures as they collaborated with their partner in tandem.

Students on both sides overwhelmingly agreed that traditional classroom activities and rote drills were not as effective in building linguistic and cultural competencies as Teletandem. Teletandem forced learners to communicate, and made them confront their own insecurities about speaking the L2 with a native speaker. In this sense, Teletandem provided a level playing field—both students were at a disadvantage in the L2.

Like any relationship, the interactions began with introductions and evolved from there. Not surprisingly, some of the student pairs developed personal friendships. Student interview data showed that Teletandem began awkwardly for most U.S students. However, they were able to adjust to the bilingual setting, naturally and quickly.

Students at both sites overwhelmingly agreed that Teletandem was more effective when learner pairs were fixed. When there were partner changes, deeper topics were not explored and less confidence was gained in speaking the L2. There were several instances when it was necessary to change pairs to adjust for unplanned absences and when dealing with incompatibility issues. Students generally agreed that changing partners was an interruption in progress, because a new partner meant having to repeat the general introductions session.

I prefer staying with the same partner because it makes it easier to progress. Having a new partner essentially means starting from the beginning. I would prefer to start talking with my first partner Giovanna because I had much better chemistry with her and I felt like my Portuguese was becoming stronger because of our conversations. My partner kept getting switched, and I think it really held back my learning. I think I needed more time with one partner to build rapport.

On the other hand, changing pairs (when needed) allowed learners to hear a different voice and interact with a new personality. Students gained additional perspective when

interacting with a new partner. This was viewed as enriching too, albeit less helpful in the context of building communicative skills. Instructors and LRC staff at both schools shared this view.

With one partner, the relationship became more meaningful and students became more comfortable speaking the L2. Language and communication barriers were overcome and students began talking freely about topics that truly interested them.

Ligia and I teach each other so many things, like music. It's a funny thing how we can learn about new and fantastic things about our own culture through the eyes of non-natives. For example, Ligia sent me a link containing a music video called 'Her Morning Elegance' by an artist based in the United States named Oren Lavie. I have never seen a music video like this! It was incredibly creative. Chances are I would have never come across this artist if it were not for Ligia's sake. Now, here is an example on my behalf. I started talking about a Brazilian song – "*Samba em Preludio*" by Vinicius de Moraes that I was listening to just before meeting with her. She couldn't recall the song so I sent a link containing the song to her. Once she began listening to the song, she immediately recognized it. She told me that she hadn't listened to this song since her childhood and added how she greatly appreciated how I had reminded her of this wonderful song.

Excerpts taken directly from the Blackboard student journals during the first 2 weeks of Teletandem illustrate the hesitation that some U.S. students felt over meeting their new Brazilian partners. During the first 2 weeks of Teletandem, many U.S. students were quick to point out the negative aspects of Teletandem compared to the Brazilian students, who reported overwhelming positive comments.

The first thing I noticed about my partner's accent when speaking Portuguese is the way she pronounces the *-ão* sound. She has difficulty saying words like *coração*, *mão*—things like that. I like the way she talks though, and hope she keeps her American accent, because I think it sounds good. Brazilians are not critical about the way non-natives speak our language. Brazilians appreciate when foreigners make an effort to learn Portuguese—even if they have an accent or make mistakes.

The U.S. student online journals provided a rich compilation of reflective comments. The names of the participants quoted or mentioned were changed in the transcriptions to protect student identities. Students reflected on a wide range of topics. In the following journal entry, one U.S. student writes about the how teletandem time is divided between Portuguese and English:

Today, I talked to Fausto. It seemed he was very adamant about speaking more in English than in Portuguese. If I could not express myself in Portuguese or thought for too long he would immediately rush me to say it in English. Multiple times he would ask me to speak in English even though we are supposed to divide the time equally for each language. Instead our session was constantly a mixture between both [languages] which I think was not constructive. I am not the blunt type, so I tried to subtly redirect us into Portuguese, but it seemed English would keep being pushed.

In another journal entry, a U.S. student provides rich reflection on various problems impacting Teletandem:

Renata and I had some trouble starting out today because the connection kept failing. This session was a little less awkward than the previous session, but I still found myself feeling uncomfortable speaking with her because she couldn't understand what I was

saying—which would make me over-think and over-analyze. This really affected my ability to form coherent sentences and thoughts in Portuguese. Although Renata is very nice, and does correct me, I just feel tense and uncomfortable speaking—her facial expressions make me feel like she has no idea what I am saying. Maybe she is not interested. I am usually always asking questions and suggesting topics to talk about. She also speaks very fast once she says something. I didn't feel that this session was very helpful, although I did learn some new vocabulary, which was the positive outcome of this session.

Other negative comments by U.S. students noted feelings of “awkwardness” during the initial sessions. “During today’s session was frustrating. I felt that Roberta did not understand what I was saying. This made me feel very uncomfortable speaking in Portuguese. It got better as we talked, but I still felt awkward.” Three weeks later, the student’s comments began to reflect a different tone:

Teletandem went well again today. Sometimes Roberta and I run out of things to talk about and it gets a little awkward, but that’s to be expected when talking to someone from another country whom you’ve never actually met in person. Overall, I think Teletandem is helping me to improve my Portuguese.

In general, the journals showed a dramatic shift in student attitude toward Teletandem over time. At the onset, the U.S. students expressed a sense of nervousness about interacting with foreign students. During the second half of the program, the U.S. students were more open to the unpredictable nature of the conversations and were more accepting of their partners. The following comments were taken from the journal entries posted in the final three weeks of

exchanges: “Renata is so cool! She may be Brazilian, but we have so much in common. She talks to me about her everyday life, and I can totally relate!”

Other U.S. students reported positive experiences immediately following the first session. In the next journal example, one student explained how being comfortable resulted in feeling less insecure about making mistakes in the target language:

This was the first Teletandem session, my partner was Ligia. This session was the perfect beginning because my partner made me feel very comfortable speaking and this helped me to feel the language. I was able to talk to her and not try to be so perfect, but just communicate my thoughts in Portuguese. At the end we corrected each other on mistakes, and this was wonderful, because she explained what I did wrong and why it was wrong grammatically. Then she told me how to say it correctly. It was constructive.

The students’ journal entries also gave the instructor and researcher rich examples of significant differences between the Brazilian and U.S. students. In general, Brazilian students consistently exhibited more maturity than the American students. Brazilians were generally more open and honest about themselves during Teletandem. This is reflected in one of the U.S. student’s journal entries. In one journal entry, the student wrote about how surprised he was that his partner would talk so openly about something as personal as facial blemishes:

One thing that I find surprising at times is Amelia’s unabashed ability to talk about anything. For instance, during our teletandem session on Friday, I saw her poking something next to her lips. I found this to be curious and immediately asked her what she was doing. ‘Tenho uma espinha, Jason.’ She was touching a blemish on her face and speaking about it so openly with me. This comment surprised me and the question that

followed caught me off-guard too. ‘Jason, você tem espinhas?’ [English = ‘Do you get pimples?’]. I have never spoken to a woman about any issues I may be having with acne. I must say that I was quite uncomfortable when she asked this. I thought to myself, ‘I can’t tell her about my defects! Why is she asking me this?’ Who was I really afraid of admitting this all to, Amelia, or the real critic, me? When I told her this, it was almost as if she took on a motherly role and tried to soothe me with her words of kindness. I was so nervous to talk about myself that I clouded over the reality of what Amelia was asking me. She exposed herself and in turn asked an innocent question. Maybe she was curious if Americans get acne at all! Maybe all the glitz and glamour of American movies makes it seem like we are this blemish free society. We need to keep ourselves in check when we interact with others so as to not impose our insecurities upon others.

Some of the passages taken from the U.S. student journals illustrate how comfortable the Brazilian students felt during the sessions. In general, the interview and screen-captured data suggests that it took more time for the majority of U.S. students to adapt to their teletandem partner. The journals became an online archive of each student’s teletandem experience. Having students reflect on each session by submitting brief text entries to note a session’s themes and contexts was useful for self-reflection and assessment. The journals may have helped some of the students to be more engaged in their learning, but the extent to which the journals provided useful information about teletandem implementation and impact on learning varied significantly. Some of the student entries were less than introspective.

“I had the same partner. We continued our conversation from where we left off last time.”

“I didn’t practice Portuguese as much this week and I feel like I am speaking worse.”

“Teletandem was good today. I had a different partner but we both got to practice. Teletandem is helping me...I think.”

Videotaped recordings of reflective mediação sessions in Brazil showed more specific references to the language learning and communication. The researcher concluded that talking about Teletandem during mediação in a group setting with other teletandem students was profoundly more reflective than writing entries in the online student journals. However, the journals are still an excellent option when mediação-style meetings cannot be held. The following excerpts came from some of the mediação sessions at the Brazilian school. They are translated in context from Portuguese to English.

I noticed that my partner gets confused when I say ‘cê’, which is short for você [you]. Maybe because ‘se’ [which has the same sound as cê] is a common sound in many Portuguese words and because it is also a reflexive pronoun, but ‘cê’ is commonly used in Brazil as a shortened version of ‘você.’ We already talked about this and he is aware of it, but he still has problems with it.

The nasal sound of Brazilian Portuguese coupled with the speed of spoken Portuguese makes it necessary for me to speak slowly and clearly, which is not natural for me. But, if I do not annunciate my words, my partner may not understand me. I can’t just say ‘nda-para-você,’ like I would normally say it. I have to speak clearly—‘não da para você.’

The student discussions ranged from being semi-structured to being totally unstructured. The Brazilian team preferred to leave their English half of the hour completely unstructured. The U.S. students were assigned task-based activities during their Portuguese half of the hour—to help guide sessions and to reinforce concepts presented in the classroom. Often, students

would get off topic and the activities would not be not completed in the 30 minutes allotted.

This was not viewed negatively by the instructors as long as students made an effort to complete the tasks and remained engaged in the discussion.

The teletandem conversation encompassed rich social interaction, dialogue, debate, and intercultural exchange. Furthermore, the conversations allowed students to explore the target culture by asking direct questions about it. They applied the grammar structures and verb tenses learned in class to a real life conversation with a real human being. The U.S. students did it with task-based activities and the Brazilian students did it through free-flowing conversation.

Students on both sides shared stories that illustrated Teletandem as a “safe” environment that made students feel less inhibited about speaking the L2. Teletandem broke down cultural and linguistic barriers and provided learners with a less threatening, more comfortable learning environment. Students were generally in agreement about this.

Another interesting observation was that all of the teletandem partners connected through Facebook® without the teachers’ planning. Students did this on their own, and it proved to be a useful way for students to stay in contact with one another between sessions. Facebook® opened yet another window into the distant world of the student partner. It allowed learner pairs to peer into one another’s social lives. One student suggested using Facebook® as a way for students and even teachers to stay in touch in between sessions. Facebook was perceived as an ideal way for partners to send text messages to one another to plan for future sessions and anticipated absences in advance. The students, teachers, LRC staff, and the researcher all agreed that using Facebook® strengthened the connectivity between student pairs and posed vast potential for expanding teletandem communities.

The Brazilian student perspective reflected enthusiasm, interest, and overall confidence in Teletandem. Brazilian students had mostly positive things to say about Teletandem. One student commented: “For me, it was a great opportunity to connect with someone my age from the United States, who wanted to have a language study partner and a friendship, too.”

Another Brazilian student said:

I find the interactions to be very enriching. Teletandem is a great way to develop friendships with people in other countries. It is an opportunity to gain a new perspective of the world. I am interested in [my partner’s] life in America, and I think [she] is interested in my life in Brazil.

The Brazilian students who participated in this project were already familiar with Teletandem because the Brazilian school had an established teletandem program. Brazilian students perceived language exchange as a more effective way of building communicative skills than traditional ways of practicing a foreign language. One Brazilian student said that classroom activities did not reproduce the language the way Teletandem did, because in a classroom, speaking and listening activities were simulated. “Studying out of a textbook is not real. Teletandem is real.”

The Brazilian students saw Teletandem as a tool and an opportunity to improve their English speaking skills, and to have an American friend in the United States through the Internet. The tools were efficient and cost-effective and the relationship was authentic and meaningful.

At the beginning of the project, the U.S. student perspective can best be described as cautiously optimistic. Some students were initially disappointed with the first round of sessions. The U.S. students clearly gained confidence in Teletandem and in their own abilities over time. They expressed varying opinions regarding the task-based activities. Most students agreed that

having clearly defined learning objectives was helpful during the first two or three sessions, but after these initial sessions, most students preferred unstructured Teletandem. In general, students felt that Teletandem was better when it was spontaneous.

The American students felt that having both classroom time and teletandem time in the same week was helpful. Integrating classroom concepts into the teletandem sessions was a way of linking two activities to form a complete language learning experience. Before the midway point of the program, students began to notice that “the grammar structures really work when used thoughtfully and skillfully.” They were able to use the language they learned in class in a real life situation with a native speaker, and that motivated them. One learner suggested that it was the “consistent and continuous” nature of Teletandem that impacted student learning the most. Students who had never traveled abroad were excited that they could have a real conversation partner in Brazil. In general, the American students felt as though they were experiencing Brazilian culture and the Portuguese language through a virtual portal that brought the language and culture to life. For American students, having the opportunity to interact with a foreign student enhanced the significance of learning the L2. In Brazil, the chance to learn, collaborate, and share with an American student in the United States was perceived as a rare and valuable opportunity. Tables 5 and 6 depict the outcomes perceived by both the U.S. participants and Brazilian participants of the Teletandem program.

Teacher Perceived Outcomes

Instructors on both sides viewed Teletandem as a constructive supplement to the foreign language curriculum and classroom. This was clearly conveyed during the interviews. Both sides overwhelmingly agreed that Teletandem is an efficient and cost-effective way to offer students authentic immersion and practice in the L2.

