

Fostering Departmental Communication and Collaboration with Online Discussion Forums

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The use of computer-mediated communication has been shown to be effective in reducing teacher isolation and supportive of substantial collaboration between teachers. In particular, online discussion forums may provide numerous opportunities for instructors within the same department to better coordinate their efforts and the flexibility in doing so at anytime and from anywhere with an Internet connection. This paper seeks to provide a rationale for the use of online discussion forums to foster departmental communication and collaboration and examines the output and perceived effectiveness of one such forum used by a faculty composed of limited-contract, English language instructors at a large, private university in Japan over the course of one academic year.

Teaching has often been described as promoting a culture of professional isolation (Bakkenes, de Brabander, & Imants, 1999; Bodzin & Park, 1998; Sachs & Smith, 1988; Schlagal, Trathen, & Blanton, 1996). Indeed, due to the very nature of the profession and the time constraints associated with it, it seems that all too often instructors do not have sufficient opportunities to exchange ideas or seek out support amongst peers, not to mention the barriers teachers face in adequately pursuing professional development (Bodzin & Park, 1998). Perhaps nowhere are these isolating aspects of teaching more apparent than at the university setting in Japan where teachers not only experience the typical demands of the profession, but may also have to endure constant teacher turnover due to the high percentage of limited-contract teaching positions (McCrostie, 2007). The constant turnover of teachers serves to make open communication and effective collaboration all the more difficult because it severely limits the opportunities for establishing rewarding professional relationships among colleagues. Although there are clearly many obstacles which perpetuate a culture of professional isolation, the need for teachers to communicate and collaborate effectively remains an essential part of a successful educational environment (Friend, 2000; Gizir & Simsik, 2005; Nias, Southworth, & Yeomans, 1989; Selwyn, 2000).

Fortunately, the use of computer-mediated communication (CMC) has been shown to be effective in reducing teacher isolation and supportive of more substantial collaboration between teachers (Bakkenes et al., 1999; Bodzin & Park, 1998; Bull, Harris, Lloyd, & Short, 1989; Casey, 1997; Hughes, Wickersham, Ryan-Jones, & Smith, 2002; Selwyn, 2000; Winter

& McGhie-Richmond, 2005). In fact, studies reveal that teachers often naturally utilize CMC to meet a number of their communicative and collaborative needs (Bodzin & Park, 1998). In the early years of CMC, Honey and Henriquez (1993) found that teachers most frequently used CMC for collegial exchange. More recently, Wickstrom (2003) continued to advocate the use of CMC amongst preservice teachers to promote collegiality as well as to instill a sense of the importance for teachers to communicate with one another once they were out in the field. In another notable study, Ruopp, Gal, Drayton, & Pfister (1993) found that CMC between teachers can encourage an exchange of ideas, provide technical support for those in need, create an outlet for social interaction, and cultivate discussion of pedagogical approaches. Clearly, CMC provides teachers with a number of important opportunities for supporting communication and collaboration.

Computer Mediated Communication

Although both synchronous and asynchronous CMC may each provide worthwhile opportunities to promote teacher communication and collaboration, asynchronous CMC options such as e-mail, e-mail lists, and online discussion forums have represented the great majority of teacher-to-teacher CMC to date (Altun, 2005; Selwyn, 2000). Several studies have examined the benefits offered by asynchronous CMC (Benbunan-Fich, Hiltz, & Turoff, 2002; Biesenbach-Lucas, 2004), though the vast majority of these general studies have focused on the effects of asynchronous CMC on learning, with particular attention paid to its use in teacher preparation courses. These studies do reveal, however, many of the general attributes of asynchronous CMC. Such attributes were found to be convenience, flexibility in time and place of use, the opportunity for more equal participation, and more focused and reflective contributions from participants, an aspect found to be particularly appealing for non-native speakers (Altun, 2005; Arnold & Ducate, 2006; Benbunan-Fich et al., 2002; Biesenbach-Lucas, 2003; Biesenbach-Lucas, 2004; Henry & Li, 2005; Kahmi-Stein, 2000; McKenzie & Murphy, 2000; Weasenforth, Biesenbach-Lucas, & Meloni, 2002). Other studies have also purported that asynchronous CMC may allow for more equal participation among users and the reduction of hierarchical divisions between them (Jones, 1998; Selwyn, 2000; Warshauer, 1997). As asynchronous CMC allows for information to be shared and accessed wherever and whenever users may be online, in addition to the many other benefits outlined, it is easy to see why these mediums have been preferred by teachers attempting to break down the barriers of teacher isolation through online communication and collaboration.

