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## Internationalisation of Japanese education in the 21st Century

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# Internationalisation of Japanese education in the 21st Century

## **Abstract**

Extract:

There can be no doubt that people around the world have been brought together by the development of telecommunication systems such as the Internet and computer-mediated communication (CMC), supported by advances in personal computers and more user-friendly software to allow access to these systems. Such is the impact of CMC that some researchers have suggested that it saves organisations more time and money normally spent on communication than any other form of information technology.

## **Keywords**

Internet, communication technology, computer-mediated communication (CMC)

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## *Internationalisation of Japanese Education in the 21st Century*

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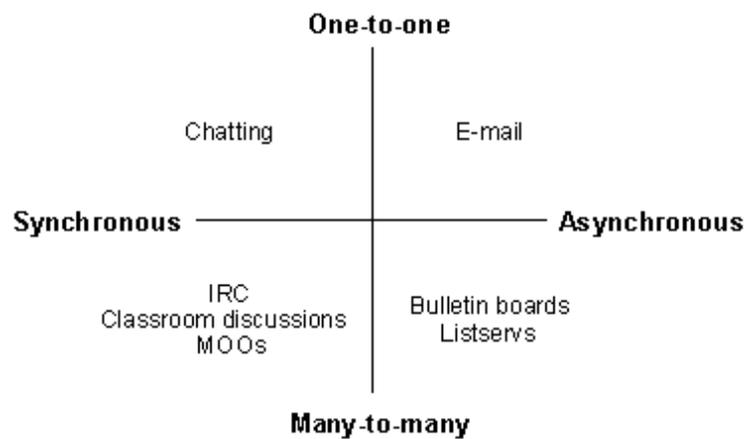
### **Introduction**

There can be no doubt that people around the world have been brought together by the development of telecommunication systems such as the Internet and computer-mediated communication (CMC), supported by advances in personal computers and more user-friendly software to allow access to these systems (Tella, 1992a, p. 1; Chapman, 1997, p. 12). Such is the impact of CMC that some researchers have suggested that it saves organisations more time and money normally spent on communication than any other form of information technology (Adams, Todd and Nelson, 1993; Merrier and Dirks, 1997). CMC has attracted the interest of language teachers and linguists as well, to the point where it has been described as the fastest growing education phenomena in the history of the world (Dyrli and Kinnaman, 1995; Liaw, 1996). Indeed, as Sussex and White argue, electronic networking tools such as CMC have done much to alter our very concept of what the classroom may consist of, challenging the traditional view of the classroom as a purely same time-same place entity, into something that may be a same time-different place, or even a different time-different place entity (1996, p. 201).

A survey of the literature has suggested that Japanese language education has also been impacted to a large degree by the emergence of CMC, and teachers and researchers have implemented CMC to enhance both language and cultural learning of Japanese (Chapman, 1997a, 1997b; Stockwell, 1997; Gray and Stockwell, 1998; Saita, Harrison and Inman, 1998). What then, are the advantages of CMC which have lead to its introduction in the Japanese language classroom? What difficulties may be associated with using CMC in its use? The purpose of this paper is to consider the benefits of CMC to Japanese language education in Australia, and to provide a rationale for how CMC can effect an internationalisation of Japanese language education as we stand on the dawn of the 21st century. In this paper, I shall examine the medium of CMC in general terms, and then I shall relate this to Japanese language education both now and in the future.

