

Developing a Sustainable System for Computer-Mediated Communication

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1. Introduction

As a tool for learning, computer-mediated communication (CMC) provides opportunities for the practice of a variety of types of authentic interaction, including (and of particular relevance to this study) what Kasper (2004) terms ‘conversation-for-learning’. However, major challenges for many learning institutions include the setting up of systems or the allocation of resources for CMC-based learning tasks, especially those tasks which occur outside of, or in addition to, the formal (traditional) language classroom. This project makes clear that such systems do *not* have to be complex or overly intricate, and the required resources need *not* be prohibitively expensive. As a means of providing an alternative to (or a possible solution to) some of these difficulties, this paper will take a practical perspective and outline the creation and design of a straightforward and sustainable CMC-based language exchange system for English as a foreign language (EFL) students at Saitama University. The system makes use of open resources which are readily available to educators the world over. Specifically, this paper will briefly outline the hardware and software utilized, and the tasks students engaged in.

2. Purpose

This research project set out to develop a sustainable, practicable in-house CMC-based language exchange program at Saitama University. This study strived to devise and refine a system for the provision of opportunities for language learners to participate in educationally meaningful one-on-one authentic cross-cultural interactions (outside of and in addition to learning activities within the formal language classroom)—thus meeting identified student needs at the university.

3. Building on previous years

This project builds upon prior studies conducted by the author. For a detailed account of (a) the uniqueness and significance of the project, (b) the research and data gathering processes and (c) the participants and their reactions to CMC-based language exchange systems, the reader is directed to the following report: Krug (2011).

4. Just what is ‘out-of-class learning’?

Numerous studies document the importance of ‘out of class learning’—those educationally purposeful activities learners engage in which occur outside of the formal classroom. To be truly successful however, Kuh, Douglas, Lund and Ramin-Gyurnek (1994) remind us that out-of-class learning must be explicitly incorporated into an institution’s educational approach.

Communicative proficiency depends on the activities that a learner engages in beyond the walls of the traditional language classroom (Benson and Reinders, 2011, p. 2). Acquisition, according to Benson and Reinders (2011, p. 5), occurs through participation in communities and contexts of various kinds.

Thus, in line with the aforementioned purpose of this study, part of the basis for this language exchange program is to determine what conditions (whether they be technical, physical, interpersonal or intrapersonal) are most likely to produce sound, meaningful learning outcomes and realistic language practice opportunities for the participants. In addition, this study will investigate the impact of this out-of-class CMC-based context on (language) learning.

5. The video-chat environment

Through networked computers, pairs of participants met and engaged in ordinary conversation in a video-chat environment (each conversation lasting between 20-30mins). Two standard laptop computers were used in this project (being two Apple Macintosh MacBook Pro computers). Placed in separate buildings within the campus of Saitama University, the computers were networked via the university’s intranet (which connects to the Internet).

It is common knowledge that during times of peak usage on a network, or at times of high use of a particular networked application, free-flowing video or audio communication can become problematic. This is true across the Internet, just as it is true even within a small intranet (as used in this project). For this reason, three different video-chat options were made available to the participants throughout this project. Should one or other video-chat application experience problems (e.g., an inability to connect to the network, interrupted or ‘jerky’ functioning, sudden termination of connection, or similar such complications) the participants had an alternative immediately at hand.

Therefore, in terms of the software utilized, this project provided three distinct options on each computer. Firstly, being Macintosh computers, Apple’s *iChat* software was available on each machine as a standard component of the native operating system (OS X 10.6 Snow Leopard). An *iChat* account was created on each

machine, with the paired machine being added to the “Buddies” list within the application. Secondly, *Skype* was installed on each machine. Just as before, an account was created on each machine, with the sister machine being added to the “Contacts” list within the *Skype* application. Thirdly, using Google’s *Chrome* web browser, a Google *Gmail* account was created for each machine. Voice and video chat capabilities are integrated into *Gmail*. Thus, despite being primarily a web-based email application, users (including participants of this project) are able to interact face-to-face within *Gmail*.

One of the successes of this project was the fact that the two machines were set up and placed in position well in advance. With three software options available on each machine (pre-set with user accounts, access details *and* with each application recognizing its coupled sister machine), participants were not burdened by delays or frustrations that may occur during account creation procedures or with finding each other online.

6. Current and future directions

Currently, the author is transcribing the interactions. Through conversation analytic (CA) techniques, the author will undertake a microanalysis of the participants’ conversations in order to identify the prominent features (including moments of miscommunication or problems and so forth) of the cross-cultural second language (L2) interactions. Specifically, just how do the participants organize their L2 CMC-based interactions, and how does this organization work to create conversation-for-learning? Without knowing in detail about such matters, we cannot completely evaluate the educational effect of this CMC context.

The author is considering the possibility of incorporating learner-generated content (i.e., excerpts of the participants’ conversations) into classroom language learning tasks. For the purpose of encouraging reflective language learners and competent conversationalists, examination of prominent features of cross-cultural L2 interactions would be of interest and benefit to language learners.

7. Conclusions and recommendations

From a technical perspective, the utilization of just two laptop computers proved to be both efficient and sufficient. They were simple to set-up and maintain. Additionally, not a great deal of hardware was required—minimizing hardware expenditure and eliminating the need to manage multiple machines, platforms, networks or user accounts. Thus, the two Apple MacBook Pro computers provided a satisfactory trial of an out-of-class CMC-based language exchange program, with a suitable number of participants.

In terms of software applications, the project coordinator and participants alike noted that minimal technical problems occurred when using the voice and video chat feature built into Google’s *Gmail*. Within *Gmail*, participants could locate and connect with each other instantaneously. Unfortunately, possibly due to a large volume of users, when using Apple’s *iChat* or when using *Skype*, technical difficulties did mar interactional experiences to some degree. Network connections were lost from time to time, and video ‘freezing’ or a lack of audio clarity occurred intermittently. Re-logging in on one or other machine usually rectified such problems. However, as stressed earlier, one success of this project was that multiple software options were available on each machine (pre-set with user accounts, access details *and* with each application recognizing its coupled sister machine). Multiple pre-set software options meant that participants were not burdened with set-up processes and, when technical difficulties were encountered, alternative possibilities were immediately available so that the language learners were able to continue on with their interactions with minimal interruptions or disturbances.

As noted in Krug (2011) and Krug (2012), involvement in such language exchange programs is enjoyable and rewarding for participants. Clearly, both local Japanese students *and* the visiting international student body want more cultural exchange and language practice opportunities. However, participants call attention to the fact that they lack chances to participate in one-on-one authentic cross-cultural interactions and would therefore, by implication, welcome an expansion and continuation of this CMC-based language exchange system within Saitama University.

References

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