E-mail vs. Online Discussion Forums

Of all of the mediums for asynchronous CMC currently available to foster online communication and collaboration between teachers, undoubtedly e-mail and online discussion forums represent the two most widely used (Selwyn, 2000). Although e-mail remains an extremely powerful communication tool with many inherent benefits, it has also been shown to have many limitations within educational contexts (Barker, 2001). These limitations have been shown to be that e-mail does not allow for users to easily follow protracted dialogues between numerous participants, it is not easy to identify if users have received or read particular messages, there is little to no control over who can submit material, messages can easily become intermingled, there is often no centralized transcript of the communications, and it can often be difficult to

locate specific information embedded within e-mails at a later date (Barker, 2001; Pappas, 2002; Winter & McGhie-Richmond, 2005).

Given the numerous drawbacks to using e-mail within educational contexts, online discussion forums have been advocated as a more effective way for teachers to communicate and collaborate over the Internet (Anderson & Kanuka, 1997; Arnold & Ducate, 2006; Kanuka & Anderson, 1998; Pappas, 2002; Winter & McGhie-Richmond, 2005). Online discussion forums, also known as bulletin boards, discussion boards, electronic discussion groups, message boards, newsgroups, Internet forums, and web forums, are web applications that allow users to maintain threaded discussions arranged chronologically by topic posts (Internet forum, 2008; Jones, 1998; Weisskirch & Milburn, 2003). With an online discussion forum, after a new topic is created, subsequent messages related to that topic appear in chronological order underneath the original post. This system of visually grouping messages chronologically according to topic allows users to easily follow protracted discussions between many participants. Furthermore, most online discussion forum applications also arrange topic threads according to activity, thereby moving most recently active topics to the top of the discussion list and often highlighting topic threads with yet unread messages for each individual user. On most online discussion forums, messages remain visible until deleted by site administrator or forum moderator but may be edited by the original authors at any time. The basic attributes of online discussion forums have been found to be highly conducive toward fostering communication among pre-service and novice teachers, in particular, as they have been shown to support reflection, collaboration, and professional development, while at the same time reducing the barriers of time and place, providing an accessible written transcript of the exchanges, and promoting technological skills (Anderson & Kanuka, 1997; Arnold & Ducate, 2006; Kanuka & Anderson, 1998; Pappas, 2002; Winter & McGhie-Richmond, 2005).

Method

The purpose of this study was to examine the effectiveness of an online discussion forum in stimulating increased communication and collaboration between the limited-contract, English language instructors in a small English as a Foreign Language (EFL) department at a large, private university in Japan over the course of one academic year. Two measures were used in an attempt to measure the effectiveness: 1) the output created on the forum was quantified according to total number of posts per pre-determined categories and sub-categories, as well as per instructor, and 2) the overall opinion of the participants involved was assessed through a questionnaire which sought to illuminate the perceived advantages and disadvantages of using an online discussion forum for intra-departmental communication and collaboration.

This study was conducted over the course of the 2007-2008 academic year within the EFL department of the School of Science and Technology at a large, private university in Japan. The participants included seven full-time, limited-contract instructors of English as a Foreign Language (IEFLs) who comprise what is called the Living Language Laboratory (LLL) and are primarily tasked with designing and implementing the EFL curriculum for the first two years of required coursework within the school. Additionally, each IEFL is designated as the coordinator of some aspect of LLL project management and its oversight.

All of the IEFLs are native English speakers from the United States who share the same office space and also largely share the same basic course syllabi and materials. As the IEFL position has a limited contract, the participants in this study had varying lengths of time working within the department at the start: four had worked for one year, one had worked for six months, and two were new to the department. Each IEFL teaches ten 90-minute classes per week with several teachers teaching additional classes as overtime work. Each IEFL also has a designated research day each week on which the instructor may work outside of the office. During the time between semesters various meetings and other functions often require the IEFLs' attendance, though the majority of the time may be spent working off campus.

At the start of the Spring 2007 academic semester, the IEFLs were introduced to the LLL Forum, an online discussion forum created using free phpBB2 software and stored on privately-hosted web space accessible from anywhere with an Internet connection by directing the browser to the Internet address and logging in. phpBB2, an abbreviation of the second major release of PHP Bulletin Board, is an online discussion forum software package written using the PHP programming language which was first released in 2002 ("phpBB," 2008). phpBB2 was chosen by the author from the great number of similar software products available simply because of a previous familiarity with the software and a basic understanding of its installation and maintenance. phpBB2 software itself is open source and is freely available for download at <http://www.phpbb.com/downloads/legacy.php>, though there is also a newer version of the software, phpBB3, now available at <http://www.phpbb.com/downloads/> as well (phpBB Group, 2008). The forum used in this study, the LLL Forum, featured slight modifications of the default phpBB2 installation package including the use of a separately downloaded theme or style, an original graphic for the forum's header, and the designation of forum categories and related subcategories within which threaded topic discussions could be created and maintained by the IEFLs: General Discussion (The LLL, Budget Expenditures), Project Management (Curriculum Development, Distance Education, Educational Technology), and Professional Development (Conference Information, Research and Publications). After being introduced to the basic features of the forum and completing registration, the IEFLs were asked to use the LLL Forum to communicate on matters of interest or importance to the group when discussing things in person was either unnecessary or unfeasible given time and scheduling limitations.