### **What is CMC?**

CMC itself is multi-dimensional, and takes many forms. In general terms, CMC may include chatting, IRC (International Relay Chat), MOOs (Multiple Object Oriented domains), bulletin boards, classroom discussions, listservs and e-mail (Paramskas, 1999). These forms of CMC may be categorised as either *synchronous*, where all participants are on-line at the same time, and interactions occur in real time, or *asynchronous*, where the participants need not be on-line at the same time, and can send and receive messages at any time (Grunner, 1999, p. 35). In addition, the form of CMC is also dependent on the number of participants, whether this be *one-to-one* or *many-to-many* (Warschauer, 1997). Consider the following figure:



**Figure 1.** *The four dimensions of CMC.*

Figure 1 shows examples of the main types of CMC, although these lists are neither exhaustive nor exclusive, and some of these examples may also exist in other quadrants of the diagram. From this figure, the forms of CMC may then be classified depending on whether or not they are synchronous, and on the number of participants who are involved in the interactions. Synchronous many-to-many CMC may include the IRC (which is also a form of chatting) (e.g., Werry, 1996), classroom discussions (e.g., Beauvois, 1992, 1995; Kelm, 1992) and MOOs (Sanchez, 1996; Donaldson and Kötter, 1999), and while they are at the "most interactive end of the CMC spectrum", their anonymous nature often results in difficulties in tracking participants and in blurred realities (Paramskas, 1999, p. 17), limiting its pedagogical applications.

The most common form of synchronous one-to-one CMC is the chatroom, which while being a more sedate version of MOOs and the IRC, still tends to share some of the problems of the previous category (ibid). In addition, because participants are required to be on-line at the same time, it is limited in its usage in cross-institutional exchanges unless times have been prearranged. Asynchronous many-to-many CMC includes listservs and bulletin boards (Stauffer; 1994). These types of communication typically involve a smaller number of participants than the IRC with a restricted membership, although any of the members may view messages or to "post" new messages to all of the participants. This has a number of pedagogical applications, but the lack of privacy of the information may have an effect on the intimacy of detail that participants wish to post.

The final category is the one of relevance to this paper, asynchronous one-to-one CMC. The most common form of this form of CMC is e-mail, and several studies into various aspects of e-mail in language learning have been performed, including Italian (Cononelos and Oliva, 1993), Spanish (Trenchs, 1996), Japanese (Chapman, 1997) and French (Sanaoui and Lapkin, 1992). The asynchronous nature of CMC means that participants to log on to any computer with an Internet connection any time of the day or night (Warschauer, 1996), giving teachers and learners a lot of freedom in the way that projects can be implemented. Similarly, that participants can interact with each other on a one-to-one basis means that learners tend to be a lot more candid in the output that they produce (Kelm, 1992).

### **Benefits and Shortcomings of CMC**

#### **Benefits**

Whether there is proof of enhanced student learning through CMC still remains to be seen, and research on the topic is rare and often contradictory (Chapelle, 1998; Paramskas, 1999). Despite this, there are a number of advantages to language learners which have been identified in the literature, including motivational increases and reduced anxiety through more anonymous exchanges (Beauvois, 1995; Kinginger, 1994), provision of authentic communication (Saita, Harrison and Inman, 1998),

increased participation (Kelm, 1992), and an equalising effect for the participants (Warschauer, Turbee and Roberts, 1996).

There has been significant evidence that CMC interactions are motivating to the learner (see Warschauer, 1995a; Beauvois and Eledge, 1996; Leh, 1997), and often result in increased participation (Kelm, 1992). For example, Kern (1995) found that all of the students in his class participated in electronic discussion while five students tended to dominate and four not participate at all in face-to-face discussions. Similar results were found by Sullivan and Pratt (1996), with only 50% of the students participating in face-to-face discussion while 100% of the students participated in the electronic discussion. Warschauer (1996) found that while those participants who were typically dominant in face-to-face discussions still continued to dominate, albeit to a lesser degree, in the electronic discussion, participation patterns certainly improved in electronic discussion when compared to face-to-face discussion. Of note in Warschauer's study was that learners who typically failed to participate in face-to-face discussions increased their participation almost ten-fold from only 1.8% of comments to 17.3%.

Kelm (1992) argues that learners will often be candid when involved in CMC interactions, and will often discuss topics which they may find too embarrassing or personal to talk about in face-to-face environments. A study by Warschauer (1996) into student attitudes while involved in electronic discussion when compared with face-to-face discussion showed that the learners reported that they felt they could express their opinions more freely, comfortably and creatively through the electronic discussion, with improved thinking ability and reduced stress.

