

Telecollaboration for intercultural learning: An overview of projects involving Japan

Nathaniel Carney

Kwansei Gakuin University, Japan

natcarn@gmail.com

Telecollaboration is a form of foreign language education which links language students both cross-linguistically as well as interculturally through computer-mediated communication (CMC) (Belz, 2003). There has been significant research on telecollaborative projects (e.g. Abrams, 2003; Bauer, Benedette, Furstenberg, Levet, & Waryn, 2005; Belz, 2001, 2002, 2003; Belz & Kinginger, 2002; Kern, 1996; Kinginger, 1998; Kinginger, Gourves-Hayward, Simpson, 1999; Kramsch & Thorne, 2002; Müller-Hartman, 2000; O'Dowd, 2003; Thorne, 2003; Ware & Kramsch, 2005). Recently, reviews of online language education (Kern, Ware, & Warschauer, 2004) and Internet-mediated intercultural foreign language education (ICFLE) (Thorne, 2005), as well as an edited volume specifically on ICFLE (Belz & Thorne, 2005) have looked at these and other telecollaborative studies. However, to date, specific contexts for telecollaboration have only been reviewed in detail for Spanish-American telecollaboration (O'Dowd, 2005) and German-American telecollaboration (Belz, 2001, 2002; Belz & Müller-Hartmann, 2003). This paper gives a overview of intercultural learning telecollaborative projects that have involved Japanese students, and based on these and other studies, offers a perspective on best practices (Thorne, 2003) for building telecollaborative partnerships for intercultural learning between Japan and other countries.

Computer-mediated communication is a daily part of many of our lives, and it is utilized in many language classrooms as well. *Telecollaboration* (Belz, 2003; see also Warschauer, 1996), one form of online language education, is defined by Belz (2003, p.2) as follows:

Telecollaboration involves the application of global computer networks to foreign (and second) language learning and teaching in institutionalized settings. In telecollaborative partnerships, internationally-dispersed learners in parallel language classes use Internet communication tools such as e-mail, synchronous chat, threaded discussion, and MOOs (as well as other forms of electronically mediated communication), in

order to support social interaction, dialogue, debate, and intercultural exchange. (Belz, 2003, p. 2)

Many telecollaborative projects from Western countries have been reported in the language learning literature to date (e.g. Abrams, 2003; Bauer et al., 2005; Belz, 2001, 2002, 2003; Belz & Kinginger, 2002; Kern, 1996; Kinginger, 1998; Kinginger, Gourvés-Hayward, Simpson, 1999; Kramsch & Thorne, 2002; Müller-Hartman, 2000; O'Dowd, 2003; Thorne, 2003; Ware & Kramsch, 2005). Overviews of some of these telecollaborative projects have appeared in recent online language education reviews (e.g. Kern, Ware, & Warschauer, 2004; Thorne, 2005), and a recent edited compilation on Internet-mediated intercultural foreign language education (ICFLE) (Belz & Thorne, 2005) has added depth to the research on language education through computer-mediated communication, including telecollaboration. For specific telecollaborative contexts, however, only overviews of the Spanish-American telecollaborative context, (O'Dowd, 2005), and the German-American context (Belz, 2001, 2002; Müller-Hartmann, 2003) have appeared. The purpose of this paper is to provide an overview of telecollaborative projects involving Japan which focus on intercultural learning. The overview gives a critical look at the studies to date and, informed by these studies and others, offers suggestions and avenues for further telecollaborative research in or with Japan. Also, it is hoped that this paper might give more attention to telecollaboration in Asia and telecollaboration involving less commonly taught languages, which might not receive the attention they deserve (Belz & Thorne, 2005, pp. xvi-xvii).

This overview focuses on intercultural learning both for the theoretical convenience of concentrating on studies with similar goals, as well as the logistical reason of limiting the number of pages of this overview. Nevertheless, the other goal of telecollaborative learning noted by Belz (2003, p. 68) as "foreign language linguistic competence", or the goal for on-line language learning of "literacy and identity" (Kern, Ware, & Warschauer, 2004; See also Kern, 2000) could be the topic of a further review of this or other literature.

Also, in this overview, projects involving tandem language learning (Appel, 1999), keypal exchanges (Kitao & Kitao, 1996; Nozawa, 2001; Robb, 1996) and language exchange partnerships (Long, 2001, p. 17), all viable means toward CMC international exchange, will not be reviewed. Telecollaboration differs from these learning methods both in that it involves learning in institutionalized settings as well as exchanges between language classes rather than just individuals. It is recognized, nonetheless, that sometimes definitions and practices, both in the case of keypal exchanges (e.g., Furmanovsky, 1999) and tandem language learning (see Thorne, 2005) might be synonymous with telecollaboration.

Table 1 gives a summary of each article included in this overview. The reader should note that Johnson and Brine (2000) is included among these, though rather than just an account of one specific telecollaborative project, it tells about having students using computers and doing telecollaboration over a period of time, and it will not be reviewed along with the other articles but rather referred to later for its insight about telecollaborative project design and related concerns. Also, for reader's reference, though not included in this overview since they are not clearly telecollaborative projects according to Belz's (2003) definition, the recent work of Chu (2005) and Park, Nakano, and Kim (2003) may be of interest. Both projects involved computer-mediated communication in English between Korean and

Japanese students from Korea University and Waseda University. Chu (2005) compares how computer-mediated communication might enable critical thinking in discussion, while Park, Nakano and Kim (2003) look at how confusion in the NNS (nonnative speaker)-NNS interaction might affect English learning positively or negatively.