Table 5

Summary of Findings - U.S. Participants' Perceived Outcomes

How did Teletandem impact student learning?	Which metaphors were used by participants to describe their Teletandem experience?
<ul style="list-style-type: none"> • Broke down linguistic and cultural barriers. • Inspired confidence in the L2. • Motivated students. • Learners developed deeper appreciation and interest of the L2 and English. • Improved fluency skills, developed vocabulary. • Motivated students to speak the L2. • Provided opportunity to have learning partnership with foreign students. • Provided viable supplement to traditional language instruction. 	<p>Instructors:</p> <ul style="list-style-type: none"> • Authentic immersion and practice. • Direct exposure to target culture. • Making connections abroad. • Innovative. • High impact learning activity. • Student centered. • Bilingual teamwork. <p>Students:</p> <ul style="list-style-type: none"> • Dynamic, engaging, enriching, interesting, fun. • Enhanced confidence. • Enhanced motivation. • Awakened interest in target and native languages. • Superior to traditional immersion activities.
Which factors contributed to the successful implementation of Teletandem?	Which metaphors were used by instructors and LRC staff to describe optimal Teletandem?
<ul style="list-style-type: none"> • Establishing a fluid relationship with reliable faculty at partner school. • Clarifying expectations of both schools in advance. • Planning technology in advance: installing, configuring, and testing Skype® accounts in advance, resolving firewall and bandwidth issues. • Holding an orientation session for students. • Developing a plan to deal with student absences. • Plan campus site visits to partner school. • Addressing bandwidth/firewall issues in advance. 	<p>Instructors:</p> <ul style="list-style-type: none"> • Community-building, bridge-building, skill-building, making new connections abroad. • Meaningful interactions with native speakers. <p>LRC staff:</p> <ul style="list-style-type: none"> • Effective classroom management, in-class assessment, testing connections in advance. • Recording sessions for post assessment. • Creating online communities. • Online student journals for reflection. • Archived Skype® text chat logs. <p>Students:</p> <ul style="list-style-type: none"> • Partner was interesting, friendly, helpful, gave me confidence, made me feel comfortable. • Glitch-free sessions, audio and video clarity.

Table 5 - continued

Which factors hindered the successful implementation of Teletandem?	Which metaphors were used by instructors, LRC staff, and students to describe hindrances?
<ul style="list-style-type: none">• Bad connection resulting in poor audio and/or video quality.• Having to deal with technical problems during the sessions.• Student absences and tardiness.• Incompatible partners.• Uncooperative and unreliable partners.• Switching partners.	<p>Instructors:</p> <ul style="list-style-type: none">• Student absences and late arrivals.• Students not staying on task during sessions. <p>LRC staff:</p> <ul style="list-style-type: none">• Technical problems.• Multiple problems occurring at once during sessions. <p>Students:</p> <ul style="list-style-type: none">• Shyness, awkwardness, intimidation.• Partner made me uncomfortable.• Partner spoke too fast.• Partner wanted to speak mostly English.• Technical problems.

Table 6

Summary of Findings - Brazilian Participants' Perceived Outcomes

<p>How did Teletandem impact student learning?</p>	<p>Which metaphors were used by participants to describe the Teletandem experience?</p>
<ul style="list-style-type: none"> • Provided opportunity to interact with native speakers in other countries. • Communication through sharing. • Exploration of language through friendship. • Journey through an ongoing conversation. 	<ul style="list-style-type: none"> • Opportunity, friendship, enrichment. • Economical, efficient, practical. • Autonomous and reciprocal. • A private conversation. • Transculturality.
<p>Which factors contributed to the successful implementation of Teletandem?</p>	<p>Which metaphors were used by instructors and LRC staff to describe optimal Teletandem?</p>
<ul style="list-style-type: none"> • Compatibility with partner. • Mediação (assessment sessions held after each (teletandem interaction). • Use of Teleduc (online course management tool). • Presence of graduate students. • Increased interest in Brazil and Portuguese abroad. • Not mixing languages during sessions. 	<p>Instructors:</p> <ul style="list-style-type: none"> • Student motivation, mediação, real improvement of oral skills, compatibility, compromise, friendship, confidence. <p>LRC staff:</p> <ul style="list-style-type: none"> • Efficient, simple, compatible partners, friendship. <p>Students:</p> <ul style="list-style-type: none"> • Partner spoke slowly and clearly, partner was not too shy, partner showed genuine interest in Portuguese, showed interest in partner's life.
<p>Which factors hindered the successful implementation of Teletandem?</p>	<p>Which metaphors were used by instructors, LRC staff, and students to describe hindrances to Teletandem?</p>
<ul style="list-style-type: none"> • Technical glitches due to connectivity problems. • Bad pairings due to incompatibility issues. • Having to switch partners due to student absences. 	<p>Instructors:</p> <ul style="list-style-type: none"> • Difficult cooperation, miscommunication, misunderstandings, excessive student absences. <p>LRC staff:</p> <ul style="list-style-type: none"> • Incompatible match. • Partner was shy, unfriendly, unreliable. <p>Students:</p> <ul style="list-style-type: none"> • Partner was unfriendly, unmotivated, frequently absent, and rude.

However, the teachers' perceptions of Teletandem may have been influenced by their own cultures, preconceptions as foreign language teachers, and/or their individual roles in the project. The American teacher of Portuguese stressed the theme of "community building" notably more often than the Brazilian instructors. In the United States, there was little contact among students outside of class. In Brazil, the students appeared to be more interconnected on and off campus. At the Brazilian school, the concept of community was widely perceived as an intrinsic part of the university experience.

In Brazil, the overarching themes among teachers and LRC staff were opportunity, friendship, language learning, and transculturality. The dominant themes at the U.S. school were international cooperation, IUPs, instructional design, role of the LRC, and language learning. Teletandem was seen by Brazilian teachers as a gateway of opportunity for their students to speak real English with real American students. The high goal for the Brazilian teachers and LRC staff was for lasting friendships to be cultivated through Teletandem. The idea of friendship stemming from Teletandem was not rejected by the U.S. instructor, but it was not mentioned as frequently as it was in Brazil. The Brazilian teachers stressed that young learners from rural areas in Brazil have limited opportunities to develop meaningful interactions with foreign students. The concept of developing lasting online friendships with students at foreign schools is not a far-fetched idea—particularly with the advent of Skype® and Facebook®. Brazilian teachers also noted cost-effectiveness as being one of the factors that made Teletandem so appealing.

At the Brazilian institution, the pool of teachers involved with Teletandem came from various departments including linguistics, foreign languages, psychology, and teacher education. Each teacher participated in Teletandem in a different role and at a different level, but they were

all connected to Teletandem in some way. There was a research cluster of professors and graduate students at the Brazilian school. The common interest among all of these teachers and scholars was exploring and promoting Internet-based language exchanges between Brazilian schools and foreign universities. There were considerably more people involved with Teletandem at the Brazilian school than at the U.S. school. The U.S. team essentially consisted of one instructor, a full-time LRC staff member, a small staff of student lab assistants and the researcher. Most of the students at the Brazilian school, graduate and undergraduate, were preparing to become English teachers in Brazilian schools. They participated in the teletandem programs in various capacities as LRC staff and also as graduate research assistants. Their involvement with the project reflected the goals and activities of the U.S. instructor and LRC staff. They worked under the mentorship of the Brazilian professors who oversaw all teletandem partnerships. The entire program was overseen by one director, a linguistics professor, who provided additional mentorship to the researcher throughout the study. The heavy emphasis on teletandem training and research in Brazil was totally lacking at the U.S. school, where Teletandem was being introduced for the first time.

The U.S. teacher drew from linguistic, social, cultural, psychological, and technological rationales to describe Teletandem and its impact on student learning. The U.S. instructor affirmed that the American students were able to improve their fluency skills. While the degree of impact on learning varied from student to student, all learners were able to have a meaningful relationship with a student in a foreign country and experience the target language and culture from the native's perspective. This empowered students to reconstruct their own view of the world and of themselves.

The U.S. teacher saw Teletandem as a learning model that produced outcomes that reflected the U.S. institution's core teaching mission to provide all students with an "engaged, learner-centered environment that promoted inquiry, discovery and innovation in a global setting." The U.S. teacher felt that this language provided an accurate description of Teletandem. The U.S. program was focused on teletandem implementation and the use of dedicated tools and technologies to enhance Teletandem. The Brazilian teachers approached Teletandem from linguistic, cultural, and social perspectives. They also perceived it as a research topic. The Brazilian teachers were constantly evaluating Teletandem.

One Brazilian instructor described Teletandem's impact on students in the following manner, "Teletandem captured their imagination. It gave the students enthusiasm, confidence, and motivation. It added a dynamic and innovative dimension to their learning experiences and it made them more interested in the target language."

The instructor and LRC staff at the U.S. school made an interesting comment about the moment when they witnessed their first full class-to-class teletandem session. "The students' faces lit up when they saw their partner on the monitor, sitting across from them on the other end, with a webcam and a headset. Teletandem was immediately engaging. It was awesome to see that." The U.S. instructor described the outcomes of the sessions in the following manner:

Teletandem was an excellent project that allowed my students the opportunity to practice the language with a real native speaker. Teletandem broke down communication and cultural barriers and enabled students to develop communicative, cultural and social skills in the target language and culture. Students used the knowledge they learned in class to guide their teletandem conversations. Teletandem was existential. I never saw a better distance learning tool for improving foreign language fluency.

The U.S. and Brazilian instructors agreed that the teacher-teacher interactions were a significant factor in carrying out the weekly teletandem sessions. The teachers on both sides had to cooperate before, during, and after the sessions to convey their goals and expectations and plan the dates, times, and activities of the sessions. The instructors were in constant communication throughout the project. This was essential in order to successfully implement and sustain Teletandem. The U.S. instructor offered this suggestion to inexperienced instructors:

Teletandem is bilingual teamwork. Developing a strong relationship with the teachers at the foreign school is very important. Teachers must be able to program together in a bilingual environment. That's how Teletandem works. It's a cross-collaborative effort at the student level, at the instructional level, and at the departmental level. There must be mutual respect and understanding on all levels.

All teachers participating in this study expressed a strong desire to continue routinizing Teletandem and exploring ways to improve and sustain it. Not a single teacher involved with this study made a recommendation against Teletandem.

LRC Staff Perceived Outcomes

No other participant in this study understood the technical and logistical processes of online TLE better than the LRC staff at both schools. The LRC personnel were involved in more aspects of this teletandem project than any other participant. They worked closely with the researcher on the pilots, participated in the preplanning stages of this study, worked closely with the instructors to facilitate the sessions, and they had direct contact with the students during the interactions.

The U.S. LRC staff was experienced and knowledgeable in the field of language learning technology, but had never been involved with an online TLE program until the pilots preceding

this study were initiated. The U.S. staff was led by the LRC's assistant director, who was instrumental in supporting both the instructor and the researcher in achieving their individual project goals. The U.S. LRC also employed student assistants, who worked in the lab, but did not oversee sessions.

In Brazil, there were several individuals who served as LRC staff, including instructors, graduate teaching assistants and interns with a foreign language or technology background or both. The Brazilian LRC staff had previous experience overseeing class-to-class teletandem sessions. The U.S. LRC staff did not. However, both groups offered unique and valuable insights into teletandem implementation and design.

From the moment the teletandem hour began, LRC staff and instructors typically had 5-7 minutes to get the students connected before valuable time started to slip away. For this reason, the LRC staffs generally began initiating contact with the partner site 20-30 minutes prior to the start of each session.

During the sessions, the U.S. LRC staff moved around the room from station to station to ensure that all students were engaged with the right partner while troubleshooting any problems that emerged along the way (Figure 6). At the U.S. school, the LRC assistant director used a hand-held Skype®-enabled iPad® during the sessions to remain mobile while staying in constant communication with the Brazilian LRC.

From the U.S. LRC staff's perspective, these were the fundamental operations of Teletandem. The U.S. LRC staff was interested in how instructional technology could be harnessed to improve Teletandem. The Brazilian LRC staff was more focused on how the sessions were impacting student learning from a research perspective.



Figure 6. U.S. LRC staff presiding over a teletandem session.

The LRC personnel on both sides were knowledgeable about the details of standard teletandem implementation. They had a clear sense of the project's purpose and goals and were also aware of its limitations. They employed real skills to facilitate and mediate the sessions between the two groups. Their contributions to the project were significant. When a problem emerged, they were usually able to resolve it quickly and avoid major disruptions.

The LRC staff on both campuses advocated strongly for Teletandem. The U.S. LRC assistant director described teletandem impact on learning as follows:

Teletandem is based on an old concept. But now, technology makes it possible to actually connect classrooms around the world and pair domestic and foreign students for conversation activities without leaving the home school. Language learning centers have many resources like Rosetta Stone® and Tell Me More®. These are programs are OK, but they'll never be as effective as authentic immersion with a native speaker.

Teletandem allows students to use technology to make contact with a real living person. They use technology to achieve something inherently human, that without technology, would be humanly impossible. With Teletandem they can share their stories and talk about their interests, experiences, and perspectives despite the fact that they are separated by distance, language, and cultural barriers. Students can learn from their partner and teach their partner something that will be equally valued. With Skype and Facebook, American students can make friends with native speakers in other countries. It is an amazing opportunity.

The Brazilian LRC staff members were less involved with the technology side of online TLE, in general. The Brazilian teletandem lab was set up for Teletandem, but it did not offer the level of language instructional resources provided by the U.S. LRC. The following excerpt from

one of the Brazilian LRC interviews reflects the tendency in Brazil to place more emphasis on human relationships than on the instructional technology. The following passage is interpreted from Portuguese:

We did not have too many problems with technology. The connections worked. We conducted sessions every day. Sometimes there were problems because the other school had technical issues. Our main focus was to ensure the paired learners were connected and felt comfortable with their partners. We know that when partners are compatible, it is more likely that Teletandem will turn into a friendship. You cannot expect that every pair will be a good match, but you can switch partners when you notice incompatibilities. When there is a bad match, it is difficult to achieve the maximum benefits of Teletandem. This is true of Teletandem at the student level, instructor level, and institutional level.

The researcher's notes describe the LRC staff at the both schools as skilled, serious, motivated, professional, hard working, and inspired. Every scheduled session was successfully carried out because the LRC staff in both labs were so cooperative, knowledgeable, and persistent. Quite simply, they were the engineers of Teletandem.

The tag clouds shown in Figures 7 and 8 (also known as word clouds, weighted lists, and Wordles) offer a visual representation of the raw text data from the transcribed interviews of the lead LRC staff members. The word clouds illustrate through text and art, a visual rendering of the language used by two distinct LRC staffs to describe Teletandem.

Researcher's Observations

The researcher was immersed at the Brazilian site for 3 weeks and at the American site for 7 weeks. This uneven level of participation was brought on by travel constraints and scheduling conflicts.



Figure 7. Word cloud - Raw text from U.S. LRC staff interview transcription. This graphical representation illustrates through text art, the words most often utilized by the U.S. LRC staff member during the formal interview. When reviewing this image during respondent validation, the U.S. LRC staff member noted distinct patterns in the two word clouds that illuminate some of the major differences and similarities between how U.S and Brazilian LRC staff viewed and approached Teletandem.



Figure 8. Word cloud - Raw text from Brazilian LRC staff interview transcription. This graphical representation illustrates with text art, the words most used by the primary Brazilian LRC staff member during the interview.

Nevertheless, it was proportioned adequately enough to successfully complete the project and experience the implementation process at both sites with both groups of participants. The researcher was in virtual communication with all participants throughout the study. Clearly, the researcher had the best view of this teletandem project and was therefore able to make keen observations of the project and its participants.