The reduced affective filter through electronic mediums of discourse will often be of benefit to learners who are less outspoken in face-to-face interactions. One of the main findings regarding CMC is its strong equalising effect. That is to say, whereas face-to-face discussions tend to be relatively unbalanced and are often dominated by one or two participants determining topics, CMC features a more balanced pattern of participation, not affected by gender or status (McGuire, Kiesler and Siegel, 1987; Huff and King, 1988; Sproull and Kiesler, 1991; Kelm, 1992; Warschauer, 1996). For example, Tella (1992b) found that in an international English language e-mail project, Finnish girls participated as equally and fully as the boys, despite having less access to and experience with computers. From the literature, we can see that CMC in itself has a number of benefits that affect the motivation of the learners, as well as providing an "equalising" forum where interlocutors need not be judged on the basis of physical or other aspects. The reduced anxiety of CMC compared with other mediums is also evident in error correction. For example, Ang, *et al.* (1993) found that learners preferred to receive feedback on language error via CMC compared to face-to-face feedback, especially when there was some risk of loss of face in the feedback. Ang and Cummings (1994) found that learners more often preferred to receive feedback in the next available opportunity in during CMC interactions, but that they preferred to either delay this feedback or not seek feedback at all in face-to-face interactions. Other research has also shown that learners will often even choose CMC over other communication means (Deal, 1995).

Researchers have identified that while many teachers have the desire to provide authentic communication partners for learners of a second language (Cohen and Miyake, 1986; Paramskas, 1993; Grunner, 1999), such input is difficult to access in normal classroom settings (Saita, Harrison and Inman, 1998, p. 221). Thus, in much the same way as face-to-face conversation partner programs have gained support in recent years, (Stoller, Hodges and Kimbrough, 1995), so too have "key-pal" relationships via CMC, and small quantities of results are at last beginning to emerge. One such example of this is the International E-mail Tandem Network, which pairs students of different languages (Warschauer, 1997, p. 475). Using this network, Brammerts (1996) describes a study in which two university students, one in Spain and one in Germany, corresponded by e-mail about twice a week using both languages, and were able to improve their translations and develop their writing styles. In another study, St. John and Cash (1995) report an adult learner of German who was able to show significant improvements through e-mail interactions with a native speaker over a six month period by systematically studying the new vocabulary and grammatical structures of all incoming e-

mail messages. Flórez-Estrada (1995) found that learners of Spanish involved in e-mail exchanges with native speakers showed greater improvements in grammatical accuracy and in breadth and depth of topic than those engaged in interactive journal writing with the author.

Benefits of using CMC and other Internet tools are not only limited to linguistic gains, and there have been a number of studies which have also demonstrated an enhanced cultural awareness through CMC as well (Calvi and Geerts, 1998; Gray and Stockwell, 1998). Lee (1997) describes how the Internet and CMC assisted learners of a language to expand their cultural knowledge. In a series of surveys into Spanish learners' opinions of using such tools, they claim that learners felt that CMC increased their interest and motivation for learning both the culture and the language in a dynamic rather than passive way (p. 421).

Finally, another major benefit CMC provides is that messages which have been sent between participants is available to the researcher for analysis (Cononelos and Oliva, 1993, p. 531). In other words, CMC allows for easy monitoring of the learner output during the use of the computer. The very nature of the CMC makes it possible to trace the incoming and outgoing mail messages, and to keep accurate records of the times in which these messages are sent and received. In addition, the teacher does not need to be present when the learner is using CMC to be able to monitor the content, nor is there any need for video or tape recorders to be utilised during the interactions, which may cause an "observation effect" possibly causing unnatural language output (c.f., Wajnryb, 1992).