Table I. An overview of the telecollaborative projects involving Japan

Article	CMC mode/ (language)	Participants	Purpose of study	Data
Gray & Stockwell (1998)	email (Japanese)	18 undergraduate students studying Japanese in Australia and 19 undergraduate students in an intercultural communication class in Japan	"to investigate the effect of CMC...to facilitate: (i) second language acquisition; and (ii) enhanced intercultural awareness" (p. 2)	A post-project questionnaire given to "all participating students" (p. 3) and students' emails (exact number not specified)
Johnson & Brine (2000)	email (English)	"[Japanese] students were paired with native speakers in...the United States, Canada, Australia, and Britain" (p. 258) from 1992-1996	Not explicitly stated – this article is about how to develop CALL courses in Japan	Informant interview data from colleagues, email transcripts, classroom observations, Student questionnaires, interviews with students
Okubo & Kumahata (2000)	iVisit First Class (English and Japanese)	US university students studying third semester Japanese (150 contact hours or more) and Japanese university students studying Intercultural Communication Studies who have at least 6 yrs. of English study	"To see how students can learn C2 through their communication in (sic) more realistic way through technology" by examining the Five C's" (p. 19)	Pre and post-project questionnaires for all participants (p. 20)
Fedderholdt (2001)	email (English)	19 Japanese university students and 19 pre-university Danish students	To increase students motivation for writing To allow students to use English in real situations To better students knowledge about non-native English speaking cultures	Questionnaires and oral interviews given to students after the project

Stockwell & Stockwell (2003)	email (Japanese)	"48 students at an Australian university and 34 students at a Japanese university" (p. 3)	"to investigate the pragmatic aspects of [Japanese] language which can be learnt through interactions with native speakers" (p. 3)	participant emails (exact number not specified)
Azuma (2003)	Video-conference by ISDN (Japanese and English)	10-15 American students in a Business Japanese course and 10-15 Japanese students in an advanced oral English course (p. 111)	For American students to understand Japanese native speakers and for Japanese students to understand English native speakers" (p. 110) Also, for students "to acquire a critical comprehensive understanding of diverse cultures" (p. 110)	videoconference session transcripts and questionnaires for American students
Itakura (2004)	email (Japanese)	Hong Kong learners of Japanese in Hong Kong and native Japanese speakers in Japan	To "evaluate an e-mail assisted intercultural project in relation to its effect on the formation or breakdown of stereotypes among foreign language learners" (p. 39)	email messages, participant reports, interviews with some Hong Kong students
Torii-Williams (2004)	email (Japanese and English)	U.S. university students of Japanese and Japanese university students of English	To achieve the National Standards' 'five goals', and develop students' creative aspects of second language acquisition (p. 110)	email letters researcher's notes U.S. student questionnaires (p. 112)

Overview of the projects

The purpose of this section of the overview is to give the reader an idea of intercultural learning findings of the telecollaborative projects. First, a paragraph citing the data collection methods for all studies is given. Thereafter, intercultural learning findings of each study are summarized. Finally, a critical look at the findings for each study appears, and specific attention is given to how researchers define intercultural learning, and how their data analysis leads to their results.

Data sources

In order to arrive at their results, researchers used a variety of data as is visible in the last column of Table 1. Most popular among these were actual telecollaborative data (what Chapelle, 2003, p. 98 refers to as “process data”) such as email transcripts (Gray & Stockwell, 1998; Itakura, 2004; Stockwell and Stockwell, 2003; Torii-Williams, 2004), and researcher’s observations of videoconference sessions (Azuma, 2003). Also popular was the use of participant questionnaires given both post-project (Gray & Stockwell, 1998; Okubo & Kumahata, 2000; Fedderholdt, 2001; Azuma, 2003; Torii-Williams, 2004) and pre-project (Okubo & Kumahata, 2000). Other researchers received written reports from students (Itakura, 2004). Other methods of garnering data included participant interviews (Fedderholdt, 2001; Itakura, 2004) and the researcher’s field notes (Torii-Williams, 2004). Data collection for specific studies will again be referred to later in their respective overviews.

Intercultural learning findings

The intercultural learning findings of these studies was, on the whole, quite positive. Gray and Stockwell (1998) reported finding many positive comments in students’ post-project questionnaires that seemed to imply intercultural learning. The authors note that “a number of comments germane to the notion of enhanced cultural awareness or openness were found” (Gray & Stockwell, 1998, p. 4), and they mention that “the Australian students too were quite positive in their assessment of the project” (Gray & Stockwell, 1998, p. 4).

Fedderholdt (2001), in her report about a Japanese-Danish partnership, had main objectives of motivating students to write, giving them a chance to use English for real communication, and increasing their awareness about each others’ cultures (Fedderholdt, 2001, p. 273). In assessing the accomplishment of these goals, questionnaires and oral interviews were given to students following the project. Among the findings of Fedderholdt’s (2000) study was that the students’ knowledge of the other culture had increased. Post-project questionnaires and interviews showed that students in both countries had only superficial knowledge about each other before the project (Fedderholdt, 2001, p. 276). Fedderholdt reports that after the project, however, students had made various discoveries about each others’ cultures. Some examples include learning about differences in school life in the two countries, learning about family life, and learning about the royal families in the two cultures.