Some observations led the researcher to make critical judgments that helped to streamline the operations processes and guide the investigative processes, too. For example, when the Brazilian school emerged as an ideal potential partner, and the Portuguese instructor at the U.S. school showed interest, the researcher decided to change the study's language focus from Spanish to Brazilian Portuguese.

The researcher's level of participation in the operations part of the project was central to the study. Once the partner schools were selected and the two teams began coordinating the project, the researcher stepped aside as an active participant. The researcher continued to extend a line of support to the instructors and LRC staff, but in general, they were able to set up and carry out the project on their own, allowing the researcher to focus on data collection. All participants were aware of the researcher's presence and role in the project.

The researcher viewed Teletandem as an optimal language learning strategy for building fluency skills in the L2. The strategy can be integrated in college-level foreign language courses as a supplement. The researcher perceived Novice High through Advanced Low to be the appropriate skill level range as per the 1999 revised *ACTCL Proficiency Guidelines*.

The researcher perceived Teletandem to be particularly relevant today with online video chat and social networking becoming increasingly ubiquitous. Hand-held devices, such as the

iPhone® and the iPad®, have made 2-way video calling portable and ubiquitous. Twenty-first century learners already communicate with Skype® and other social networking applications. Every student involved in this study used Facebook® and Skype® regularly. The Brazilian students used Facebook® and Orkut®, a Brazilian social media site.

The researcher saw Teletandem as a more natural way of building fluency skills. It is more dynamic and engaging than listening to pre-recorded audio tapes or using software programs like Rosetta Stone® and Tell Me More®. The generally positive outcomes of the project prompted the researcher to ask the following questions:

1. Why not find a way to integrate online TLE in conversation and oral fluency courses offered in the foreign language curriculum?

2. Why not create teletandem opportunities for American students, so that they can put the foreign languages they learn in the classroom to practical use?

In an increasingly globalized Internet-driven world, the idea of Teletandem seems to be very logical. Table 7 summarizes the researcher's observations regarding the impact of Teletandem on student learning.

Summary of Findings

The purpose of this study was to develop a rich understanding of how Teletandem was implemented, routinized, and sustained as a class-to-class exchange with a foreign university. The findings suggest that online TLE is a highly effective foreign language learning strategy that builds communicative skills and speeds up the path to fluency in college-level language courses through authentic immersion. But, how does it impact L2 language learners and how do instructors implement it as a classroom activity?

Table 7

Summary of Findings - Researcher's Observations

<p>How did Teletandem impact student learning?</p> <ul style="list-style-type: none">• Motivated students benefited more than Non-motivated students.• Inspired confidence in the L2.• Motivated students.• Learners developed deeper appreciation and interest of the L2.• Developed deeper appreciation of native language.• Provided opportunity to develop friendship with foreign students.• Provided opportunity to have meaningful impact on a foreign student's life.	<p>Which metaphors were used by researcher to describe Teletandem?</p> <ul style="list-style-type: none">• Viable supplement to traditional language Instruction.• 21st century learning model.• Joint curricular venture.• International university partnership.• Enhanced interactions between domestic and foreign students.• Innovative way to build cultural and communicative competencies.
<p>Which factors contributed to the successful implementation of Teletandem?</p> <ul style="list-style-type: none">• Organized pre-teletandem orientation session.• Planned site visits to partner school.• Worked out a session schedule; account for misaligned time zone differences.• Developed strategies to strengthen cooperation, communication between stakeholders at partnered schools.	<p>Which metaphors were used by researcher to describe optimal Teletandem?</p> <ul style="list-style-type: none">• Finding the right partner school and faculty, good organization, good communication, periodic meetings with instructor and LRC staff.• Having backup plans, testing tools and software, hold a pre-session orientation for students.• Expand partnership with increased opportunities for student and faculty mobility, add new languages and programs cautiously and vigilantly.
<p>Which factors hindered the successful implementation of Teletandem?</p> <ul style="list-style-type: none">• Poor communication with faculty at partner school.• Poor online connection, low network bandwidth.• Being forced to switch student partners due to student late arrivals and absences.• Lack of motivation and enthusiasm.	<p>Which metaphors were used by the researcher to describe hindrances?</p> <ul style="list-style-type: none">• Choosing wrong partner school.• Underestimating cooperation tasks.• Poor pre-session preparations.• Unwillingness to be flexible.

Telles and Vasallo (2006) suggested that Teletandem is essentially comprised of processes, context, participants, and tools. The findings of this study showed that teletandem implementation depended on a series of processes that included a partner search, project set-up tasks, and recurring cooperation with the partner school to create an optimal environment for Teletandem (LRC role). There was an instructional context too. Task-based activities were assigned to keep students focused during the sessions, and software tools were used to manage teletandem sessions, record sessions, and assess students during sessions (teacher's role).

Once a viable partner was identified, participants were oriented and prepared for the sessions (teacher and LRC shared role). Then, the tools were installed, configured, and tested, and teachers were trained to use them (LRC role).

The findings of this study indicated that the manner in which these tasks were planned and carried out significantly impacted the outcomes of Teletandem. The findings also suggest that the entire implementation process can be routinized in higher education settings, surprisingly fast as noted by the U.S. LRC staff member:

We found ourselves repeating the same tasks week in and week out. Some of the tasks were difficult and stressful, but we learned by doing. By the third and fourth sessions, we knew what to do and it helped us to avoid problems.

In general, teachers, students, and LRC staff responded positively toward Teletandem. This was demonstrated in the program evaluation surveys, interviews, and through observation. Students on both sides generally agreed that Internet-based desktop videoconferencing can be used as an alternative way for language learners to build fluency skills by reaching out to native speakers for immersion and practice. They concurred that having the same partner is preferable

to having multiple partners. Technical and partner compatibility problems were seen as the biggest hindrances.

Subtle and huge differences existed between the Brazilian and American participants. Brazilian teachers viewed Teletandem as a research area, a learning activity, and an opportunity to gain an international perspective. The U.S teacher was inexperienced with Teletandem and viewed it from sociocultural, psychological, and pedagogical lenses. The U.S instructor was also willing to explore new ways to enhance teletandem with instructional technology. Teachers, students, and LRC all viewed Teletandem from diverse and unique perspectives.

The researcher perceived the Brazilian students to be more mature and more appreciative of the opportunity than the American students. This of course, is a generalization and does not necessarily reflect the view of every single student. In general, however, Brazilian students were more insightful in their reflections, more forgiving about technical glitches and more accepting of their partners. They were also more relaxed during the sessions and more open to friendship. American students were more nervous and self-conscious about their language abilities, more critical of technical problems, of their partners and of themselves, and they were more frequently absent and late to teletandem sessions.

CHAPTER 5. CONCLUSIONS, INTERPRETATIONS, AND RECOMMENDATIONS

This chapter will present the significant findings of this study and contextualize them in light of the literature and theory presented in Chapter 2. Implications of the results and limitations of the study will be addressed and recommendations will be made in order to gain a better understanding of the outcomes derived from the data analysis in Chapter 4.

The presentation of findings reflects a qualitative process that was employed to better understand how Teletandem impacted college-level language learners and how it could be optimally integrated in traditional foreign language curriculum in a higher education setting. In addition, the study explored ways to improve teletandem implementation through enhanced cooperation and innovative instructional design. The conclusions, interpretations, and recommendations are based on the researcher's analysis of the field observations, evaluation surveys, interview data, and recorded teletandem sessions.

Review of Research Questions

Two main research questions guided this study. Research Question 1 asked which factors facilitated and hindered the design, implementation, and sustainability of Teletandem. This question explored the various processes of teletandem programming, and sought to pinpoint, from a procedural and pedagogical perspective, which actions and activities led to optimal implementation, and which ones impeded it. Research Question 2 asked how Teletandem impacted student learning. This question explored Teletandem in terms pedagogical effectiveness, from student and teacher perspectives and from U.S and Brazilian perspectives.

Summary of Significant Findings

The findings suggest that Teletandem is a viable “computer assisted mode of learning foreign languages in-tandem that makes extemporaneous use of oral and written production, reading and listening comprehension” through online video-mediated interactions between domestic and foreign students (Telles & Vasallo, 2006, p. 6). Implementation of a 20-session class-to-class teletandem program was effectively routinized through an international university partnership that was facilitated at the departmental level.

Teletandem is fundamentally comprised of “processes, contexts, participants, and tools” (Telles & Vasallo, 2006, p. 23). The main processes included an institutional partner search, sustained international cooperation, instructional design activities, program implementation, teaching and learning, evaluation, and student assessment. The main contexts were language, culture, communication, settings (physical and virtual), the essence of partnership, and transculturality.

The study shed light on critical factors that impacted the cooperation, implementation, and pedagogical processes. Through field observations, formal interviews, and analysis of data, the researcher was able to develop a deep understanding of the implementation, impact, and sustainability of class-to-class telecollaborative programs in higher education settings.

Specifically, the study’s findings showed that the exploration phase of Teletandem may be the most challenging process of all. During the search process, the researcher noted how few schools in the United States and Latin America are adequately prepared for high level class-to-class Teletandem exchanges. After the project was initiated with the Brazilian school, however, many of the processes and organizational events vital to Teletandem were found to be dependant on reliable and consistent cooperation and good communication between the language teachers

and LRC staffs of the two schools. The study revealed that the partnership was strengthened and routinized with each teletandem session. The sessions provided building blocks for students to socially co-construct their linguistic experiences and identities over time. In addition, teachers and LRC staff were able to co-construct new pedagogical perspectives to develop strategies for optimizing teletandem. Cooperation between the U.S. and Brazilian teams began as a single teletandem project and evolved into multiple international collaborations that reflected a much broader institutional alliance between the two schools.

Teletandem effectiveness and impact on learning varied from student to student. Each individual learner was unique. The student pairs and the discussions were also unique. The participants on both sides of the partnership reported experiences and opinions that reflected inherent cultural differences between the two groups. Instead of using this data to make broad generalizations about Americans and Brazilians, the researcher viewed perceptions, attitudes, and behaviors influenced by ethos as part of the cultural mosaic of Teletandem.

Many students underscored the importance of having a compatible partner. Students also stressed that they were able to achieve more with a single partner than with multiple partners. Some U.S. students initially exhibited a sense of resistance, but those learners gradually developed an appreciation of Teletandem, and ultimately viewed it as a practical language learning activity for building linguistic and cultural competencies.

The teletandem conversations incorporated a full range of topics, themes, ideas, and sharing of personal information. The findings showed that the depth of communication deepened as the dialogue evolved with each session. Students gained knowledge and understanding of another culture. They connected the language with other disciplines by integrating them as topics in their conversations. The students were able to make intercultural

comparisons during the sessions, and they reflected on these experiences in their journals and during mediação. Students were able to have meaningful interactions with teletandem learners from a foreign university. The sessions were held two times per week over a 10-week period.

Each site had its own culture and its way of doing things, but the teachers, LRC staff, and students of both sites were still able to collaborate with each other in virtual spaces where both languages and cultures co-existed equally. Several Brazilian teachers and LRC staff called this phenomenon “*transculturalidade*”, a hybridized reality that comes to light when two languages and cultures are shared equally in a human relationship, as they are in Teletandem.

Transculturality reflects “pluralization of identities and intertwinement” as opposed to “homogenization or uniformization” (Welsch, 1994, p. 19).

The two groups co-existed in a virtual environment in which neither language or culture dominated; both were perceived and shared equally. Transculturality suggests a conceptualization of culture that differs from interculturality and multiculturalism, which tend to conceive cultures as isolated and delimited. Transculturality reflects the convergence of two cultures. It can occur between two individuals, two institutions, and two societies. This theory accurately reflects the cultural context and setting of the teletandem partnership.

Teletandem and the Five Cs of Language Learning

The 1999 revised *ACTFL Proficiency Guidelines* provided a framework for measuring the impact of Teletandem on student learning. The ACTFL guidelines were useful in assessing development of communicative skills. They provided hundreds of language samples and other key descriptors to more accurately measure a speaker’s progress through the advanced level of proficiency.

The ACTFL guidelines provided teachers with a valid framework for performing language assessment on their students. The Guidelines were used to examine the effectiveness of Teletandem in this study (Table 8). The Five Cs of foreign language education—communication, cultures, connections, comparisons, and communities (ACTFL Standards, 1996) were effectively linked to the outcomes of the interactions (Driggers, 2009).

The results indicated that Teletandem increased L2 production through rich conversations in a continuous collaborative setting. Analysis of individually recorded sessions showed that students asked and answered questions, exchanged opinions and ideas, and expressed feelings and emotions during the sessions. When the program was completed, many of the student pairs extended their contact through Facebook®. Likewise, the instructors collaborated on plans to conduct the next teletandem program and further strengthen the partnership between the two schools.

Through 2-way Skype® video, students were able to observe their partner's appearance, body language, gestures, and facial expressions. This enabled both groups of students to experience the subtle nuances of the target culture. Teletandem empowered students to discover patterns and analyze similarities and differences across the two languages and cultures.