### **Shortcomings**

While CMC provides a number of benefits to both the learners and the researcher, there are also a number of possible shortcomings associated with CMC as well. For example, some researchers found that while enthusiasm is high at the start, generally the number of CMC communications between the learners tends to drop off, sometimes completely, after the initial enthusiasm has passed (for example, see Tella, 1991, 1992a; Warschauer, 1995). Despite this, conflicting evidence has also appeared, as was shown in a study of students of Spanish in the United States paired with native speakers in Mexico (Leh, 1997), where one quarter of learners continued electronic mail communication with their partners as much as one year after the project had finished.

Another possible difficulty with the writing of CMC messages to native speakers is that it can be a demanding task, requiring sufficient levels of proficiency and motivation on the part of the learners (Saita, Harrison and Inman, 1998, p. 227). That is to say, if learners do not have the sufficient skills to both read the messages which they receive from their interactors, or if they are unable to construct messages which are comprehensible to the native speakers, the success of such exchanges will be jeopardised.

The reduced affective filter which has been identified in CMC interactions (see above) can also take on a negative aspect. For example, Kelm (1992) warns of the possibility of "flaming" in CMC, which is characterised as bold, offensive, or crude comments, not typically found in oral conversations. When learners are in an environment where there is some degree of anonymity, learners become less accountable for their actions, resulting in possible "bad behaviour" (Paramskas, 1999).

One difficulty associated in CMC is that in sending and receiving messages, participants are unable to use eye contact or intonation (Wilkins, 1991), meaning that much of the expression that might normally be present in face-to-face conversations is lost in CMC interactions. In light of this, Sherblom (1988, p. 41) has argued that CMC has the potential to be "unsociable, insensitive, cold and impersonal." While the potential certainly exists for this to be the case in CMC interactions, much of the empirical evidence does not appear to support it. For example, as mentioned above, there have been numerous studies which have described CMC as a highly motivating medium for discussion (Kelm, 1992; Beauvois, 1995, 1997; 1998), and some learners have claimed that they have developed very close relationships through CMC (Cononelos and Oliva, 1993), thus questioning statements such as those made by Sherblom.

An issue of concern voiced by Moran (1991) is that many participants involved in CMC interactions unfortunately do not read the content of mails as much as they produce them, and the resulting discourse can often appear to be more like a monologue than a discussion. In such a situation, while learners may have the opportunity to develop automaticity through producing output, it is possible that they may severely reduce the amount of input they receive which most researchers now consider as an integral part of the second language process (e.g., Ellis, 1994b, 1999; Gass, 1997).

Finally, it is possible that the attitudes of the students themselves can be a deciding factor in the success or failure of CMC in language teaching. As Paramskas (1999) argues, some students have the illusion that learning only occurs when they are in a teacher-fronted environment, reading recommended materials and doing tests on their ability to learn it. Therefore, whether or not learners perceive that there is the potential to acquire new language forms through CMC can have an effect on their actual ability to do so. If, for example, learners involved in NS-NNS CMC interactions believe that such an activity could not possibly be related to their second language learning, there is the chance that they will not participate in them as effectively as those who believe they may benefit from them.

We have now established that CMC has the potential to bring various benefits to the learner, provided that a small number of precautions are taken in the setting up and implementation stage to ensure that the possible shortcomings do not affect the outcomes of the interactions. How then, does this relate to the overall concept of internationalisation of Japanese language education? This is discussed below.

### ***Internationalisation of Japanese Education through CMC***

Japanese has a range of aspects which make it different from many other languages which are taught in universities in Australia. Firstly, as Saita, Harrison and Inman (1998) have pointed out, giving access to native speakers of Japanese to university students in Australia is not always easy, meaning that learners have often been deprived of opportunities for real communication that might be available through other languages which are more widely spoken in Australia. Secondly, the orthographic script of Japanese means that conventional means of using CMC (which is of course text-based) can be limited if the software used for facilitating communication does not allow the use of Japanese script.