Okubo and Kumahata (2000) as well as Torii-Williams (2004) both used achievement of the Five C’s from the National Standards of Foreign Language Learning of the United States as the measure of success in their projects, with one of the Five C’s being culture (National Standards, 2001). Okubo and Kumahata (2000) conclude through their analysis of pre and post-project questionnaires that “preliminary data result [sic] from Baylor students shows the effectiveness of computer-assisted acquisition” (p. 20). Sample questions from questionnaires presented in the paper were “Do you think [sic] computer is a useful learning tool in [sic] academic setting?” (p. 20) and “Are you interested in foreign cultures?” (p. 21). Both of these questions showed an increase in positive responses from the American university students in the project, though “no statistically significant change of attitudes” (p. 21) among Japanese university participants. In Torii-Williams (2004) study, she finds that students enjoyed the project and “the project helped the students improve their mastery of language and increased their cultural knowledge” (p. 121). With regard to her students’ cultural

learning she mentions students learning various skills including: changing from formal forms of address to informal forms after the first exchanges (p. 117), learning about "age-appropriate cultural practices" (p. 118), the exchange of photos and music (p. 118), and the use of *kaomoji*, or Japanese style emoticons (p. 119).

In Azuma's (2003) Japan – America telecollaborative videoconferencing project, there is no clearly stated intercultural learning goal though it is implied that culture learning is part of the project as Azuma writes that "it is a content course that aims at students' intellectual growth and cultural awareness"; (Azuma, 2003, p. 110) and one of the stated goals of the department in which this class was offered was "to acquire a critical comprehensive understanding of diverse cultures" (Azuma, 2003, p. 110). Based on transcriptions of the videoconferencing sessions and questionnaires given to American participants, Azuma concludes that "students learned that the way people speak (or do not speak) is different from culture to culture" (Azuma, 2003, p. 113). Some examples of this conclusion were that American students could observe Japanese communication style, and "as the video sessions were continued, American students realized that their communication style tends to be too direct, ignoring the preference of maintaining conformity within their group, as well as with the interlocutor" (Azuma 2003, p. 114). Another example was that American students observed how "Japanese often look at one another before expressing their own view, and began to understand Japanese avoidance strategy in any potential conflict-evolving situation where the difference in opinion may cause a problem for the relationship" (Azuma 2003, p. 115).

Stockwell and Stockwell (2003) discuss the acquisition of a very specific type of cultural learning in their research – "pragmatic expression" (Stockwell & Stockwell, 2003, p. 3). Referencing Ellis (1994, p. 23) they write that "pragmatics is particularly concerned with the appropriateness of language use, both with regard to what is said in a particular context and how it is said" (Stockwell & Stockwell, 2003, p. 3). The purpose of Stockwell and Stockwell's study was "to investigate the pragmatic aspects of a second language which can be learnt through interactions with native speakers" (Stockwell and Stockwell 2003, p. 3). The results in Stockwell and Stockwell's (2003) study are based on the analysis of participant emails. The authors find a number of interesting results regarding the acquisition of pragmatic expressions. They note that there were both cases where a NNS used certain expressions appropriately after their NS (native speaker) counterparts had used them in an email, and they also noted various instances of both positive and negative transfer of pragmatic knowledge. That is, using strategies from their L1, students both said appropriate and inappropriate things in their L2. Finally, the authors found some instances where the content of the emails was culturally inappropriate and this led to disgruntled students on both ends of the interaction (Stockwell & Stockwell, 2003, p. 4; see also Stockwell, 2004).

Itakura (2004), in a Hong Kong – Japan partnership, investigates how cultural stereotypes are formed and how they are changed, and sometimes reinforced, through email telecollaboration. Itakura references Ting-Toomey's (1999, p.161) definition of stereotypes as an "exaggerated set of expectations and beliefs about the attributes of a group membership category." He also formulates three specific research questions which are "(a) what kinds of input form the basis of stereotyped assumptions about the target culture (b) under what circumstances these assumptions may be dismissed, retained, modified or reinforced and (c) how the learners made sense of similarities and differences between their own and target

culture through data collection?" (Itakura, 2004, p. 39). After analysis of emails, Itakura reported that students seem to get cultural assumptions from a wide range of sources, including the mass media and other students learning Japanese, even while "learners are aware that assumptions based on these sources may be inaccurate" (Itakura, 2004, p. 41). In interviews with students, another source of assumptions, the classroom teacher (in this case a business class tutor) was also reported. Itakura mentions, however, that the emails "suggest that learners may believe that native speakers know the 'actual situation' and that their assumptions can be validated by information directly obtained from native speakers of Japanese" (Itakura, 2004, p. 41) as Hong Kong students asked many questions of their Japanese counterparts verifying the truth of these assumptions. Itakura investigated whether students' assumptions changed both based on their project findings as well as based on their inquiry to the native Japanese students. When there were conflicts between project findings and previous assumptions, students tended to modify their assumptions, often attributing contrary information to demographics (e.g. maybe not all Japanese girls love shopping, but those who live in the city probably do). When students found conflicts between their assumptions and the responses from their Japanese counterparts, they definitely seemed to modify their assumptions. Nevertheless, Itakura cautioned in his paper that the modification of stereotypical assumptions can also result in reinforced stereotypes (see also Belz, 2002, p. 76; 2005). He mentions that some students interpreted the results of their intercultural surveys through a stereotypical perspective which served to reinforce their previously held assumptions. In the end, Itakura (2004, p. 49) concludes that "the e-mail intercultural project has been shown to benefit the learners in different ways to develop more sensitive and complex views on culture." But, he adds that "future e-mail intercultural projects would need to consider the importance of involvement from learners, native speakers and foreign language teachers for the joint interpretation of cultural data" (Itakura, 2004, p. 49). A significant cross-reference to Itakura's conclusions would be Furstenberg et al.'s CULTURA project (2001).