Procedure

Over the course of the academic year, from April 2007 to April 2008, the IEFLs accessed the LLL Forum with no further instruction given by the author aside from responses to occasional technical questions. At the end of the academic year, the forum data was analyzed in an attempt to quantify its use over the course of the year in relation to the established categories, subcategories, and topics, as well as patterns of interaction and individual user proclivity. As the author also served as forum site administrator over the course of the year, IEFL-generated topics were constantly monitored for their relation to the designated categories and subcategories, and topics that were deemed to be more appropriately posted under another subcategory were moved at that time. In addition to the quantitative analysis of forum use conducted, qualitative information was gathered through the use of a questionnaire administered to all participants at the end of the academic year. The questionnaire sought to determine the participants' overall opinions toward using the forum to communicate with each other over the course of the

academic year, to determine the IEFLs' basic forum usage patterns, to ascertain the IEFLs' desire to continue using such a forum to communicate amongst one another or at similar future positions, to establish the perceived advantages and disadvantages of communicating via an online discussion forum, and to elicit the potential differences between using the forum to communicate among IEFLs and not doing so.

Results

Forum Usage Results

Over the course of the academic year, the seven IEFLs created a total of 3798 posts under 587 distinct topics on the LLL Forum. In terms of the three designated categories, General Discussion proved to be by far the most active category with 2288 posts under 334 topics, Project Management was the second most active category with 1109 posts under 166 topics, and Professional Development was the least active category with 401 posts under 87 topics. A more detailed breakdown of the forum use results according to categories and subcategories can be seen in Table I.

Table I. Forum Usage Results by Category and Subcategory

Forum Category	Forum Subcategory	# of Topics	# of Posts
General Discussion		334	2288
	The LLL	316	2136
	Budget Expenditures	18	152
Project Management		166	1109
	Curriculum Development	86	623
	Distance Education	37	197
	Educational Technology	43	289
Professional Development		87	401
	Conference Information	26	136
	Research and Publications	61	265
Total		587	3798

In terms of topics, the most active topic concerned planning for and reporting the results from the midterm and final exams administered in winter term with 95 posts, the second most active topic related to the planned departmental purchase of e-learning software with 80 posts, and the third most active topic also concerned software installation on student computers with 73 posts. While several topics like these generated a great deal of discussion, there were also 87 topics that had no replies at all to the original posts. On average though, there were approximately 6.47 posts per topic over the course of the year, and in terms daily activity, there were an average of 10.38 posts and 1.6 new topics created per day.

As for individual user proclivity, there was a great disparity between how often the seven

IEFLs posted on the LLL Forum over the course of the year. Indeed, the most active user contributed 771 posts over the course of the year while the least active user contributed only 144 posts. A complete breakdown of the number of individual user posts is included in Table 2.

Table 2. Individual User Post Totals

Forum User	Length of Time in Department	# of Posts	% of Total Posts
IEFL A	One year	771	20.3%
IEFL B	One year	743	19.6 %
IEFL C	One year	632	16.6%
IEFL D	Six months	555	14.6%
IEFL E	New to department	489	12.9%
IEFL F	One year	464	12.2%
IEFL G	New to department	144	3.8%
Total		3798	100%

Questionnaire Results

All seven IEFLs completed a questionnaire asking them to reflect on the year's forum use at the end of the academic year. The questionnaire consisted of a series of both discrete-choice and open-ended questions to be completed online anonymously. First, the participants were asked what overall opinion they had of using the forum to communicate among IEFLs. The responses reveal that all seven participants held a favorable view toward the forum with five out of seven (71.4%) indicating a "very positive" opinion and two out of seven (28.6%) indicating a "positive" opinion. These favorable views are largely reflected in the participants stated habits for accessing the forum with five respondents purporting to access the forum "several times a day", one respondent claiming "daily" access, and one respondent "once or twice a week". The positive opinion of the forum is also evident in the 100% agreement in the stated desire to continue to use the forum in the upcoming academic year. The unanimous endorsement of the forum is further echoed in the participants' responses to the question that asked if they would recommend using this kind of online departmental discussion forum to other university instructors. Similarly, all seven participants stated that they would advocate the use of this kind of online discussion forum for departmental communication at their next teaching job.