Despite this, solutions to both of these problems have started to appear in recent years. Firstly, CMC provides a medium through which learners of Japanese can be linked with native speakers and engage in real communication. There are a number of universities in Japan at present which have also started to investigate the possibilities of language exchange programs via CMC with overseas (i.e., outside of Japan) universities with their advanced level English speakers. To this end, reciprocal arrangements can be made with these universities enabling learners of English in Japan to be paired with learners of, for example, intercultural communication in Australia, while at the same time, learners of Japanese in Australia can be paired with learners of other subject areas in Japan. Such arrangements can of course allow for an exchange of language between the participants, but can also facilitate solid relationships between members of each community.

Secondly, the problem of software for CMC which allows Japanese character processing is quickly becoming more readily available at low costs. The old problem of learners needing to buy complete Japanese systems for their computers and running partitioned hard disks is becoming a thing of the past. Low-cost software is now available for users of both PC and Macintosh platforms from the Internet, and can remain resident in memory with little or no disruption to other programs and applications the learner might use. Most of this software also comes with easy explanations of how to input the Japanese characters using normal English keyboards, meaning that the net costs to the learners (or school) is minimal.

Through the use of CMC, learners of Japanese have the capacity to be linked with native speakers in Japan, as well as with other learners of Japanese anywhere in the world. The walls of the classroom essentially become irrelevant to language teachers and researchers who see the potential of CMC. At

this stage, much of CMC remains a written medium, but as technology become less expensive and network bandwidth improves, opportunities for learners and native speakers of Japanese to come "face-to-face" through video images of one another is not far away.

In conclusion, it can be stated that one of the keys to internationalisation of Japanese language education in the 21st century is the introduction of CMC technology in the second language classroom, but along with it must also come the attitude of the teacher to incorporate such technologies with a view to enhancing the human-human interactions which CMC can facilitate. The future of Japanese language education in the new century is indeed bright, and it is up to language teachers to broaden the walls of the classroom, and show learners that language exists not only in the classroom, but as a living entity which spreads across the world.

## References

- Adams, D. A., Todd, P. A. & Nelson, R. R. (1993). A comparative evaluation of the impact of electronic and voice mail on organisational communication. *Information and Management*, 24, 9-21.
- Ang, S. & Cummings, L. L. (1994). Panel analysis of feedback-seeking patterns in face-to-face, computer-mediated, and computer-generated communication environments. *Perceptual and Motor Skills*, 79, 67-73.
- Ang, W., Cummings, L. L. Straub, D. W. & Earley, P. C. (1993). The effects of information technology and the perceived mood of the feedback giver on feedback seeking. *Information Systems Research*, 4, 240-261.
- Beauvois, M. H. (1992). Computer-assisted classroom discussion in the foreign language classroom: Conversation in slow motion. *Foreign Language Annals*, 25 (5), 455-464.
- Beauvois, M. H. (1995). E-talk: Attitudes and motivation in computer-assisted classroom discussion. *Computers and the Humanities*, 28, 177-190.
- Beauvois, M. H. (1997). Computer-mediated communication (CMC): Technology for improving speaking and writing. In M. D. Bush & R. M. Terry (Eds.), *Technology enhanced language learning* (pp. 165-184). Lincolnwood, IL: National Textbook Company.
- Beauvois, M. H. (1998). Conversations in slow motion: Computer-mediated communication in the foreign language classroom. *The Canadian Modern Language Review*, 54 (4), 198-217.
- Beauvois, M. H. & Eledge, J. (1996). Personality types and megabytes: Student attitudes towards computer mediated communication (CMC) in the language classroom. *CALICO Journal*, 13 (2 & 3), 27-45.
- Brammerts, H. (1996). Language learning in tandem using the Internet. In M. Warschauer (Ed.), *Telecollaboration in foreign language learning* (pp. 121-130). Honolulu, HI: University of Hawaii, Second Language Teaching & Curriculum Centre.
- Calvi, L. & Geerts, W. (Eds.). (1998). *CALL, culture and the language curriculum*. Berlin: Springer-Verlag.
- Chapelle, C. A. (1998). Multimedia CALL: Lessons to be learned from research on instructed SLA. *Language Learning & Technology*, 2 (1). Available:

<http://polyglot.cal.msu.edu/llt/vol2num1/article1/index.html>.