Interpretation of Results and Theoretical Analysis

The findings were interpreted in light of the full set of results, the applicable literature, the theoretical foundation, the limitations of the study, and the body of literature. The interpretation of the results strived to answer the following four questions:

1. What did the results show?
2. What do the results mean?

Table 8

Linking the Outcomes of Teletandem to the Five Cs of Language Learning

ACTFL standard	Teletandem outcome
<p>Communication:</p>	<p>Teletandem Communication:</p>
<p><u>Standard 1.1:</u> Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions.</p>	<p>Students were engaged in an ongoing conversation with a native speaker that incorporated a full range of topics, themes, ideas, and sharing personal information.</p>
<p><u>Standard 1.2:</u> Students understand and interpret written and spoken language on a variety of topics.</p>	<p>The students used Skype® text chat to clarify and interpret spoken language during the sessions.</p>
<p><u>Standard 1.3:</u> Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.</p>	<p>The depth of interaction deepened as the conversation evolved. With each session the information, concepts, and ideas became more profound.</p>
<p>Cultures: Gain knowledge and understanding of other cultures.</p>	<p>Teletandem Cultures:</p>
<p><u>Standard 2.1:</u> Students demonstrate an understanding of the relationship between the practices and perspectives of the culture studied.</p>	<p>Reflective activities such as mediação in Brazil and the student online journals maintained by the U.S. students enabled learners on both sides to monitor their learning and document their experiences.</p>
<p><u>Standard 2.2:</u> Students demonstrate an understanding of the relationship between the products and perspectives of the culture studied.</p>	<p>Online TLE enabled students to seamlessly exchange digital media, art, and text to reinforce cultural topics by providing real examples through pictures, words, images.</p>
<p>Connections: Connect with other disciplines and acquire information.</p>	<p>Teletandem Connections:</p>
<p><u>Standard 3.1:</u> Students reinforce and further their knowledge of other disciplines through the foreign language.</p>	<p>Students were encouraged to talk about their interests in other subject areas to make Teletandem interdisciplinary.</p>
<p><u>Standard 3.2:</u> Students acquire information and recognize the distinctive viewpoints that are only available through the foreign language and its cultures.</p>	<p>Students used Teletandem to peer into the world of their partners and develop a profound understanding of Brazilian culture from both American and Brazilian points of view.</p>

Table 8 – continued

ACTFL standard	Teletandem outcome
<p>Comparisons: Develop insight into the nature of language and culture.</p>	<p>Teletandem Comparisons:</p>
<p><u>Standard 4.1:</u> Students demonstrate understanding of the nature of language through comparisons of the language studied and their own.</p>	<p>Teletandem provided the ideal setting and conditions for deep exploration of two languages in which both languages were constantly spoken and contrasted.</p>
<p><u>Standard 4.2:</u> Students demonstrate understanding of the concept of culture through comparisons of the cultures studied and their own.</p>	<p>Students reflected on cultural nuances observed during sessions—backgrounds, clothes, gestures, facial expressions, regional accents were compared.</p>
<p>Communities: Participate in multilingual communities.</p>	<p>Teletandem Communities</p>
<p><u>Standard 5.1:</u> Students use the language both within and beyond the school setting.</p>	<p>Students connected with their partners outside of the Teletandem; via e-mail, Skype®, Facebook®, and most had multiple partners.</p>
<p><u>Standard 5.2:</u> Students show evidence of becoming life-long learners by using the language for personal enjoyment and enrichment.</p>	<p>The majority of students showed a deep interest and for the L2. Teletandem was generally viewed as effective and enriching. Students expressed interest in furthering their study of L2.</p>

3. What were the possible causes of the results?
4. What are the possible consequences of the results?

The results suggest that Teletandem is an innovative, low-cost, high impact language learning activity that blends socioconstructivism, second language acquisition, authentic immersion, computer mediated communication (CMC), distance learning, and cooperation with foreign schools.

The theoretical underpinnings of this study were anchored on Vygotsky's theory of cognitive development which underscored the importance of social interaction in the development of cognition (Vygotsky, 1978). Vygotsky argued that community is critical in the process of learning language and "making meaning." Teletandem provided learners with access to a community of native speaking students with similar demographics and language learning goals. According to Vygotsky, "Human beings retain the functions of social interaction" (1981, p. 164). Conversely, classroom-taught concepts are not so easily retained. Vygotsky's Zone of Proximal Development (ZPD) and scaffolding theories (1978) reflect the fundamental concept of Teletandem—that an expert will guide the novice L2 learner through a series of interactions that gradually enable the novice to gain control and adeptness of the L2. Teletandem replicates this learning scenario for a pair of learners, who will benefit mutually through a language sharing partnership.

Vygotsky's view of second language acquisition emphasizes culture, socialization, and the role of language as being the primary facilitators of cognitive development in children. These are the primary components of Teletandem. The goal of Teletandem is not to achieve perfect L2 mastery, but instead to put the L2 into practice with a native speaker in a meaningful way.

In this sense, Teletandem may be an ideal supplement to traditionally taught foreign language courses in higher education settings. It does not change the traditional model of language instruction. It enhances it by adding the elements of socialization and culture central to the language learning experience through international cooperation and Internet-based videoconferencing tools.

This signifies that interaction through Teletandem could potentially improve traditional models of language instruction without replacing them. Teletandem provides an experience that is inherently constructive to language development, but important questions remain about which areas of L2 development Teletandem affects (morphosyntactic and/or lexical) and to what extent. Which areas of language acquisition are most strengthened by Teletandem? Jeon (2007) studied the impact of interaction on L2 learners of Korean and found that the impact of interaction effectively promoted L2 learning of nouns, verbs, and object relative clauses, but was less effective in strengthening honorific agreement morphology. Jeon emphasized that Korean honorifics are particularly challenging for L2 learners. This brings to light the idea that interaction-based immersion may impact certain linguistic targets more effectively than others. Students on both sides of this study noted that their partners had difficulties with certain grammatical structures in the L2. However, in the context of achieving the basic ACTFL goals of Communication, Culture, Connections, Comparisons, and Communities, Teletandem was at least partially effective as a language learning supplement (Driggers, 2009). Teletandem may not have improved L2 skills in all areas and contexts, but the interactive nature of Teletandem still gave the students a rich experience, and enabled them to achieve many of the goals outlined in the ACTFL National Standards (1999).

All human languages are bound by a system of rules and syntax. Portuguese (Romance) and English (Germanic) belong to different language families, and they have different rules, but they are both Indo-European. Portuguese and English have the same alphabet and share a large number of cognates and other linguistic similarities. These factors came into play during Teletandem and significantly aided learners in understanding the context of the discussions even when the concepts and topics had not yet been taught in class. It is important to consider that exchanges involving non-Indo-European languages may not be as easily facilitated as those in languages more closely related to English. Thus, the L2 skill level of the learners in this study (Intermediate Low) may not have been appropriate for a teletandem program involving a non-Indo-European language—like Mandarin Chinese—which has virtually nothing in common with English. This is not a claim, but merely a factor that should be considered

Mackey and Goo's (2007) meta-analysis of interaction research in SLA examined the efficacy of interaction-based L2 development. Their study analyzed the relationships between interaction-driven SLA and various theoretical, contextual, and methodological factors that may surface during the learning process. The study showed that "interaction plays a strong facilitative role in the learning of lexical and grammatical target items" (p. 439). The findings of the study supported the idea that interaction is beneficial, regardless of the linguistic form targeted. Interaction strengthens "lexis and grammar to a great extent, with a stronger immediate effect on lexis, and a delayed and durable effect on grammar" (p. 446).

These findings are consistent with the outcomes of this study. Instructors on both sides reported vast improvement in lexis and only partial improvement in use of grammar. These generalizations were reported by the instructors who assessed student performance during the live sessions and in reviewing the recorded sessions. The researcher, however, concluded that

the impact of Teletandem on student learning would be better understood by measuring by the depth of the interactions as opposed to testing and analyzing grammatical accuracy. After all, the goals of Teletandem are more far more concerned with meaningful context than they are with linguistic accuracy (Warschauer, 1997).

Teletandem was viewed by both groups of instructors as an effective strategy for reinforcing classroom taught concepts through authentic immersion. The instructors and LRC staffs at both schools saw it as an opportunity for students to experience the living language and culture. In some cases, the teletandem experience transformed students' perceptions of the target language and culture.

Teletandem is a high impact learning activity. It prompted learners to experience "emotions, pleasure, and humor in the exchange of experiences" (Telles & Vasallo, 2006, p. 20). It also produced "negative feelings of tension, competition, frustration, and irritation" (p. 20). These innately human feelings are implicated in the language acquisition process. Warschauer (1997) contends that the activities associated with online distance language exchange between domestic and foreign students are consistent with Vygotsky's constructivist view of language learning. Teletandem is experiential and goal-oriented. Furthermore, online TLE reflects the "educational value of creating cross-cultural communities of practice and critical inquiry. . . these features make online learning a potentially useful tool for collaborative language learning" (Warschauer, 1997, p. 477).

Cziko (2004) maintains that online TLE is an optimal way of improving knowledge of foreign languages and cultures. "It is therefore surprising that tandem is not more widely known and used by learners and teachers or investigated by researchers in the Americas" (p. 38).

Teletandem can be manifested in various forms and contexts, and the tools may not always be the same, but it is always interactive, authentic, and collaborative in nature, and it always maintains the two fundamental principles of tandem learning—autonomy and reciprocity (Little & Brammerts, 1996).

With today's Internet and online videoconferencing applications, foreign language learning is no longer confined to the limited physical spaces of traditional classrooms (Lee, 2009). Teletandem, in essence, brings the world to the classroom. O'Dowd (2000) described videoconferencing as a powerful medium for intercultural learning because it enables two groups of students from different countries to "observe and interact with members of the target culture operating in their native language" (p. 60).

Mackey and Goo (2007) suggested that interaction treatments on the acquisition of linguistic targets are more effectively implemented in lab environments than in classroom settings. This conclusion coincides with the findings of this study that LRCs played a major role in the facilitation of Teletandem in higher education settings.

Fundamentally, language learning is a constructivist activity (Vygotsky, 1962). The most effective way to develop fluency in a new language is by increasing production of the L2 through human interaction. Yet, opportunities for tandem-style language exchange have not flourished in U.S. post-secondary schools. Artificial role-play in the classroom, rote drills, audio tapes, and even software-based programs like Rosetta Stone® are still the most common ways to achieve foreign language immersion and practice in U.S. post-secondary schools. However, these methods can only simulate language immersion. All of these learning paths can lead to enhanced vocabulary and a better understanding of a new language and culture, but in order to become

communicatively competent in the L2, the language must be experienced in “the context of real life situations” (Van der Zwaal, 2007).

Krashen (1981) suggested that the best language learning activities should be “natural, interesting, and understood. When these requirements are met, and where there is a great deal of input of this nature, progress in language acquisition will result” (p. 104). TLE is real communication between real people in real time. Authentic immersion with a native speaker is always favored over artificial role-play in the classroom (Butler & Fawkes, 1999).

O’Dowd and Eberbach (2004) maintain that telecollaborative activities should be firmly integrated into contact classes where students can receive guidance and instruction from the teacher and support from the LRC staff and their classmates. González-Lloret’s (2008) suggests that it is possible to approach TLE through tasks and activities designed to reflect the language curriculum with a specific pedagogical purpose.

The tools of Teletandem are relatively simple, but inexperienced instructors may be overwhelmed by the voluminous details involved in their setup and integration. The intersect between physical and virtual learning spaces is often a tricky landscape to navigate. O’Dowd (2000) points out, “The potential for such technology in the language classroom is surely awesome, but it is limited by factors such as time, cost, logistics, and technical quality.”

Instructional technology issues—as they relate to Teletandem—should demonstrate new ways that technology can improve the teaching and learning of foreign languages. Conacher and Kelly-Holmes (2007) recommend the following strategies for harnessing 21st century technologies:

1. Interpreting new language learning environments;
2. Changing contexts for language learning;

3. Developing teaching and learning;
4. Promoting intercultural learning; and
5. Exploring new media.

Instructional technology should be useful, user friendly, and effective in its application as a tool for teaching and learning. In Teletandem, technology is used to facilitate the sessions and document them. Student journals, blogs, and discussion forums and portfolios are all ways students can reflect on the sessions. Teachers can refer to the student reflections to fine tune Teletandem and assess student progress.

The communication, reliability, trust, and sincerity manifested by the faculty and staff of two internationally partnered schools will impact a teletandem partnership as much as any factor and perhaps more than any other factor. The teacher-teacher interaction is very influential on the outcomes of online TLE projects. Both teachers have to work in harmony through virtually every detail of a teletandem project. Teachers must define their instructional goals and negotiate the terms as to how Teletandem will be delivered. Instructors will need to learn new skills to cooperate effectively with faculty of foreign institutions (O'Dowd & Eberbach, 2004).

In order to pair domestic and foreign learners in class-to-class online collaborative exchanges, a functional partnership with the relevant stakeholders of a foreign institution must first be in place. International university partnerships open new possibilities for many types of joint cooperative ventures (Van de Water et al., 2008). Teletandem is one type of jointly-delivered program that can lead to tremendous impact and growth at the departmental level and in terms of teaching, research, and service learning. Program-specific partnerships that involve one-on-one student exchanges, such as teletandem, “involve relatively minor institutional

expenses, but might require substantial bookkeeping and staff support” (Van de Water et al., 2008, p. 20).

A well-equipped LRC can provide the right tools and setting for harnessing the power of social networking, digital media and distance learning applications to supplement and enhance foreign language curricula. There was consensus among the teachers and LRC staff of this study that today’s Internet technologies can bring such unprecedented power and potential to the classroom, that they cannot be ignored. Being able to harness technology to develop and sustain international university partnerships is one of the chief aims of Teletandem.

Trends show many U.S. colleges and universities are forming institutional partnerships with foreign schools as a means to advance their internationalization initiatives (Van de Water et al., 2008). Many broad partnerships begin with lofty goals and inflated rhetoric, but they can quickly become bridges to nowhere when there is no faculty interest or student involvement.

Online collaborative learning exchanges between domestic and foreign students may be a way of enhancing IUPs. By developing a language learning component for IUPs through innovative learning activities like Teletandem, new opportunities can be created for meaningful student and teacher exchanges with the partner school. When these relationships are realized in the context of Teletandem, the connection between two internationally partnered schools can be significantly strengthened. When a teletandem partnership with a foreign school is sustained, new online communities of students and teachers from both schools will emerge and new lines of bilingual communication, cooperation, and co-existence can be established.

Implications

There are three major implications stemming from this study. First, foreign language departments, particularly in higher education, stand to benefit immensely by enriching the

curriculum with Teletandem. Teletandem is a relatively low-cost activity that presents extraordinary possibilities for foreign language teachers, students, and LRCs. All stand to benefit from a teletandem-enhanced curriculum. Language faculty can expand their teaching, research, and service activities through new collaborative partnerships with faculty at foreign schools. Students can develop real foreign language skills while building connections to international communities abroad.

Secondly, Teletandem can contribute significantly toward an institution's internationalization efforts. Although the main purpose of Teletandem is to develop language and cultural competencies, it has tremendous potential in other areas of the curriculum as well. The use of videoconferencing to integrate international university partnerships across the curriculum is an area that brings vast possibilities in terms of internationalization. One successful Teletandem program could have a rippling effect across a campus.

The depth and significance of international university partnerships can be measured by the level of student and faculty involvement. Broad institutional partnerships often do not reach teachers and students because they are typically coordinated by high-level administrators who are not familiar with the processes, contexts, tools, or participants at the classroom level (Van de Water et al., 2008). When joint curricular ventures are managed by academic departments, international cooperation can have a significant impact on faculty and students. Teletandem is a student-centered learning activity, but it can have a lasting effect on teachers and LRC staff, too.

The element of international cooperation makes Teletandem intriguing. Twenty years ago, the notion of jointly organized class-to-class, video-mediated language exchanges with foreign schools, while technologically possible, was still considered unrealistic and impractical.

Today, Teletandem is potentially available to any school in the world with a computer lab and high-speed Internet service. U.S. colleges and universities would be well served to consult language departments in the development of internationalization initiatives and explore Teletandem and its potential outcomes—at the classroom level, at the department level and at the institutional level. Teletandem heightens interaction between domestic and foreign students. It also fosters real opportunities for faculty collaborations with foreign scholars, and strengthens the presence of the home institution abroad. These are the lofty internationalization goals that many high-level administrators have a difficult time achieving with broad institutional partnerships.