Critical overview: Intercultural learning definitions and data analysis

This brief overview intercultural learning findings can serve as a useful summary of the telecollaborative projects, but it is not a complete story because it ignores a question central to any study of intercultural learning, that being, what defines intercultural learning, and what kind of data show intercultural learning? In giving concrete definitions of what constitutes intercultural learning and showing how their data might imply intercultural learning in either a positive or negative sense, a few of the studies should be singled out. Of the above mentioned studies, only three, Stockwell and Stockwell (2003), Itakura (2004), and Torii-Williams (2004), provide the reader with a clear idea of what constitutes intercultural learning for their study. Stockwell and Stockwell (2003) are careful to define "pragmatic expression" (Stockwell & Stockwell, 2003, p. 3), the central concern of their study. Itakura (2004) defines the central concern of his study, stereotypes, as well as discussing research on what defines intercultural competence. Finally, Torii-Williams, while using a predefined paradigm of the Five C's for her study, takes time to quote definitions for each of the Five C's (Okubo and Kumahata, 2001, also use the Five C's as a guideline but do not define them for the reader). In studies measuring intercultural learning, defining intercultural learning is

important before any determination of its attainment can be reached. In the studies that do not do this, there is the danger that the results of such work can neither be reproduced nor learned from by their peers.

A further consideration regarding these studies is the data used to arrive at results. While all studies reported collecting some sort of data for their project, how the data was reported and analyzed is of significant concern. In fact, most studies reported collecting much data, but as it was not presented in their article, it becomes unavailable to the reader. As with the use of definitions commented on in the previous section, it seems the more recent studies -- Stockwell and Stockwell (2003), Itakura (2004), and Torii-Williams (2004) -- do a more thorough job of collecting data and presenting their data clearly in support of their conclusions. Hopefully this is both a sign of improving methodologies as well as an affirmation of the work of those researchers. It is also worthwhile to mention here the work of researchers not involved with Japan who have included a variety of data in order to determine the development of intercultural learning (e.g. Belz, 2003, O'Dowd 2003) in their telecollaborations.

In terms of data, Gray and Stockwell (1998) used both email transcripts as well as post-project questionnaires as data for their study. While both sources might serve as useful information, within the study actual email transcripts were not quoted, and the quoted post-project student feedback alone makes it difficult to judge how students' intercultural awareness may have developed over the course of the telecollaboration. It is not clear, in other words, what abilities and opinions students held before the study, hence it is difficult to judge their progress, though it may have been clear for the researcher. In Okubo and Kumahata's study (2000), while pre and post-questionnaires are given to the participants, the connection between the results of the questionnaire data and the results of the study is only marginally made in the article, though all questionnaire data is made available to the reader online (p.20). The use of questionnaires alone leaves the question open as to whether students' responses changed because of the project or for another reason. Transcript data would be useful in order to see actual linguistic footage of how students' opinions changed. Fedderholdt's (2001) study relies on post-project questionnaires and interviews for data. In this case, transcript data would have been an excellent supplement to such post-project participant reports. In addition, as with other studies, this study might have profited from more detailed pre-project surveys of students abilities, backgrounds and knowledge. Azuma (2003) collects both transcripts of videoconferencing sessions as well as student questionnaires as data for his study, but no actual transcripts are quoted, and the questionnaires provide useful but incomplete information about the students pre and post-study abilities (it is not clear when the questionnaires were given, though they seem to be post-project questionnaires). Torii-Williams (2004) also collects both transcripts (of emails), and questionnaires, and she also takes field notes during her study. Again, no actual transcript data is used to support findings in the study, though Torii-Williams does provide many quotes and supports her findings with the rest of the collected data. Stockwell and Stockwell (2003) use transcripts as data for their study, thus, the reader can clearly see what the researcher's see. In the case of Stockwell and Stockwell's (2003) examination of pragmatic expression, seeing the transcripts is essential and very useful for the reader. The only drawback on Stockwell and Stockwell's (2003) transcript data is that, while all transcripts were of Japanese language communication, all quotes were in English translation with none of the

actual Japanese language being shown. The reason for this is not explicit, but it would seem useful to include the untranslated data for those readers able to comprehend it. In a later analysis of the same data, such bilingual transcripts are included (Stockwell, 2004). Finally, Itakura (2004) gathered participant emails, conducted post-project interviews as well as gathering participants' written reports in his study. Quoting from all three of these sources allowed Itakura (2004) to create significant support for his conclusions while clearly allowing the reader to see how he arrived at said results.