Chapman, D. (1997). A comparison of oral and e-mail discourse in Japanese as a second language. *On-CALL*, 11 (2), 31-39.

Cohen, M. & Miyake, N. (1986). A worldwide intercultural network: Exploring electronic messaging for instruction. *Instruction Science*, 15, 257-273.

Cononelos, T. & Oliva, M. (1993). Using computer networks to enhance foreign language/culture education. *Foreign Language Annals*, 26 (4), 527-534.

Deal, N. (1995). Is the medium the message? Comparing student perceptions of teacher responses via written and e-mail forms. *Proceedings of the National Educational Computing Conference, Baltimore, 1995*, 216-218.

Donaldson, R. P. & Kötter, M. (1999). Language learning in cyberspace: Teleporting the classroom into the target culture. *CALICO Journal*, 16 (4), 531-557.

Dyrli, O. E. & Kinnaman, E. D. (1995). Gaining the online edge. Part 1: Energizing the classroom curriculum through telecommunications. *Technology & Learning*, 16 (1), 79-84.

Ellis, R. (1994b). *The study of second language acquisition*. Oxford: Oxford University Press.

Ellis, R. (1999). Input-based approaches to teaching grammar: A review of classroom-orientated research. *Annual Review of Applied Linguistics*, 19, 64-80.

Flórez-Estrada, N. (1995). *Some effects of native-nonnative communication via computer e-mail interaction on the development of foreign writing proficiency*. Unpublished doctoral dissertation, Graduate Faculty of Arts and Sciences, University of Pittsburgh.

Gass, S. (1997). *Input, interaction and the second language learner*. Mahwah, NH: Lawrence Erlbaum Associates, Publishers.

Gray, R. & Stockwell, G. R. (1998). Using computer-mediated communication for language and culture acquisition. *On-CALL*, 12 (3), 2-9.

Grunner, A. (1999). Teaching and learning through electronic mail. *Australian Journal of Applied Linguistics*, 1 (1-3), 34-48.

Huff, C. & King, R. (1988). An experiment in electronic collaboration. In J. D. Goodchilds (Ed.), *Interacting by computer: Effects on small group style and structure*. Symposium conducted at the meeting of the American Psychological Association, Atlanta.

Kelm, O. R. (1992). The use of synchronous computer networks in second language instruction: A preliminary report. *Foreign Language Annals*, 25 (5), 441-464.

Kern, R. (1995). Restructuring classroom interaction with networked computers: Effects on quantity and characteristics of language production. *Modern Language Journal*, 79 (4), 457-476.