Thirdly, video-mediated telecollaboration—because of its immense potential for collaboration and sharing—will continue to be integrated in online learning models in higher education and beyond. It is inevitable. As online learning becomes more and more conventional, telecollaboration will become more prominent as a model for learning foreign languages. Given the unprecedented growth of social media and the power of the Internet, it is likely that 21st century language curricula will reflect a more dynamic, engaging, and interactive model for developing language and cultural skills.

Foreign language departments of U.S. colleges and universities would be well served to explore Teletandem as a lab supplement in appropriate courses. Despite its immense potential, Teletandem is still relatively uncommon in the United States. This is particularly true of class-to-class tandem projects. Skype® may be a disruptive technology in the way that it impacts traditional models of language instruction.

Given the low cost, conferencing capabilities, and recording option of online video calling there are any number of possibilities for using this technology in language

learning. The most obvious is to connect users in distant locations for free conversational practice. (Godwin-Jones, 2005, p. 9)

Teletandem is a pedagogically innovative yet simple tool that not only builds language skills, it also builds confidence in speaking the L2 and it builds a deeper appreciation of the target language and culture. Online Teletandem, delivered in cooperation with foreign schools, may be the ideal model for providing students with authentic linguistic and cultural immersion in language lab settings.

The traditional foreign language curriculum is ready for new and innovative pedagogical practices. The unprecedented power, speed, and reach of today's Internet make the conditions extremely favorable for introducing what has long been considered by linguists and language teachers as the ideal scenario for developing fluency skills in a foreign language—extended face-to-face interactions with a native speaker of the L2.

In an increasingly globalized world that faces complex economic and geopolitical challenges, it is more necessary than ever to prepare American students to speak foreign languages, embrace diversity, and be better global citizens. Pairing domestic and foreign students to communicate, cooperate, and collaborate in academic settings is a viable means of achieving these goals.

Limitations

The results of this study were limited by several factors, the most significant being generalizability. The small sample size coupled with the fact that an emergent qualitative design was employed, resulted in less generalizable findings. In addition, the conclusions were based on the interpretations of the researcher. This aided in developing rich descriptions to present the results, but it also resulted in the research design sacrificing some reliability.

Another limitation was that time spent at both sites was not entirely equitable. The two groups were inherently different, not just culturally and linguistically but also structurally, politically, philosophically, and pedagogically. Therefore, it was not possible to devise a scenario in which conditions would be identical in both settings for a site-to-site comparative analysis. The participating schools had as many things in common as could be expected. Both universities were of similar size and stature in their respective states and countries and the students were in the same age range (18 to 25 years). However, there were intrinsic differences and these were noted in the research

Another limitation was that a pretest and posttest were not given to the two groups to more accurately measure teletandem impact on learning. In general, Teletandem impacted participants differently because each individual brought his/her own unique set of skills, perceptions, attitudes, expectations, and behaviors to Teletandem.

Recommendations for Further Research

Future research might explore variables that were not addressed in the current study in relation to L2 development through Teletandem, such as gender, age, and other demographic variables. Future studies should explore what specific advantages and disadvantages there are between unstructured tandem and task-based tandem.

Future studies should analyze Teletandem in new contexts, tools, and settings. Are organized class-to-class tandem exchanges more effective than independent tandem sessions? Which tools are the most appropriate and suitable for harnessing the maximum potential of Teletandem? Skype® was used for this study, but how do other video chat and webconferencing programs compare? Furthermore, do enhanced environments, such as high-definition telepresence, impact the outcomes of Teletandem, and if so, how? And, to what extent? The

researcher strongly recommends further research on the use of Teletandem in elementary and secondary language classrooms.

Replication of the present study in other languages, particularly in less commonly taught languages such as Mandarin Chinese and Arabic, might shed light on how Teletandem impacts learning of particularly difficult languages. Further research on the role of the teacher in achieving the aims of Teletandem will contribute significantly to the body of knowledge on video-mediated distance language exchange. This is an area that has been generally neglected in the literature (Belz & Müller-Hartmann, 2003). Also, further studies on the specific role of LRCs in designing and sustaining online TLE programs will be helpful in developing best practices. The LRC's role was integral in virtually every aspect of this project. Language resource centers may find renewed purpose and vitality in developing and sustaining teletandem-type programs.

Practitioners should be creative in exploring new ways to enhance the teletandem experience through technologically-enhanced session activities. Practitioners should also focus on developing faculty training programs, so that Teletandem can be explored by more teachers and implemented in more languages. Preparing teachers to carry out telecollaborative projects is essential in order to be successful in teletandem implementation. Teachers need training to develop competence and awareness of telecollaborative task design (O'Dowd & Ware, 2009).

Final Thoughts

The results of the study clearly showed that Teletandem was a viable supplement for intermediate-level foreign language learners in higher education settings. Teletandem enabled students at both sites to build fluency skills in the L2. Furthermore, Teletandem enhanced intercultural awareness and boosted confidence, motivation, and interest in the target language

and culture. Teletandem introduced a new array of international cooperation activities to the college language instructor's work detail that have never before been associated with teaching foreign languages. The most challenging of these was searching for a viable partner institution. The processes involved with setting up a class-to-class teletandem project were challenging and often unpredictable at the onset of the project, but the results indicated that teletandem implementation can be routinized in higher education settings, particularly with the support of a full-service LRC.

The results also suggest that joint implementation of online class-to-class telecollaborative projects with foreign schools depends more on good communication, good relationships, and trust than it does on resources, prestige, and rankings. The findings also showed that successful use and integration of tools and technology depended more on being organized, prepared, and diligent than it did on having expensive state-of-the-art equipment and extensive technical expertise.

The study was perceived to be immensely successful on both sides of the partnership. Before this study was completed, the two teams had already discussed the possibility of planning future programs and solidifying the partnership. The general conclusion of the two teams was that further exploration of Teletandem was warranted because the following five conditions were met:

1. Teletandem was a suitable and viable method for both schools to provide opportunities of immersion and practice to their foreign language students.

2. Both schools' faculty showed interest in organizing and implementing online TLE interactions through cooperative faculty partnerships.

3. The teachers were able to work collaboratively and collegially—instructors and LRC personnel were reliable, skilled, trustworthy, and sincere.

4. Both schools were adequately equipped with the appropriate tools, services, and staff to support teletandem through an LRC.

5. Students and teachers responded positively to Teletandem.

Because the above-mentioned conditions were realized, the members of the U.S. team agreed that the next logical step should be to routinize implementation, schedule new interactions, and search for new ways to strengthen the partnership and improve Teletandem. The Brazilian team shared this view, but placed a stronger emphasis on developing teletandem research and scholarship. The U.S. team was more focused on the actual practice of Teletandem and finding ways to optimize its design and delivery through technology and enhanced cooperation. Both U.S. and Brazilian perspectives contributed significantly to the ongoing discussion on teletandem research and practice.

Teletandem is a high-impact language learning activity with vast pedagogical implications. Building fluency skills was the main goal, but in many cases Teletandem had a transformational impact on teachers and students that extended far beyond the scope of language learning.

LIST OF REFERENCES

LIST OF REFERENCES

- American Council of Education. (2005-08). *Global learning for all series of working papers on internationalizing higher education*. Washington, DC: Author.
- American Council on the Teaching of Foreign Languages. (n/da). *Statement of philosophy*. Retrieved from <http://www.actfl.org/i4a/pages/index.cfm?pageid=3392>
- American Council on the Teaching of Foreign Languages. (n/db). ACTFL certified proficiency testing programs. Retrieved from <http://www.actfl.org>
- American Council on the Teaching of Foreign Languages. (1996). *Standards for foreign language learning: Preparing for the 21st century*. Yonkers, NY: Author.
- American Council on the Teaching of Foreign Languages. (2012). *ACTFL guidelines 2012*. Retrieved from <http://actflproficiencyguidelines2012.org>
- Anderson, K. E. (2008). *A profile of international partnerships at land-grant universities*. Retrieved from ProQuest Digital Dissertations. (AAT 1456070)
- Appel, C., & Mullen, T. (2000). Pedagogical considerations for a web-based tandem language learning environment. *Computers & Education*, 34, 291-308.
- Ardley, J. (2009). Unanticipated findings: Gains by cooperating teachers via video-mediated conferencing. *Journal of Computing in Teacher Education*, 25(3), 81-86.

- Ayoubi, R. M., & Al-Habaibeh, A. (2006). An investigation into international business collaboration in higher education organisations: A case study of international partnerships in four UK leading universities. *International Journal of Educational Management*, 20, 380-396.
- Baker, P., Gardner, D., & Curry, L. (2008, October 10). *Structural configurations of school/university partnerships: An exploratory paper*. Retrieved from http://www.ibhe.state.il.us/grants/NCLBProfile/2008/symposium/NCLB_Exploratory_Paper_Structural_Configurations.pdf
- Barlow, J., Peter, P. & Barlow, L. (2002). *Smart videoconferencing: Smart videoconferencing, New habits for virtual meetings*. San Francisco: Barrett-Koehler Publishers.
- Baum, H. S. (2007). Fantasies and realities in university-community partnerships. *Journal of Planning Education and Research*, 20(2), 234-246. Retrieved January 1, 2009 from ERIC.
- Belz, J. (2002). Social dimensions of telecollaborative foreign language study. *Language Learning & Technology*, 6(1), 60-81
- Belz, J. (2003). Linguistic perspectives on the development of intercultural competence in telecollaboration. *Language Learning and Technology*, 7(2), 68-117.
- Brammerts, H. (1996). Tandem language learning via the Internet and the International E-Mail Tandem Network. In D. Little & H. Brammerts (Eds.), *A guide to language learning in tandem via the internet* (CLCS Occasional Paper 460, 1-25).
- Bronkhorst, J. (2007, July). Video conferencing in foreign language learning education. In P. van der Zwaal (Ed.), *IC and talk. Using the webcam in foreign language education in secondary education*. Retrieved from <http://www.cordys.nl/>

- Butler, M., & Fawkes, S. (1999). Videoconferencing for language learners. *Language Learning Journal*, 19(46-9). Rugby: Association for Language Learning.
- Calvert, M. (1992). Working in tandem: Peddling an old idea [electronic version]. *Language Learning Journal*, 6(1), 17-19.
- Casale-Giannola, D. P. (2000). *The meaning of international experiences for the professional development of educators*. Retrieved from ProQuest Digital Dissertations. (UMI 9968418)
- Chan, W. Y. (2004). International cooperation in higher education: Theory and practice. *Journal of Studies in International Education*, 8(1), 32-55. Retrieved February 1, 2009 from ERIC.
- Chinnery, G. M. (2008). VoIM-mediated cooperative tasks for English language learners. *English Teaching Forum*, 4(1), 28-40.
- Conrad, R-M., & Donaldson, J. A. (2004). *Engaging the online learner: Activities and resources for creative instruction* (1st ed.). San Francisco, CA: Jossey-Bass.
- Conacher, J. E., & Kelly-Holmes, H. (Eds.). (2007). *New learning environments for language learning*. New York, NY: Peter Lang.
- Coulby, D., & Zambeta, E. (2005). *Globalization and nationalism in education*. New York: Routledge Falmer.
- Cubillos, J. (2001, Fall). The emerging foreign language teaching/learning paradigm. *The Northeast Conference on Teaching of Foreign Languages Review*, 49. Retrieved January 1, 2010 from ERIC.
- Currie, J., & Subotsky, G. (2000). Alternative responses to globalization from European and South African universities. In N. P. Stromquist & K. Monkman (Eds.), *Globalization and*

- education: Integration and contestation across cultures* (pp. 123-148). Lanham, MD: Rowman & Littlefield.
- Cziko, G. A. (2004). Electronic tandem language learning (eTandem): A third approach to second language learning for the 21st century. *Computer Assisted Language Instruction Consortium Journal*, 22(1).
- Derckx, F. (2007, July). PC based video conferencing. In P. vander Zwaal (Ed.), *IC and talk. Using the webcam in foreign language education in secondary education*. Retrieved from <http://www.cordys.nl/>
- De Wit, H. (2002). *Internationalization of higher education in the United States of America and Europe: A historical, comparative, and conceptual analysis*. Greenwood Studies in Higher Education. Westport, CT: Greenwood Press.
- Driggers, A. (2008). *Opportunities for language learning and cultural awareness arising during participation in a tandem language exchange program*. Retrieved from ProQuest Digital Dissertations. (UMI 3347865)
- Eckel, P., Hartley, M., & Affolter-Caine, B. (2004) *Cooperating to compete: A campus leaders' guide to developing curricular partnerships and joint programs*. Washington, DC: American Council on Education.
- Elia, A. (2006). Language Learning in Tandem Via Skype. *Reading Matrix: An International Online Journal*, 6(3), 269-280.
- Ellis, R. (1986). *Understanding second language acquisition*. Oxford, UK: Oxford Press.
- Ellis, R. (1994). *The study of second language acquisition*. Oxford, UK: Oxford Press.
- Encyclopædia Britannica Online. (2012, March). *Joseph Lancaster*. Retrieved from <http://www.britannica.com/EBchecked/topic/329001/Joseph-Lancaster>

- Finn, K. E., Sellen, A. J., & Wilbyr, S. (Eds.). (1997). *Video-mediated communication*. Mahwah, NJ: Lawrence Erlbaum.
- Garcia, N., & Wolff, L. (2001, November/December). The lowly language lab: Going digital. *TechKnowLogia*. Knowledge Enterprise, Inc. Retrieved from http://www.techknowlogia.org/TKL_Articles/PDF/339.pdf
- Gass, S. M., & Mackey, A. (2007). Input, interaction, and output in second language acquisition. In B. VanPatten & J. Williams (Eds.), *Theories in second language acquisition: An introduction* (pp. 175-199). Mahwah, NJ: Lawrence Erlbaum.
- Gill, N. (2008, April 2). Regionalism and globalization theory. *Southern Affairs News and Analysis of Latin American International Relations*. Retrieved from <http://www.southernaffairs.org>
- Godwin-Jones, R. (2005). Emerging technologies: Skype and podcasting: Disruptive technologies for language learning. *Language Learning & Technology*, 9(3), 9-12.
- González-Lloret, M. (2008). “*No me llames de usted, trátame de tú*”: L2 address behavior development through synchronous computer mediated communication. Retrieved from ProQuest Digital Dissertations. (UMI 3328269)
- Goodfellow, R., Jeffreys, I., Miles, T., & Shirra, T. (1996). Face-to-face language learning at a distance? A study of a videoconference try-out. *ReCALL*, 8(2): 5-16.
- Green, M. (2005). *Measuring internationalization at comprehensive universities*. Washington, DC: American Council on Education.
- Green, M., Eckel, P., & Luu, D. (2007). *Venturing abroad: U.S. degrees through overseas branch campuses and programs*. Washington, DC: American Council on Education.