Constraints and Affordances Specific to Telecollaborative Projects with Japan

While language research is often an exciting process of discovery in which intercultural learning and education in general can benefit, the logistics of any research study are affected by the context in which they are planned and enacted. Johnson and Brine (2000, p. 252) write, "it can be argued that all successful developments and implementations of educational computer applications are influenced and shaped by the local context in which they are designed and used and include the entire milieu of cultural and social organization." For researchers in Japan or doing research projects associated with Japan, the potential Japanese-specific institutional, cultural, and technological constraints and affordances (van Lier, 1996) are of great interest.

There were a number of different constraints or characteristics mentioned by the researchers reviewed here, and by other researchers with experience working in or with Japan. These constraints and affordances will be defined as institutional, which are rules or practices specific to the learning institution in Japan where the research takes place, cultural, which are the habits or practices common in Japanese society, and technological, which relate to the tools used for telecollaboration (see Belz, 2001; Belz & Müller-Hartmann, 2003; O'Dowd, 2005).

Institutional constraints and affordances

One of the most common constraints mentioned in telecollaborative partnerships involving students in Japan was the different time zones and semester schedules for normal classes at the institutions involved. For institutions in the Americas, the time difference is often double-digits, and this usually means scheduling classes during odd times for institutions. Okubo and Kumahata (2000) reported that "[t]he problem, which we cannot resolve, is the time difference during iVisit sessions. 14 or 15 hours in time difference, depends on the Daylight Savings Time, becomes a menace" (Okubo and Kumahata, 2000, p. 22). Of course, non-synchronous telecollaboration such as email is one way to avoid the problem of time difference. What cannot be avoided, however, are differences in semester schedules. As Azuma points out, "It is often the case that the academic calendar between two countries is quite different" (Azuma, 2003, p. 117). Typically, Japanese universities' semesters run from April until late July, and then from September until March, with some vacation in January. For at least two of the researchers reviewed here, the difference in semester schedule caused a shortened period of telecollaboration than would be desired. In reference to their Australia-Japan telecollaborative partnership, Gray and Stockwell (1998) mention that "Due to the limited time during which the semesters at both universities overlap, the project was

officially conducted within a time span of five weeks" (Gray and Stockwell 1998, p. 4). Torii-Williams, in a US-Japan partnership, similarly comments that "[d]ue to a long spring break of the Japanese college, the actual process of exchanging e-mails was delayed and occurred only 3-5 times during the semester though they continued to write to each other after the semester ended" (Torii-Williams 2004, footnote on p. 112).

A final concern mentioned by one of the researchers, while not wholly an institutional constraint or characteristic, was the importance of having dedicated partner teachers with whom to build telecollaborative projects. In his report on his US-Japan videoconferencing telecollaboration, Azuma writes, "Without a dependable foreign colleague, it is impossible to carry out the videoconference project" (Azuma, 2003, p. 116). Johnson and Brine comment that for their telecollaborative projects when finding partners "the main problem was identifying teachers whose instructional expectations matched those of the authors" (Johnson & Brine, 2000, p. 258) and even after such a partner was located "the authors devoted months of correspondence time each year to identifying and "getting to know" potential partner teachers" (Johnson & Brine, 2000, p. 258). While the other articles reviewed do not mention this consideration, it is an essential point about any successful telecollaborative partnership.

Cultural constraints and affordances

According to Johnson and Brine, "Explicit consideration of cross-cultural aspects of communication must be included in the design of CMC activities that link students with different cultural and linguistic backgrounds" (Johnson & Brine, 2000, p. 252). As the studies reviewed here were culture and language projects, and therefore, explicitly concerned with the cultures and language of their participants, by their nature they paid some attention to the 'cross-cultural aspects of communication' of the participants. However, in this section, constraints and affordances for carrying out telecollaborative projects will be the focus. In other words, the considerations here will be of cultural phenomena that influenced the design of the projects or clearly affected the outcomes of the projects. For an overview of the Japanese context and guidelines about doing Network-Based Language Teaching in the Japan, see Jarrell (2001).

One particular cultural concern in the studies reviewed here was the Japanese educational system. Johnson and Brine comment that "The learning style of Japanese university students is shaped by the public education system" (Johnson & Brine, 2000, p. 252). Relevant to CMC and telecollaborative projects, the authors go on to comment that (as of 1999) "Even though computers have been available for many years in Japanese schools, their use is not mandated in the area of language teaching by the Ministry of Education and, as a result, are not seen as central components in most English language instruction" (Johnson & Brine, 2000, p. 253). Now, in 2006, high speed broadband Internet access is widely available (Bleha, 2005), though if recent years trends have continued, Internet access through cell phones still outshines the use of personal computers for access, at least for the younger generation (Clark, 2003). Aside from computer usage, the general communicative habits of Japanese students are a cultural issue. Fedderholdt comments that "Japanese students are known for being wary and reluctant to communicate with foreigners, as they are not at all confident about their English" (Fedderholdt, 2001, p.275). For this reason, Fedderholdt

judged the NNS-NNS telecollaborative partnership she created with Japanese and Danish students to be useful, implying that it would be less intimidating to communicate with other non-native speakers. Johnson and Brine (2000) mention that topic selection is an issue with Japanese students. They comment that in their projects "simple and non-controversial topics had to be selected as Japanese students are often ill-prepared and unwilling to discuss sensitive topics in English (or in Japanese for that matter)" (Johnson and Brine, 2000, p.261). A further issue perhaps particular to Japanese students is Japanese students' abilities to participate in the language classroom. Fedderholdt comments, "Teachers in Japan – especially Westerners – often complain about the lack of spontaneity of Japanese learners' language production in English" (Fedderholdt, 2001, p. 279). This indeed might be a mainly Westerner complaint due to the contrasts in communication styles. Gray and Stockwell cite an observation from Clancy which gives a concise view of how Westerners communicative style might differ from the communicative style of Japanese students:

In Japan, the ideal interaction is not one in which the speakers express their wishes and needs adequately and listeners understand and comply, but rather one in which each party understands and anticipates the needs of the other, even before anything is said. (Gray & Stockwell 1998, p.2, cited from Clancy in Rose, 1996, p. 71).

An important source of students' cultural and normal practices are the educational systems within which they are raised. In the context of Japan, Gray and Stockwell relate the system specifically to English language education when they write that "the role of English as a medium of communication has been eclipsed by the gatekeeping role of the university English entrance exam" (Gray & Stockwell, 1998, p. 3). Fedderholdt seconds this notion remarking that "in high school [in Japan], most 'writing' in English consists of translating unconnected sentences in order to practice various grammatical points as preparation for university entrance examinations" (Fedderholdt, 2001, p.275). Nonetheless, one group of researchers found a positive side in the Japanese high school education system when they taught their students basic computer skills. "Basic computer and software terminology was introduced and practiced through a variety of paper-based drills and quizzes. One key aspect of this structured teaching method was that it was consistent with students' previous English language instruction in high school, and students accepted it readily" (Johnson & Brine, 2000, p. 256).

Technological constraints and affordances

Technological constraints and affordances must be of prime consideration for any telecollaborative project. For the projects reviewed here, a number of different technologies were chosen for telecollaboration, and they each presented different challenges.

Researchers who chose telecollaborative tools that involved real-time video contact among participants reported challenges specific to those technologies. Okubo and Kumahata (2001) noted problems with the connection speeds for iVisit, which resulted in "jerky and dropped video and audio feed" (Okubo & Kumahata, 2001, p. 22) and they also reported that the "limitation in the number of video windows forces us to use only

one camera" (Okubo & Kumahata, 2001, p. 22) despite having 30+ students. Azuma, who employed videoconferencing technology, implied that such technology limited the class size for an effective telecollaboration, "we considered that more than 15 would hinder the efficiency of class participation by reducing the opportunity for students to speak" (Azuma, 2003, p. 111). Two suggestions that Azuma gave with respect to videoconferencing were the importance of having "test sessions" and the usefulness of having a "technical assistant physically present during at least the first several sessions" (Azuma, 2003, p. 117). A final concern Azuma mentions in relation to telecollaborating via videoconference was turn-taking. He cautions that "[o]ne potential problem with turn-taking [in videoconferencing] is that speaking can be dominated by a limited number of students who are more active than the rest of the class, although the receptive skills (e.g. listening, understanding) can be equally practiced by all participants" (Azuma, 2003, p. 118). In the cases of Azuma's videoconference, it should be noted that Azuma was in the United States and the problems and concerns reported appear to be on the United States side of the partnership. There are no explicit reports about the Japanese side's concerns. In the case of Okubo and Kumahata, it is not clearly indicated if the problems with iVisit occurred on the Japanese or on the United States side of the partnership.

Students' skill levels using technology and the relatively timely functioning of telecollaborative tools are absolutely an important element of any telecollaborative project. Fortunately, it appears that communicative technologies only improve over time, as do students' skills using them, so potential for smooth telecollaborative partnerships in 2006, at least from a technical standpoint, seems brighter than ever.

Conclusion

Telecollaboration can have many intercultural learning benefits for language learners in Japan and elsewhere. As Japan is a country with a highly developed technological infrastructure including high rates of Internet access and computer ownership throughout its high school and university systems, the foundation for creating telecollaborative partnerships is great. As researchers continue to build new telecollaborative partnerships and study the intercultural learning that takes place, a few considerations implicit in this review might be of use.

A first insight that might be gained through this review is that building a strong theoretical framework for telecollaborative research is significant. As researchers determine the results of their studies, being able to base their results on clear data and refer to clear definitions is paramount, as in all research. This is especially challenging when working with a concept such as intercultural learning which is abstract. For researchers working with Japan, it might be useful to look some thorough studies conducted with other languages and countries (e.g. Abrams, 2003; Bauer et al., 2005; Belz, 2001, 2002, 2003; Belz & Kinginger, 2002; Kern, 1996; Kinginger, 1998; Kinginger, Gourves-Hayward, Simpson, 1999; Kramsch & Thorne, 2002; Müller-Hartman, 2000; O'Dowd, 2003; Thorne, 2003; Ware & Kramsch, 2005), just as it is hoped that through this review researchers of other languages will be more informed about the telecollaborative research with Japan.