- Kinginger, C. (1994). Locating contingency in e-mail. *Georgetown University Round Table on Languages and Linguistics, 1994*, 211-218.
- Lee, L. (1997). Using Internet tools as an enhancement of C2 teaching and learning. *Foreign Language Annals, 30* (3), 410-427.
- Leh, S. C. A. (1997). Electronic mail in foreign language learning: communication and culture. *Proceedings of the National Convention of the Association of Educational Communications and Technology, Albuquerque, 19*, 189-200.
- Liaw, M. L. (1996). *Communication devices uses by EFL students in e-mail writing*. (pp. 2-29). Taiwan: Tungai University, Dept. of Foreign Languages and Literature.
- McGuire, T. S., Kiesler, S. & Siegel, J. (1987). Group and computer-mediated discussion effects in risk decision making. *Journal of Personality and Social Psychology, 52* (5), 917-930.
- Merrier, P. A. & Dirks, R. (1997). Student attitudes towards written, oral and e-mail communication. *Business Communication Quarterly, 60* (2), 89-99.
- Moran, C. (1991). We write, but do we read? *Computers and Composition, 8* (3), 51-61.
- Paramskas, D. M. (1993). Computer-assisted language learning (CALL): Increasingly into an ever more electronic world. *The Canadian Modern Language Review, 50* (1), 124-143.
- Paramskas, D. M. (1999). The shape of computer-mediated communication. In K. Cameron (Ed.), *Computer assisted language learning: Media, design and applications* (pp. 14-31). Lisse: Swets & Zeitlinger Publishers.
- Saita, I., Harrison, R. & Inman, D. (1998). Learner proficiency and learning tasks in e-mail in Japanese. In K. Cameron (Ed.), *Multimedia CALL: Theory and practice* (pp. 221-228). Exeter: Elm Bank Publications.
- Sanaoui, R. & Lapkin, S. (1992). A case study of an FSL senior secondary course integrating computer networking. *The Canadian Modern Language Review, 48* (3), 525-552.
- Sanchez, B. (1996). MOOving to a new frontier in language learning. In M. Warschauer (Ed.), *Telecollaboration in foreign language learning*. Honolulu: University of Hawaii Press.
- Sherblom, J. (1988). Direction, function, and signature in electronic mail. *The Journal of Business Communication, 25*, 39-54.
- Sproull, L. & Kiesler, S. (1991). *Connections: New ways of working in the networked organisation*. Cambridge: Cambridge University Press.
- Stauffer, S. J. (1994). Computer-based classrooms for language teaching. *Georgetown University Roundtable on Languages and Linguistics, 220-232*.
- St. John, E. & Cash, D. (1995). Language learning via e-mail: Demonstrable success with German. In M. Warschauer (Ed.), *Virtual connections: Online activities and projects for networking language learners* (pp. 191-197). Honolulu, HI: University of Hawaii,

## Second Language Teaching & Curriculum Centre.

Stockwell, G. R. (1997). *Investigating language characteristics in an electronic mail project between native and advanced level nonnative speakers of Japanese: A preliminary study*. Unpublished master's dissertation, University of Southern Qld, Australia.

Stoller, F. L., Hodges, R. & Kimbrough, J. (1995). Examining the value of conversation partner programs. *Applied Language Learning*, 6 (1 & 2), 1-12.

Sullivan, N. & Pratt, E. (1996). A comparative study of two ESL writing environments: A computer-assisted classroom and a traditional oral classroom. *System*, 24, 1-24.

Sussex, R. & White, P. (1996). Electronic networking. *Annual Review of Applied Linguistics*, 16, 200-225.

Tella, S. (1991). *Introducing international communications networks and electronic mail into foreign language classrooms: A case study into Finnish senior secondary schools* (Res. Rep. No. 95). Helsinki: Department of Teacher Education, University of Helsinki.

Tella, S. (1992a). *Talking shop via e-mail: A thematic and linguistic analysis of electronic mail communication* (Res. Rep. No. 99). Helsinki: Department of Teacher Education, University of Helsinki.

Tella, S. (1992b). *Boys, girls and e-mail: A case study in Finnish senior secondary schools*. Helsinki: University of Helsinki, Department of Teacher Education.

Trenchs, M. (1996). Writing strategies in a second language: Three case studies of learners using electronic mail. *The Canadian Modern Language Review*, 52 (3), 464-491.

Wajnryb, R. (1991). *Classroom observation tasks: A resource book for teachers and trainers*. Cambridge: Cambridge University Press.

Warschauer, M. (1996). Comparing face-to-face and electronic discussion in the second language classroom. *CALICO Journal*, 13 (3), 7-26.

Warschauer, M. (1997). Computer-mediated collaborative learning: Theory and practice. *The Modern Language Journal*, 81 (4), 470-481.

Warschauer, M., L., Turbee, & Roberts, B. (1996). Computer networks and student empowerment. *System*, 24 (1), 1-14.

Werry, C. C. (1996). Linguistic and interactional features of Internet Relay Chat. In S. C. Herring. *Computer-mediated communication: Linguistic, social and cross-cultural perspectives* (pp. 47-64). Amsterdam: John Benjamins.

Wilkins, H. (1991). Computer talk: Long-distance conversations by computer. *Written Communication*, 8 (1), 56-78.

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