- Green, M., Hesel, R. A., & Bartini, M. (2008). *College-bound students' interests in study abroad and other international learning activities*. Washington, DC: American Council on Education, Art, & Science Group, LLC, and the College Board.
- Green, M., Luu, D. T., & Burris, B. (2006). *Mapping internationalization on U.S. campuses: 2008 edition*. Washington, DC: American Council on Education.
- Guice, J. (1997). Rethinking the wired classroom: An international video-conferencing experiment. *Interpersonal Computing and Technology*, 5(3-4), 15-27.
- Hill, B., & Green, M. (2008). *A guide to internationalization for chief academic officers*. Washington, DC: American Council on Education.
- Hoepfl, M. (1997). Choosing qualitative research: A primer for technology education researchers. *Journal of Technology Education*, 9(1), 47-63.
- Internet World Stats Today*. (2009). World Internet usage statistics - Internet market research. <http://www.Internetworldstats.com>
- Jacobs, J., College, H., & Vlaardingen, V. (2007, July). Webcam communication step by step. In P. vander Zwaal (Ed.), *IC and talk. Using the webcam in foreign language education in secondary education*. Retrieved from <http://www.cordys.nl/>
- Jeon, K. S. (2007). Interaction-driven L2 learning: Characterizing linguistic development. In A. Mackey (Ed.), *Conversational interaction in second language acquisition: A series of empirical studies*. Oxford, UK: Oxford University Press.
- Johnson, B., Kavanagh, P., & Mattson, K. (Eds.). (2003). *Steal this university: The rise of the corporate university and the academic labor movement*. New York, NY: Routledge.

- Jones, Z. L. (2002). *Organizational strategies for internationalization: A case study of the University of Alberta Canada*. Retrieved from ProQuest Digital Dissertations. (UMI NQ68585)
- Juwah, C. (2006). *Interactions in online education, implications for theory and practice*. New York, NY: Routledge.
- Kennedy, J. (2007). International education and developing countries: Research and educational collaboration in the field. *Journal of Political Science Education*, 3, 223-236.
- Kerr, C. (1990). The internationalization and the nationalization of the purposes of higher education: Two 'laws of motion' in conflict? *European Journal of Education*, 25, 5-22.
- Kerr, C. (1994). *Higher education cannot escape history: Issues for the twenty first century*. SUNY Series Frontiers in Education. Albany, NY: State University of New York Press.
- Klobucka, A. (2007). *Ponto de encontro: Portuguese as a world language*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Kötter, M. (2002). *Tandem learning on the Internet: Learner interactions in virtual online environments (MOOs)*. Frankfurt: Lang.
- Kötter, M. (2003). Negotiation of meaning and codeswitching in online tandems. *Language Learning & Technology*, 7(2), 145-172.
- Krashen, S. (1981). *Second language acquisition and second language learning*. Downloadable from http://www.sdkrashen.com/SL_Acquisition_and_Learning/index.html
- Krashen, S. (1985). *Language acquisition and language education*. San Francisco, CA: Alemany Press.
- Larsen-Freeman, D., & Long, M. H. (1991). *An introduction to second language acquisition research*. New York, NY: Longman.

- Lee, H. J. (2009). *Internet-mediated videoconferencing for the development of intercultural communication in second language (L2) education*. Retrieved from ProQuest Digital Dissertations. (UMI 3367811)
- Lee, L. (2007, December). Fostering second language oral communication through constructivist interaction in desktop videoconferencing. *Foreign Language Annals*, 40(4), 635-649.
- Lehman, R. M., & Berg, R. A. (2007). 147 practical tips for synchronous and blended technology teaching and learning (9781891859694 electronic). Madison, WI: Atwood.
- Levey, S. (2006). *Key administrative conditions for the successful establishment of an international distance learning partnership*. Retrieved from ProQuest Digital Dissertations. (AAT 3263375)
- Little, D., & Brammerts, H. (1996). *A guide to language learning in tandem via the Internet* (CLCS Occasional Paper no. 46): Dublin: Trinity College.
- Lorenzetti, J. O. (2003). *Universities in the marketplace: The commercialization of higher education: (Between the lines)* University Business.
- Mackey, A., & Goo, J. M. (2007). Interaction research in SLA: A meta-analysis and research synthesis. In A. Mackey (Ed.), *Input, interaction and corrective feedback in L2 learning* (pp. 379-452). Oxford, UK: Oxford University Press.
- MacDonald, J. (2008). *Blended learning and online tutoring: planning learner support and activity design* (2nd ed.). UK: Gower.
- Maxwell, J. A. (2005). *Qualitative research design: An interactive approach* (Applied Social Research Methods Series 41). Thousand Oaks, CA: Sage.

- Martin, M. (2005). Seeing is believing: The role of videoconferencing in distance learning. *British Journal of Educational Technology*, 36(3), 397-405. Retrieved February 10, 2009 from <http://www.eric.ed.gov.proxy.library.vcu.edu/ERICWebPortal/>
- McClure, M. W. (2007). Sustainable university partnerships: National education reform challenges in decentralizing Indonesia. *International Studies in Education*, 8, 5-6. Retrieved February 10, 2009 from <http://iise.pitt.edu/publications/ncontents/v8/n1/ise200803.pdf>
- McMillan, J. H., Schumacher, S. (2006). *Research in education: Evidence-based inquiry* (6th ed.). New York, NY: Pearson.
- Merriam, S. B. (1988). *Case study research in education: A qualitative approach*. San Francisco, CA: Jossey-Bass Publishers.
- Merrill, T. (2003). *The university in a corporate culture*. New Haven. Yale University Press.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis* (2nd ed.). Thousand Oaks, CA: Sage.
- Morfit, C., Gore, J., & Akridge, P. B. (2008). *U.S.-Africa higher education partnerships: A decade of experience*. Washington, DC. American Council on Education.
- Ninnes, P., & Hellstén, M. (2005). *Internationalizing higher education: Critical explorations of pedagogy and policy* (CERC Studies in Comparative Education 16). Hong Kong, China: Hong Kong University Press.
- O'Connell, M. E., & Norwood, J. L. (Eds.). (2007) *International education and foreign languages: Keys to securing America's future*. Washington, DC: The National Academies Press.
- O'Dowd, R. (n.d.) Personal homepage. <http://www3.unileon.es/personal/wwdfmrod/>

- O'Dowd, R. (2000). Intercultural learning via videoconferencing: A pilot exchange project. *ReCALL*, 12(1), 49-61, Cambridge University Press.
- O'Dowd, R. (2006). The use of videoconferencing and e-mail as mediators of intercultural student ethnography. In J. A. Belz & S. L. Thorne (Eds.), *Internet-mediated intercultural foreign language education* (pp. 86-119). Boston, MA: Heinle & Heinle.
- O'Dowd, R., & Eberbach, K. (2004). Guides on the side? Tasks and challenges for teachers in telecollaborative projects. *ReCALL*, 16(1), 5-19, Cambridge University Press.
- O'Dowd, R., & Ritter, M. (2006). Understanding and working with 'failed communication' in telecollaborative exchanges. *Computer Assisted Language Instruction Consortium Journal*, 61(2), 623-642.
- O'Dowd, R., & Ware, P. (2009). Critical issues in telecollaborative task design. *Computer Assisted Language Learning*, 22(2), 173-188.
- Oleksiyenko, A. (2008). *Global portfolios and strategic international partnerships of a major research university*. Retrieved from ProQuest Digital Dissertations. (AAT NR39948)
- Olson, C., Evans, R., & Shoenberg, R. E. (2007). *At home in the world: Bridging the gap between internationalization and multicultural education*. Washington, DC: American Council on Education.
- Olson, C., Green, M., & Hill, B. (2005). *Building a strategic framework for comprehensive internationalization*. Washington, DC: American Council on Education.
- Olson, C., Green, M., & Hill, B. A. (2006). *Global learning for all: A handbook for advancing comprehensive internationalization: What institutions can do and what students should learn*. Washington, DC: American Council on Education.

- Opp-Beckman, L. (2007) *Characteristics of successful e-partnering in an online distance education course for English as foreign language (EFL) educators*. Retrieved from ProQuest Digital Dissertations. (AAT 3294005)
- Özturgut, O. (2008). Political, economic, socio-cultural, and educational challenges of administering a Sino-U.S joint venture campus in China. *International Journal of Progressive Education*, 4(3). Retrieved, March 1, 2009 from ERIC.
- Palloff, R. M., & Pratt, K. (2005). *Collaborating online: Learning together in community*. San Francisco, CA: Jossey-Bass.
- Palloff, R. M., & Pratt, K. (2005). *Building online learning communities: Effective strategies for the virtual classroom*. Hoboken, NJ: Wiley.
- Palvetzian, T. E. (2005). *Integrating internet-facilitated internet partnerships into local university environments: Faculty perspectives*. Retrieved from ProQuest Digital Dissertations. (AAT MR24904)
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage.
- Paul, R. (2006). *More universities banning Skype*. Retrieved December 9, 2009, from <http://arstechnica.com/old/content/2006/09/7814.ars>
- Peel, H. A., Peel, B. B., & Baker, M. E. (2002). School/university partnerships: A viable model. *Journal of International Educational Management*. Retrieved January 1, 2009, from ERIC.
- Pew Research Center's Internet & American Life Project (2010). *Internet-based video calls, chats, teleconferences*. Retrieved January 5, 2009 from, <http://www.pewInternet.org/Reports/2010/Video-chat/Findings/Online-video-calls.aspx>

- Raduntz, H. (2005). The marketisation of education within the global capitalist economy. In M. W. Apple, J. Kenway, & Michael Singh (Eds.), *Globalizing public education: Policies, pedagogy, and politics*. New York, NY: Peter Lang USA.
- Rapoport, A. (2006). *The impact of international educational exchange and training programs on teachers' curricular and pedagogical practices: Participant perspectives*. Retrieved from ProQuest Digital Dissertations. (AAT 3239762)
- Readings, B. (1996). *The university in ruins*. Cambridge, MA: Harvard University Press.
- Rhoades, G., & Slaughter, S. (2004). *Academic capitalism and the new economy: Markets, state, and higher education*. Baltimore, MD: Johns Hopkins University Press.
- Rhodes, G., & Sporn, B. (2002). Quality assurance in Europe and the U.S: Professional and political economic framing of higher education policy. *Higher Education*, 32(3), 355-390.
- Rhodes, J. (2001). *Videoconferencing for the real world: Implementing effective visual communications systems*. Woburn, MA: Butterworth-Heinemann.
- The Rhodes Trust. (2011). *The Rhodes scholarships. Leaders for the world's future*. Retrieved from <http://www.rhodeshouse.ox.ac.uk/>
- Roberts, B. (2003). What should international education be? From emergent theory to practice. *International Schools Journal*, 22(2), 69. Retrieved March 15, 2009 from ERIC.
- Roby, W. (2004). Technology in the service of language learning: The case of the language laboratory. A chapter in the *Handbook of Research on Educational Communications and Technology*, D. Jonassen (ed.), 2nd edition, p. 523-541.

- Roosevelt, F. D. (1941, January 20). Third inaugural address. In G. Peters & J. T. Woolley, *The American president project*. Retrieved on January 15, 2010, from <http://www.presidency.ucsb.edu/ws/?pid=16022>.
- Schullo, S., Hilbelink, A., Venable, M., Barron, A. E., (2007, December). Selecting a virtual classroom system: Elluminate Live vs. Macromedia Breeze (Adobe Acrobat Connect Professional). *Journal of Online Learning and Teaching*, 3(4), 331-345.
- Schütz, R. (2007). *Stephen Krashen's theory of second language acquisition: English made in Brazil*. Retrieved from <http://www.sk.com.br/sk-krash.html>
- Scott, P (1998). Massification, internationalization and globalization. In P. Scott (Ed.), *The globalization of higher education*. Buckingham, UK: SRHE & Open University Press.
- SKYPE and podcasting: Disruptive technologies for language learning. (2005, September). *Language Learning & Technology*, 9(3), 9-12.
- Slethaug, G. (2007). *Teaching abroad: International education and cross cultural classroom*. Hong Kong, China: Hong Kong University Press.
- Smith, A. (2000). Collaboration between educational institutions: Can various individual successes translate into a broad range of sustained partnerships? In T. Nunan, R. George, L. Sheppard, & B. Kenworthy (Eds.), *Distance education: An open question? Proceedings of the international conference on distance learning*, University of South Australia, Adelaide.
- Smith, A. (2001, July). *Learning partnerships between educational institutions: Insights from the literature and implications for future efforts*. Paper presented at the 24th International HERDSA Conference at the University of Newcastle, Newcastle. Retrieved January 1, 2009, from ERIC.

- Söderbaum, M. F., & Shaw, T. M. (Eds.). (2003). *Theories of new regionalism: A Palgrave Macmillan reader*. New York, NY: Palgrave Macmillan.
- Spariosu, M. I. (2006). *Remapping knowledge: Intercultural studies for a global age*. New York, NY: Berghahn.
- Stromquist, N. P. (2002a). *Education in globalized world. The connectivity of economic power, technology, and knowledge*. Lanham, MD: Rowman & Littlefield.
- Stromquist, N. P. (2002b). Globalization, the I, and the other. *Current Issues in Comparative Education*, 4(2), 87-94.
- Stromquist, N. P. (2005). Comparative and international education: A journey toward equality and equity. *Harvard Educational Review*, 75(1), 89-112.
- Stromquist, N. P. (2007). Internationalization as a response to globalization: Radical shifts in university environments. *Higher Education: The International Journal of Higher Education and Educational Planning*, 53(1), 81-105.
- Stromquist, N. P., Monkman, K., Jones, P., Carnoy, M., Rust, V.D., Gough, N. et al. (2000). *Globalization and education: Integration and contestation across cultures*. Lanham, MD: Rowman & Littlefield.
- Tambascia, J. A. (2005). *Internationalization of higher education: A case study of a private United States research university*. Retrieved from ProQuest Digital Dissertations. (AAT 3219855)
- TANDEM® Fundazioa. <http://www.tandem-f.org/pages/sitemap2002.htm>
- TANDEM® Fundazioa: History. *History of Tandem*. Retrieved from http://www.tandemcity.info/general/en_history.htm

- Tandem-Server Bochum - Ruhr-Universität Bochum. *Language learning in tandem. Autonomous Learning with a partner*. <http://www.slf.ruhr-uni-bochum.de/Teletandem> *Brasil: Foreign Languages For All*. <http://www.teletandembrasil.org/>
- Telles, J. A., & Vassallo, M. L. (2006). Foreign language learning in- tandem: Teletandem as an alternative proposal in CALLT. *The ESpecialist*, 27(2), 189- 212.
- U. S. Department of State, Bureau of Educational and Cultural Affairs. (2012). *Fulbright international educational exchange program*. Washington, DC. Retrieved from <http://Fulbright.state.gov/>
- Van de Water, J., Green M. F., & Koch, K. (2008). *International partnerships: Guidelines for colleges and universities. U.S. higher education in a global context* (Working Paper #2). Washington, DC: American Council on Education.
- Van der Zwaal, P. (Ed.). (2007, July). *IC and talk. Using the webcam in foreign language education in secondary education*. Retrieved from <http://www.cordys.nl/>
- Vassallo, M. L., & Telles, J. A. (2006). Foreign language learning in- tandem: Theoretical principles and research perspectives. *The ESpecialist*, 25(1), 1- 37.
- Virginia Commonwealth University's International Partnership Universities Initiative. <http://www.international.vcu.edu/partnerships/index.html>
- Vygotsky, L. S. (1962). *Thought and language*. Cambridge MA: Massachusetts Institute of Technology.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.). Cambridge, MA: Harvard University Press.