A second significant insight from this review is that the Japan's uniqueness both in terms of languaculture (Agar, 1994) and as a country reveal a telecollaborative landscape that has

many avenues for further research. Despite the diversity notable in the studies reviewed here, there are also some similarities that point to open areas for research. All the studies reviewed here include university students as at least one of the partner groups. Research looking at pre-university student partnerships between Japan and other countries would both broaden the literature and could be very beneficial specifically to younger students in Japan's public schools who might be in fairly large classes with little opportunity for individual interaction with native speakers of other languages (perhaps the case in many other countries as well). Another point regarding the studies here is that most involve the use of email or synchronous chat communication over computers. While both of these tools are useful for telecollaboration, as technology continues to develop, other tools also might hold great potential for language development. In Japan, the high usage of cell phones for sending email, pictures, and even video may hold some potential for education (Scott, 2002; Thornton & Houser, 2005). Other tools that have potential include blogs and web pages, both of which give opportunities for students to represent themselves publicly, and wikis, a potential tool for collaborative writing projects. These tools can complement the use of other more directly communicative tools such as email, synchronous chat, or videoconferencing, and increase the ways in which learners are required to use the language and interact with others.

The purpose of this review has been to give the reader an overview of the intercultural learning telecollaborative projects that have been conducted involving students in Japan. A diversity of projects has shown a diversity of telecollaborative tools, project designs, and project results. It is hoped that future telecollaborative research in Japan will be informed by these previous studies and attempt to make further discoveries about language learning in general and the potentials of telecollaboration in particular. Furthermore, it is hoped that this country-specific review might inspire other such reviews so that the body of telecollaborative research can draw not only from comparative, cross-cultural reviews but also from culturally and geographically specific comparisons.

References

- Abrams, Z. (2003). The effect of synchronous and asynchronous CMC on oral performance in German. *The Modern Language Journal*, 87(2), 157-167.
- Agar, M. (1994). *Language shock: Understanding the culture of conversation*. New York: William Morrow
- Appel, M. C. (1999). Tandem language learning by e-mail: Some basic principles and a case study. CLCS occasional paper no. 54. *Dublin: Trinity College, Centre for Language and Communication Studies*.
- Azuma, S. (2003). Business Japanese through internet-based videoconferencing. *Global Business Languages*, 8, 108-119.
- Bauer, B., de Benedette, L., Furstenberg, G., Levet, S., & Waryn, S. (2005). Computer-mediated intercultural foreign language education: The Cultura Project. In J. A. Belz & S. L. Thorne (Eds.), *Internet-mediated intercultural foreign language education*. Boston, MA: Heinle & Heinle.

- Belz, J. A. (2001). Institutional and individual dimensions of transatlantic group work in network-based language teaching. *ReCALL*, 13(2), 129-147.
- Belz, J. A. (2002). Social dimensions of telecollaborative foreign language study. *Language Learning & Technology*, 6(1), 60-81. Retrieved April 6, 2005 from <http://llt.msu.edu/vol-6num1/BELZ/default.html>
- Belz, J. A. (2003). From the special issue editor. *Language Learning & Technology*, 7(2), 2-5.
- Belz, J. A. (2005). Intercultural questioning, discovery, and tension in Internet-mediated language learning partnerships. *Language and Intercultural Communication*, 5(1), 3-39.
- Belz, J. A., & Kinginger, C. (2002). The cross-linguistic development of address form use in telecollaborative language learning: Two case studies. *Canadian Modern Language Review/Revue canadienne des langues vivantes*, 59(2), 189-214.
- Belz, J. A., & Müller-Hartmann, A. (2003). Teachers as intercultural learners: Negotiating German-American telecollaboration along the institutional fault line. *Modern Language Journal*, 87(1), 71-89.
- Belz, J. A., & Thorne, S. L. (eds) (2005). *Internet-mediated intercultural foreign language education*. Boston, MA: Heinle & Heinle
- Bleha, T. (2005). Down to the wire [electronic version]. *Foreign Affairs*, 84(3). Retrieved January 3, 2006 from <http://www.foreignaffairs.org/20050501faessay84311/thomas-bleha/down-to-the-wire.html>
- Clark, T. (2003, April 4). Japan's generation of computer refuseniks. *Japan Media Review*. Retrieved January 3, 2006 from <http://www.japanmediareview.com/japan/wireless/1047257047.php>
- Chu, H. (2005). Critical thinking through asynchronous on-line discussions. *Journal of Pan-Pacific Association of Applied Linguistics*, 9(1), 117-137
- Fedderholdt, K. (2001). An email exchange project between non-native speakers of English. *ELT Journal*, 55(3), 273-280.
- Furmanovsky, M (1999). Keypals for intercultural communication: Using course syllabi and other materials in teacher homepages to help design an intercultural e-mail exchange project. Retrieved December 2, 2004 from www.world.ryukoku.ac.jp/~michael/docs/keypals_article.html
- Furstenberg, G., Levet, S., English, K., & Maillet, K. (2001). Giving a voice to the silent language of culture: The Cultura Project. *Language Learning & Technology*, 5(1), 55-102.
- Gray, R., & Stockwell, G. (1998). Using computer mediated communication for language and culture acquisition. *On-Call*, 12(3), 2-9.
- Jarrel, D. (2001). Network-based language teaching in the Japanese context. In P. Lewis (Ed.), *The changing face of CALL: A Japanese perspective* (pp. 175-186). Lisse: Swets & Zeitlinger.
- Johnson, E. M., & Brine, J. W. (2000). Design and development of CALL courses in Japan. *CALICO Journal*, 17(2), 251-268.
- Kern, R., Ware, P., & Warschauer, M. (2004). Crossing frontiers: New directions in online pedagogy and research. *Annual Review of Applied Linguistics*, 24(1), 243-260.

- Kern, R. (1996). Computer-mediated communication: Using e-mail exchanges to explore personal histories in two cultures. In M. Warschauer (Ed.), *Telecollaboration in foreign language learning* (pp. 105-119). Honolulu: University of Hawai'i Second Language Teaching and Curriculum Center.
- Kern, R. (2000). *Literacy and language teaching*. Oxford: Oxford University Press.
- Kinginger, C., Gourves-Hayward, A., & Simpson, V. (1999). A tele-collaborative course on French-American intercultural communication. *The French Review*, 72(5), 853-866.
- Kinginger, C. (1998). Videoconferencing as access to spoken French. *The Modern Language Journal*, 82(4), 502-513.
- Kitao, K., & Kitao, K. (1996). Keypal opportunities for students on WWW. Retrieved April 7, 2005 from <http://ilc2.doshisha.ac.jp/users/kkitao/online/www/kitao/int-keyp.htm>
- Kramsch, C., & Thorne, S. (2002). Foreign Language Learning as Global Communicative Practice. In D. Block & D. Cameron (Eds.), *Globalization and Language Teaching*. London: Routledge. [electronic version] Retrieved on November 6, 2005 from <http://language.la.psu.edu/~thorne/KramSchThorne.html>
- Long, R. H. (2001). A motivation case study of English/Japanese language exchange partners using computer mediated communication and telecommunication. *Unpublished master's thesis, University of Leicester, Australia*.
- Müller-Hartmann, A. (2000). The role of tasks in promoting intercultural learning in electronic learning networks. *Language Learning & Technology*, 4(2), 129-147.
- National Standards for Foreign Language Learning (2001). Retrieved on July 7, 2005 from <http://www.actfl.org/i4a/pages/index.cfm?pageid=3324>
- Nozawa, K. (2001). Keypal exchanges for writing fluency and intercultural understanding. In P. Lewis (Ed), *The changing face of CALL: A Japanese perspective* (pp. 187-201). Lisse: Swets & Zeitlinger.
- O'Dowd, R. (2003). Understanding the "other side": Intercultural learning in a Spanish-English-e-mail exchange. *Language Learning & Technology*, 7(2), 118-144.
- O'Dowd, R. (2005). Negotiating sociocultural and institutional contexts: The case of Spanish-American telecollaboration. *Language and Intercultural Communication*, 5(1), 40-56.
- Okubo, M., & Kumahata, H. (2001). Collaborative cultural studies over the internet: Learning cultures with virtual partners. A project between Baylor University and Tokyo Institute of Polytechnics. In *Annual Proceedings of Selected Research and Development [and] Practice Papers Presented at the National Convention for the Association for Educational Communications and Technology, Atlanta, GA*.
- Park, K., Nakano, M., & Kim, S. (2003). A study on interactions between nonnative speakers with different L1s. *Journal of Pan-Pacific Association of Applied Linguistics*. 7(1), 59-75
- Robb, T. (1996). E-mail keypals for language fluency. Retrieved April 7, 2005 from <http://www.kyoto-su.ac.jp/~trobb/keypals.html>
- Scott, D. J. (2002). Japan's widespread use of cellular telephones to access the internet: Implications for educational telecommunications. Japan: Association for the Advancement of Computing in Education (AACE).
- Stockwell, G. (2004). Communication breakdown in asynchronous computer-mediated communication (CMC). *Australian Language & Literacy Matters*, 1(3), 7-10, 31.

- Stockwell, E. S., & Stockwell, G. (2003). Using email for enhanced cultural awareness. *Australian Language Matters*, 11(1), 3-4.
- Thorne, S. L. (2003). Artifacts and cultures-of-use in intercultural communication. *Language Learning & Technology*, 7(2), 38-67.
- Thorne, S. L. (2005). Internet-mediated intercultural foreign language education: Approaches, pedagogy, and research (CALPER Working Papers, No. 6). *The Pennsylvania State University: Center for Advanced Language Proficiency Education and Research*.
- Thornton, P., & Houser, C. (2005). Using mobile phones in English education in Japan. *Journal of Computer Assisted Learning*, 21, 217-228.
- Ting-Toomey, S. (1999). *Communicating across cultures*. New York: Guilford.
- Torii-Williams, E. (2004). Incorporating the use of e-mail into a language program. *Computer Assisted Language Learning*, 17(1), 109-122.
- van Lier, L. (1996). *Interaction in the classroom: Awareness, autonomy, authenticity*. London: Longman
- Ware, P., & Kramsch, C. (2005). Toward an intercultural stance: Teaching German and English through telecollaboration. *The Modern Language Journal*, 89(2), 190-205.
- Warschauer, M. (Ed.). (1996). *Telecollaboration in foreign language learning*. Honolulu, HI: University of Hawaii Second Language Teaching and Curriculum Center (University of Hawaii Press).

Biodata

Nathaniel Carney received his M.A. in TESL from Penn State University, USA. He is an English instructor at Kwansai Gakuin University's School of Science and Technology.