- Wang, Y. (2004a). Distance language learning: Interactivity and fourth-generation internet-based videoconferencing. *Computer Assisted Learning Instruction Consortium Journal*, 21(2): 373-395.
- Wang, Y. (2004b). Supporting synchronous distance language learning. *Language Learning and Technology*, 8(3), 90-121.
- Wang, Y., & Sun, C. (2001). Internet-based real time language education: Towards a fourth generation distance education. *Computer Assisted Learning Instruction Consortium Journal*, 18(3), 539-561.
- Ware, P. D. (2005). 'Missed' communication in online communication: Tensions in a German-American telecollaboration. *Language Learning & Technology*, 9(2), 64-89.
- Ware, P., & O'Dowd, R. (2008, February). Peer feedback on language form in telecollaboration. *Language Learning & Technology*, 12(1), 43-63.
- Warschauer, M. (1997). Computer-mediated collaborative learning: Theory and practice. *National Federation of Modern Language Teachers Associations*.
- Welsch, W. (1994). Transculturality: The puzzling form of cultures today. *California Sociologist*, 17/18, 19-39.
- Wylie, M. (2008). Internationalizing curriculum framing theory and practice in international schools. *Journal of Research in International Education*, 7(1), 5-19.
- Xiao, M. (2007). *An empirical study of using internet-based desktop videoconferencing in an EFL setting*. Retrieved from ProQuest Digital Dissertations. (AAT 3292884)
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Beverly Hills, CA: Sage.
- Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Beverly Hills, CA: Sage.

Zourou, K. (2009). Corrective feedback in telecollaborative L2 learning settings: Reflections on symmetry and interaction. *The Jaltcall Journal*, 5(1), 3-20.

APPENDIX A

Online Video Chat Applications

Camfrog®	http://www.camfrog.com/
EyeBallChat®	http://www.eyeballchat.com/
Google Video Chat®	http://www.google.com/chat/video
iChat®	http://www.apple.com/support/ichat/
iVisit®	http://www.ivisit.com/
ooVoo®	http://www.oovoo.com
Open-Tok by Tokbox®	http://www.tokbox.com/
paltalk®	http://www.paltalk.com/
SightSpeed®	http://www.sightspeed.com/
Skype®	http://www.Skype.com/intl/en-us/home
tinychat®	http://www.tinychat.com/
Vsee®	http://www.vsee.com/
Windows Messenger®	http://windows.microsoft.com/en-US/messenger/video-call





APPENDIX B

Teletandem Schedule

Date	Session	Researcher's location	<u>30 minutes in Portuguese</u>	<u>30 minutes in English</u>
Sept. 21 (Wed)	1	U.S Site	1:00PM – 1:30PM EST	1:30PM-2:00PM EST
Sept. 23 (Fri)	2	U.S Site	1:00PM – 1:30PM EST	1:30PM-2:00PM EST
Sept. 28 (Wed)	3	U.S Site	1:00PM – 1:30PM EST	1:30PM-2:00PM EST
Sept. 30 (Fri)	4	U.S Site	1:00PM – 1:30PM EST	1:30PM-2:00PM EST
Oct. 5 (Wed)	5	U.S Site	1:00PM – 1:30PM EST	1:30PM-2:00PM EST
Oct. 7 (Fri)	6	U.S Site	1:00PM – 1:30PM EST	1:30PM-2:00PM EST
Oct. 12 (Wed)	7	U.S Site	1:00PM – 1:30PM EST	1:30PM-2:00PM EST
Oct. 14 (Fri)	8	Brazilian Site	1:00PM – 1:30PM EST	1:30PM-2:00PM EST
Oct 19 (Wed)	9	Brazilian Site	1:00PM – 1:30PM EST	1:30PM-2:00PM EST
Oct. 26 (Wed)	10	Brazilian Site	1:00PM – 1:30PM EST	1:30PM-2:00PM EST
Oct. 28 (Fri)	11	Brazilian Site	1:00PM – 1:30PM EST	1:30PM-2:00PM EST
Nov. 2 (Wed)	12	Brazilian Site	1:00PM – 1:30PM EST	1:30PM-2:00PM EST
Nov. 4 (Fri)	13	Brazilian Site	1:00PM – 1:30PM EST	1:30PM-2:00PM EST
Nov. 9 (Wed)	14	U.S Site	1:00PM – 1:30PM EST	1:30PM-2:00PM EST
Nov. 11 (Fri)	15	U.S Site	1:00PM – 1:30PM EST	1:30PM-2:00PM EST
Nov. 16 (Wed)	16	U.S Site	1:00PM – 1:30PM EST	1:30PM-2:00PM EST
Nov. 18 (Fri)	17	U.S Site	1:00PM – 1:30PM EST	1:30PM-2:00PM EST
Nov. 30 (Wed)	18	U.S Site	1:00PM – 1:30PM EST	1:30PM-2:00PM EST
Dec. 2 (Fri)	19	U.S Site	1:00PM – 1:30PM EST	1:30PM-2:00PM EST
Dec. 7 (Wed)	20	U.S Site	1:00PM – 1:30PM EST	1:30PM-2:00PM EST
Dec. 9	If needed	U.S Site	TBA	TBA




APPENDIX C

Teletandem Evaluation Survey (Student Responses)




1. Teletandem enhanced my language learning experience.			
		Response Percent	Response Count
Strongly Agree		56.3%	9
Agree		18.8%	3
Neither Agree Nor Disagree		18.8%	3
Disagree		6.3%	1
Strongly Disagree		0.0%	0
answered question			16
skipped question			0

2. Teletandem helped me to improve my communicative skills in the target language.			
		Response Percent	Response Count
Strongly Agree		37.5%	6
Agree		37.5%	6
Neither Agree Nor Disagree		18.8%	3
Disagree		6.3%	1
Strongly Disagree		0.0%	0
answered question			16
skipped question			0




3. Teletandem enhanced my interest in the target language.

		Response Percent	Response Count
Strongly Agree		50.0%	8
Agree		25.0%	4
Neither Agree Nor Disagree		25.0%	4
Disagree		0.0%	0
Strongly Disagree		0.0%	0
answered question			16
skipped question			0




4. Teletandem enabled me to learn new insights about the target culture that were not addressed during class lectures.

		Response Percent	Response Count
Strongly Agree		43.8%	7
Agree		31.3%	5
Neither Agree Nor Disagree		25.0%	4
Disagree		0.0%	0
Strongly Disagree		0.0%	0
answered question			16
skipped question			0




3. Teletandem enhanced my interest in the target language.

		Response Percent	Response Count
Strongly Agree		50.0%	8
Agree		25.0%	4
Neither Agree Nor Disagree		25.0%	4
Disagree		0.0%	0
Strongly Disagree		0.0%	0
answered question			16
skipped question			0





4. Teletandem enabled me to learn new insights about the target culture that were not addressed during class lectures.

		Response Percent	Response Count
Strongly Agree		43.8%	7
Agree		31.3%	5
Neither Agree Nor Disagree		25.0%	4
Disagree		0.0%	0
Strongly Disagree		0.0%	0
answered question			16
skipped question			0




5. Teletandem enhanced my confidence in speaking the target language.

		Response Percent	Response Count
Strongly Agree		31.3%	5
Agree		43.8%	7
Neither Agree Nor Disagree		25.0%	4
Disagree		0.0%	0
Strongly Disagree		0.0%	0
answered question			16
skipped question			0




6. My language partner was interesting and engaging.

		Response Percent	Response Count
Strongly Agree		50.0%	8
Agree		18.8%	3
Neither Agree Nor Disagree		18.8%	3
Disagree		12.5%	2
Strongly Disagree		0.0%	0
answered question			16
skipped question			0

7. My language partner was cooperative and helpful.

		Response Percent	Response Count
Strongly Agree		50.0%	8
Agree		31.3%	5
Neither Agree Nor Disagree		18.8%	3
Disagree		0.0%	0
Strongly Disagree		0.0%	0
answered question			16
skipped question			0

8. Teletandem is a viable supplement for immersion and practice in foreign language courses with aims to build fluency skills in the L2.

		Response Percent	Response Count
Strongly Agree		68.8%	11
Agree		25.0%	4
Neither Agree Nor Disagree		6.3%	1
Disagree		0.0%	0
Strongly Disagree		0.0%	0
answered question			16
skipped question			0

9. In your own words, please describe how Teletandem impacted your learning.

On Building Confidence

“Oh, what a great experience! In the beginning, I was so unsure of how my Portuguese would sound or progress when I first started teletandem, but after I got over my nervousness I began to get more confident in speaking with my partner. Now that I know a lot more about the language, I can converse with other native Brazilians. It enhanced my confidence, which I will use when I train for capoeira. I guess you could say the teletandem was a confidence booster. In addition, I made a great friend and also we have made plans to stay in touch with each other. I thoroughly enjoyed the teletandem experience. I wish it didn't have to end because I had a great time learning from my partner and vice versa. In the future I think [the college] should keep the teletandem program because it really is a great benefit and it can only grow from where it began.”

“Teletandem helped me improve my confidence when speaking to my partner in Portuguese—something I was not able to do prior to taking this course. It was a great experience and I recommend it highly.”

On Partner Compatibility

“My first partner wasn't a great match but my second partner was very enthusiastic and helpful as she would correct me when we were talking. She was very open during our discussions and we learned a lot from each other over the course of these few weeks. I wish our teletandem experience could have been longer because I felt this opportunity put the language in "action" and was very beneficial for me to acquire a better understanding of Portuguese. I intend on continuing to learn Portuguese and practice with my partner! Thank you for this wonderful experience!”

On Reinforcing Class-taught Concepts

“Teletandem really helps to cement what we learn in class. While the class material is often grammatical, and feels theoretical, teletandem gives us the opportunity to really apply our knowledge and use it in a real-world environment without having to travel to another country. It reminds us that Portuguese is a language that is actually spoken somewhere, by real people, and doesn't just exist in a textbook.”

On Friendship

“The best part about my teletandem experience is that I gained a friend from it. It was very beneficial to understand that speakers of other languages have just as much anxiety about trying to speak English as we do with trying to speak languages outside of English. What I took from this is that we all may be scared about being vulnerable, but we all want to try, because we want to learn.”

General Comments

“Teletandem helped me learn more about the culture. My partner was helpful in correcting my grammar and pronunciation. This experience has greatly helped my Portuguese and has furthered my interest in pursuing higher level classes.”

“Teletandem gave me an opportunity to practice speaking the real language.”

“Teletandem helps students communicate what they learn in class and it helps a lot.”

“I felt it enhanced my ability to think and respond quickly. It helped my understanding of cultural expressions by speaking the living language, which is not like the Portuguese taught in class.”

“Teletandem allowed me to practice the language in an environment that was highly innovative and interactive.”

“I think the teletandem experience helped to cement my knowledge of common words, and verb usage in Portuguese. I also became more confident conversing with native Brazilians and understanding spoken Portuguese.”

10. In your own words, please list areas of teletandem implementation that you feel need improvement.

On Student Pairing

“The pairing process might be better by matching a student weak in language skills with someone with a good understanding of their partner’s language, almost to the point of a student–mentor relationship.”

“I feel like my partner and I are not the best match. We’ve had some difficulties because our personalities are totally different. Overall though, this has been a good experience and I would suggest it to other language students.”

“I think the student pairing is the trickiest part, because it can make or break the experience. My first partner and I didn’t mesh well together, but my second partner and I hit it off from the start.”

“Finding people that you have things in common with is very important. Some of my partners—we had nothing in common.”

General Comments

“I believe Teletandem would be a good experience for upper-level language students. I think it’s a lot to expect from beginners.”

“We need a conversation topic before we begin the sessions. It got really awkward sometimes.”

“I need to come to terms with the fact that I am nervous when I try to speak Portuguese. Sometimes it is hard to put a simple sentence together. I also need to look beyond my own fears in order to appreciate my partner’s nervousness and insecurities.”

“The connection was the biggest issue I had, but it got better throughout the semester. I think when teletandem first started, the students should already have assigned partners. It was very hectic the first day.”

“The connection was a little slow early on, but it has since improved. Other than that, the sessions have been wonderful.”

APPENDIX D

Preliminary Interview Protocol for Student Participants

Purpose of Interview

This study is to learn from Teletandem students about their experiences, values, perceptions and opinions relating to the implementation of teletandem and its impact on student learning.

Background information

Date:

Name:

Age:

Academic major:

Which other languages do you speak fluently?

Have you ever taken part in a teletandem type of program prior to this study?

Essential Interview Questions

1. How do you perceive teletandem as a learning tool?
2. What are the benefits of teletandem, if any?
3. What are the disadvantages of teletandem, if any?
4. What are the challenges you perceived during teletandem implementation?
5. What strategies could future teletandem students employ to harness the full potential from their teletandem experience?

Teletandem – Outcomes and Impact on Student Learning (Probing questions)

6. How do you think teletandem has impacted your learning?
7. What metaphors would you use to describe Teletandem?
8. Does teletandem lead to improved fluency in a foreign language? If so, why? If not, why not?
9. Can online interaction between domestic and foreign students lead to enhanced intercultural awareness? If so, why? If not, why not?
10. Does teletandem heighten sensitivity toward issues of diversity? If so, how and in what context? If not, why not?
11. Does teletandem contribute to the preparation of tomorrow's global citizens? If so, how and in what context?
12. Do online video-collaboration activities between domestic and foreign students have any potential benefit in other subject areas? If so, which ones and why?

Teletandem – Diversity and Multicultural Awareness (Probing questions)

13. Does teletandem raise multicultural awareness? If so, how and in what context?
14. What are the benefits, if any, of pairing domestic and foreign students for routine sessions of language exchange?
15. How would you describe your experience of collaborating with a student in Brazil/U.S.?
16. How would you describe the partner school's culture? How would you compare it to the home school?
17. Can teletandem impact a university's internationalization efforts and if so, how?
18. Can teletandem enhance campus diversity and multiculturalism?
19. Does teletandem foster intercultural awareness and understanding, and if so, how?

Teletandem – Implementation (Probing questions)

20. Based on your experience, what steps can be taken to improve the implementation of class-to-class online language exchanges?
21. Describe your experience collaborating with U.S./Brazilian student via Skype?
22. Is there a formula to successful implementation? What are the key factors?
23. Are there patterns to failure? What are the pitfalls?
24. What do you believe should be the instructor's role?
25. How can LRC staff be most helpful to instructors?
26. Is Teletandem a viable supplement to traditional language instruction? If so, why? If not, why not?

APPENDIX E

Student Disclosure Letter and Consent Form (U.S. School)

The students of the Fall 2011 Portuguese language course at [REDACTED] (PORT 201-001) are invited to participate in a tandem language exchange project to be conducted between September 21 and December 9, 2011. Students will be individually paired with [REDACTED] students of English at [REDACTED] for conversational immersion and practice. This particular version of distance language exchange is called Teletandem and it is designed to supplement your classroom learning, not replace it.

The tandem method is founded on agreed and shared principles of autonomy and reciprocity. Both participants will have something to learn and something to offer. The teletandem interactions will be between you and your partner. Your instructor will not be an active participant in your interactions. During the 1-hour teletandem sessions, you will spend 30 minutes speaking to your partner in Portuguese and 30 minutes speaking in English.

This Teletandem portion of your Portuguese language course will be the basis of an educational research case study on Teletandem. Students, instructors and facilitators will be observed and interviewed throughout the program and some of the interactions will be recorded and screen-captured for further analysis. Photographs will be taken at some of the sessions and some of those images may be used to report on this research project. However, student identities will remain strictly confidential. If you prefer not to be photographed or videotaped, please advise your instructor in advance.

The purpose of this release form is to give you (the student) the choice to opt out of Teletandem. If you prefer to opt out, your instructor will prepare other learning activities for you to work on during the Teletandem sessions. If you choose to participate, you will agree to take part in the study and to adhere to the general teletandem guidelines set forth by your instructor.

Please sign below next to one of the following options:

I have read and fully understand the Student Disclosure Letter and Consent Form.

Yes, I would like to participate in Teletandem _____

No, I prefer to opt out of Teletandem _____

APPENDIX F

Institutional Review Board Approval Letter

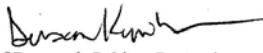
VCU Memo

V i r g i n i a C o m m o n w e a l t h U n i v e r s i t y

Office of Research Subjects Protection
BioTechnology Research Park
BioTech One, 800 E. Leigh Street, #114
P.O. Box 980568
Richmond, Virginia 23298-0568
(804) 828-3992
(804) 827-1448 (fax)

DATE: November 15, 2011

TO: Jonathan D. Becker, JD, PhD
School of Education, Educational Leadership
Box 842020

FROM: Susan D. Kimbrough, CIP 
Assistant Director, Office of Research Subject Protection
Box 980568

RE: **CORRECTION**
VCU IRB # HM13976
Title: Implementation and Outcomes of a Portuguese-English Tandem Language Exchange (TLE) Program Delivered Jointly across a U.S.-Brazilian University Partnership: A Case Study

During an internal audit of your file for the above-referenced research study, the IRB discovered an error in the file documents. The IRB acknowledges that the letter of approval dated October 14, 2011, contained several inconsistencies.

Please note the following revisions to the approval letter:

- Date of letter changed from October 14, 2001, to October 14, 2011.
- Date of Approval changed from October 14, 2011, to October 16, 2011. The IRB did not receive the IRB Reviewer's final recommendation and documentation until October 16, 2011.
- Expedited Category 5 has been added to the approved categories. This research is being approved under Expedited Categories 5, 6 and 7.
- Date of revisions received in the Office of Research Subjects Protection changed from October 9, 2011, to October 10, 2011. Revisions to the Research Plan were received on October 10, 2011; no other revisions were requested for this review.
- The Protocol section was not included in the original approval letter. The section has been revised to include the approved Research Plan, Personnel Roster and Interview Protocols.
- Both the English and Portuguese versions of the Free and Clarified Consent are now stated.

Please find enclosed a revised letter which is now your official IRB letter of approval. This letter replaces the earlier letter you have received.

We apologize for any inconvenience our error may have caused. If you have any questions, please contact Jennifer Rice, IRB Coordinator, VCU Office of Research Subjects Protection, at irbpanelb@vcu.edu and 828-3992.

Page 1 of 1

VCU Memo

Virginia Commonwealth University

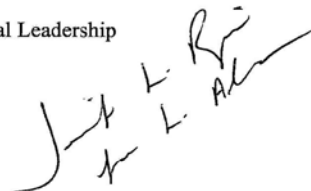
Office of Research Subjects Protection
BioTechnology Research Park
BioTech One, 800 E. Leigh Street, #114
P.O. Box 980568
Richmond, Virginia 23298-0568
(804) 828-3992
(804) 827-1448 (fax)

DATE: October 14, 2011
[Revised on November 15, 2011]

TO: Jonathan D. Becker, JD, PhD
School of Education, Educational Leadership
Box 842020

FROM: Lisa M. Abrams, PhD
Chairperson, VCU IRB Panel B
Box 980568

RE: **VCU IRB #: HM13976**
Title: Implementation and Outcomes of a Portuguese-English Tandem Language Exchange (TLE) Program Delivered Jointly across a U.S.-Brazilian University Partnership: A Case Study



On October 16, 2011, the following research study was approved by expedited review according to 45 CFR 46.110 Categories 5, 6 and 7. The approval reflects the revisions received in the Office of Research Subjects Protection on October 10, 2011. This approval includes the following items reviewed by this Panel:

RESEARCH APPLICATION/PROPOSAL: None

PROTOCOL (Research Plan): Implementation and Outcomes of a Portuguese-English Tandem Language Exchange (TLE) Program Delivered Jointly across a U.S.-Brazilian University Partnership: A Case Study, received 10/10/11, version 2, dated 10/10/11

- VCU IRB Study Personnel Roster, received 9/30/11, version 1, dated 9/28/11
- Protocol: Preliminary Schedule for Sessions during Data Collection Phase, Interview Protocol for Study Participants, Interview Protocol for Instructors and LRC Staff, Teletandem Student Personality/Pairing Questionnaire, Teletandem Evaluation Questionnaire for Instructors and LRC Staff, and Evaluation Questionnaire for Study Participants, received 9/30/11, version 1, dated 9/22/11

CONSENT/ASSENT (attached):

- Research Subject Information and Consent Form, received 9/30/11, version date 9/22/11, 4 pages
- [REDACTED] Participant Consent Form: Agreement of Free and Clarified Consent – *English version*, received 9/30/11, version 1, 2 pages
- [REDACTED] Participant Consent Form: Agreement of Free and Clarified Consent – *Portuguese version*, received 9/30/11, version 1, 3 pages

ADDITIONAL DOCUMENTS: None

This approval expires on September 30, 2012. Federal Regulations/VCU Policy and Procedures require continuing review prior to continuation of approval past that date. Continuing Review report forms will be mailed to you prior to the scheduled review.

(Continued...)

APPENDIX G








Termo de consentimento livre esclarecido

Teletandem e transculturalidade: Interações on-line em língua estrangeira por webcam

TERMO DE CONSENTIMENTO LIVRE E ESCLARECIDO

Pelo presente termo, autorizo Anton T. Brinckwirth, pesquisador(a) do *Implementation and Outcomes of a Portuguese-English Tandem Language Exchange Program Delivered Jointly Across a U.S.-Brazilian University Partnership: A Case Study*, a fazer uso dos dados por mim gerados para os estudos do referido projeto.

Ao assinar este termo de consentimento livre e esclarecido, entendo que (rubricar cada item, após a leitura, na coluna da direita):

	rubrica
<ul style="list-style-type: none">Os dados por mim gerados serão submetidos à análise dos pesquisadores do projeto, com os seguintes objetivos: (a) levantar os modos pelos quais eu compreendo o estudo, a aprendizagem e a prática das línguas estrangeiras on-line; (b) levantar os modos pelos quais eu compreendo a cultura do meu parceiro de teletandem e seus impactos sobre minha aprendizagem e sobre a relação com meu parceiro estrangeiro; (c) descrever o papel do teletandem na minha educação para se relacionar com outros povos; e (d) levantar múltiplas visões de implementação institucional do teletandem;	
<ul style="list-style-type: none">Autorizo que sejam feitas gravações em áudio/vídeo de minhas sessões de teletandem com o meu parceiro, assim como de entrevistas por mim concedidas, de acordo com a minha vontade e tempo disponível;	
<ul style="list-style-type: none">Tais atividades podem, por algum motivo, causar algum desconforto ou constrangimento passageiros, mas que serão, ao máximo, evitados pelo pesquisador;	
<ul style="list-style-type: none">Caso, por qualquer motivo, eu me sinta desconfortável, poderemos utilizar algum outro método alternativo de coleta, com a minha permissão;	
<ul style="list-style-type: none">Por meio de minha participação na pesquisa, poderei aprender muitas coisas acerca do meu modo de aprender e ensinar línguas estrangeiras, sendo esses os benefícios que terei com minha participação no projeto;	
<ul style="list-style-type: none">Terei o acompanhamento e assistência, na medida do possível, do pesquisador acima referido;	
<ul style="list-style-type: none">O pesquisador acima referido me dará esclarecimentos, antes e durante a	

Teletandem e transculturalidade: Interações on-line em língua estrangeira por webcam

pesquisa, acerca de sua metodologia e seu método de análise dos dados;	<input checked="" type="checkbox"/>
• Terei total garantia de anonimato, estando assegurada minha privacidade quando dados confidenciais envolverem o meu nome;	<input checked="" type="checkbox"/>
• Não serei pago por minha participação no projeto, sendo que os ganhos decorrentes da mesma serão no âmbito de minha aprendizagem e experiência de participação;	<input checked="" type="checkbox"/>
• No caso de aplicação de questionários ou de entrevistas, terei o direito de não responder a perguntas que me causem constrangimentos de qualquer natureza;	<input checked="" type="checkbox"/>
• Autorizo a publicação dos meus dados, desde que sejam mantidos os procedimentos de anonimato.	<input checked="" type="checkbox"/>
• Autorizo a publicação de minha imagem por meio de vídeos ou fotos	<input checked="" type="checkbox"/>
• Não autorizo a publicação de minha imagem por meio de vídeos ou fotos (neste caso, será colocada uma tarja preta ou desfocalização do rosto, para impedir a identificação)	<input checked="" type="checkbox"/>

Atenciosamente,

_____, 23 de Setembro de 2011.

Participante

Antônio T. Brinckiweth
Pesquisador

Testemunha

DADOS DO PARTICIPANTE	
Nome:	_____
Data de nascimento:	23 DE JULHO DE 1989

Jonathan Becker, J.D., Ph.D.
(Principal Investigator)

Teletandem e transculturalidade: Interações
on-line em língua estrangeira por webcam

2103 Oliver Hall 1015 West Main Street, P.O.

Endereço:	Box 842020 Richmond, VA 23284-2020 EUA
Telefone para contato:	804-827-2655 EUA
E-mail:	jbecker@vcu.edu
DADOS DO PESQUISADOR	Anton T. Brinckwirth, Study Coordinator)
Nome:	900 Park Ave (Hibbs Hall 423)
Endereço:	Richmond, VA 23832
Telefone para contato:	804-827-1149 EUA
E-mail:	abrinckwirth@vcu.edu
Comitê de Ética de Pesquisa da Faculdade de Ciências e Letras de [REDACTED]	Coordenadora: [REDACTED] Vice-Coodenadora: [REDACTED] Endereço: Faculdade de Ciências e Letras de [REDACTED] CEP: [REDACTED] Tel: [REDACTED] e-mail: [REDACTED]

APPENDIX H

Invitation Letter from Brazilian University

UNIVERSIDADE [REDACTED]
Faculdade de Ciências e Letras de [REDACTED]

[REDACTED] 16 de setembro de 2011.

Prezado Anton Brinckwirth,

A Faculdade de Ciências e Letras de [REDACTED] terá o prazer de recebê-lo durante o mês de outubro do corrente para o desenvolvimento de parte de seu projeto de pesquisa de Doutorado intitulado Implementation and Outcomes of a Portuguese-English Tandem Language Exchange (TLE) Program Delivered Jointly Across a U.S.-Brazilian University Partnership: A Case Study.

Suas atividades serão realizadas junto à equipe de pesquisadores do Laboratório de Teletandem do C.L.D.P. - Centro de Línguas e Desenvolvimento de Professores desta unidade, sob a supervisão do Prof. Dr. [REDACTED]

Você está autorizado a entrevistar estudantes, instrutores e mediadores de Teletandem na [REDACTED] contanto que saibam, antecipadamente, quais são os objetivos da sua pesquisa, como eles poderão ser afetados sendo participantes, que assinem o Termo de Consentimento Livre e Esclarecido e que o pesquisador proteja a identidade e confidencialidade dos dados de cada participante.

Desejamos-lhe uma excelente e profícua estada em [REDACTED] nossa faculdade, esperando que seu contato com o C.L.D.P. - Centro de Línguas e Desenvolvimento de Professores se frutifique em futuros projetos conjuntos de pesquisa com o [REDACTED] University.

Atenciosamente,

[REDACTED]
Diretor /
Faculdade de Ciências e Letras
[REDACTED]

Faculdade de Ciências e Letras - DIREÇÃO
[REDACTED]

VITA

Anton Theodore Brinckwirth was born in St. Louis, Missouri. He earned his high school diploma in 1981 at Santa Teresa High School in San Jose, California. He received his Bachelor of Arts degree in Communication and Spanish in 1990 from Saint Louis University (SLU), and completed his Master of Arts degree in Spanish at SLU in 1992. During the next 4 years, he taught Spanish at several St. Louis area high schools and junior colleges while exploring a career in music—as a guitar player, songwriter, and recording artist. In 1996, he returned to SLU to manage the Language Learning Center. It was at this juncture that he decided to shift his career focus to Higher Education. Over the next 5 years, he took courses in Russian, French, Portuguese, Computer Science, and Math. In 2003, he left SLU to pursue the Education Specialist degree in Educational Technology at the University of Missouri-Columbia. He completed the Ed.S. degree in 2004 and moved to Richmond, Virginia, where he accepted the position of Director of the World Studies Media Center at Virginia Commonwealth University (VCU). He was admitted into the Ph.D. program in Education at VCU in 2005, and he completed his Ph.D. studies in May 2012.