Next, the participants were asked to cite the general advantages of using the LLL Forum if, indeed, they felt there were any, and to name the most beneficial aspect. In response to these questions, all seven participants cited an increase in communication amongst instructors as one of the major advantages. Several participants specifically noted that there was an increase in communication between instructors "without the need for more face-to-face meetings." Related to this point, two participants noted that the forum also decreased the length of necessary meetings by allowing certain topics to be outlined and clarified first online before meeting face-to-face, thereby cutting down on the time spent in meetings.

Most of the participants also cited the increased thinking time for reflection allowed by car-

rying out discussions online as a positive attribute of forum use. One participant who felt that the increased response time allowed by the forum generated more thoughtful discussion put it this way: "The forum gives me time to think about issues and make more informed, less emotional decisions." Another participant felt similarly: "It allows people to think about things, much better than a face to face meeting because in a meeting you must immediately react."

Equality of access and the opportunity for all IEFLs to participate in the online discussion was another beneficial aspect noted by several respondents: "Everyone can get a word in on the forum if they want to, whereas face-to-face meetings are often dominated by the stronger voices of the department." Similarly, another participant put it this way: "It also allows everyone the chance to voice their thoughts and opinions on all matters unlike meetings which may be too limited in time or dominated by some members more than others." Still another respondent noted: "I can hear everybody's opinions and ideas about a topic, and I can make my voice heard to everyone all at once."

The convenience in time and place of access was also cited as advantageous by nearly all participants, as was the centralized record of previous discussions and information provided by the online discussion forum. One respondent noted: "The forum serves as a good control center for storing information throughout the year that can be easily found and retrieved at a later date as needed." Another put it this way: "If there was information that I had forgotten about, I could easily go back to the forum and search for it there." This same respondent also stated a clear preference for the forum over e-mail in regards to departmental communication by continuing: "E-mails could get accidentally deleted, but forum posts stay on the forum. I also don't have a flood of e-mails in my mailbox coming from a bunch of 'reply-alls.'" Another respondent similarly noted: "The fact that I can talk to everyone at once and follow the strand of conversation from its origin and without a flood of e-mails is the greatest thing." Clearly, reduction in e-mail communication between all IEFLs was another perceived benefit of using the forum among the many other stated advantages.

The participants were also asked to list the general disadvantages of using the LLL Forum if they felt there were any, and to name the most detrimental aspect related to forum use. Here one of the major complaints voiced by several participants was the feeling that the reduction in the amount of face-to-face meeting time may have a negative effect by not allowing "one to see the emotions people have towards the material being discussed!" Another stated it this way: "It can lead to less face to face meeting time and can be a bit impersonal!"

Another concern expressed by several participants was of the additional work created by the need to frequently check and respond to ongoing forum discussions. One participant summed up the point this way: "Although the forum has decreased the need for face-to-face meetings, it has increased the amount of time communicating over the Internet. Perhaps this generally useful discussion may not have happened without the forum, but it has increased the amount of time I must dedicate to it." Another respondent put it this way: "It's harder to leave work at the office--people are working on the Forum morning, night, and weekends." Likewise, another participant stated: "If you are away from a computer for an extended amount of time, you can fall behind on current discussion topics." Similarly, another respondent said: "The forum is time-consuming, sometimes quick decisions are more easily made face to face. All forum members (teachers) must actively check and participate on the forum to have issues solved. Sometimes teachers don't respond to posts that everyone should respond to!"

The fact that not all IEFLs actively participated in the online discussion was a point echoed by several other participants as one of the other major drawbacks of the forum. One participant summed up the problem this way: "Some teachers don't respond to Forum posts or respond without reading carefully." Another like-minded respondent stated the problem this way: "Not everyone checks it on a regular basis even though they are supposed to, so the same people are left in the dark on things all the time. Getting everyone to respond to an issue within a certain time-frame is tough, especially if it's a major decision that needs to be made." In a similar vein, another respondent put it this way: "One disadvantage is that not all members participate enough in forum discussions, thereby hindering decision-making in some cases. Likewise, all members do not participate equally leading to the over-representation of some and under-representation of others." Both the problems of unequal participation and time-consumption can be succinctly discerned from one participant's poignant response: "I am lazy and often forget to check the forum."

A last area in which several participants felt that the LLL Forum was lacking was in some of its technical capabilities. While several respondents noted isolated technical problems such as an intermittent problem remaining logged in when accessing the forum from heavily-secured Internet connections such as at the university or an occasional problem with unread messages not remaining highlighted until actually read, the major concern here related to the particular forum version in use, the standard phpBB2 package, and its lack of functionality in regards to uploading files. Here six of the seven participants stated a strong wish that the forum could allow for the uploading or attachment of files.

A final question asked the participants to imagine what, if anything, would have been different if they had not used the LLL Forum over the course of the past academic year. The responses indicate a unanimous belief that there would have been more meetings required and significantly more e-mails exchanged. Several respondents went so far as to say that the departmental communication would have suffered regardless of additional meetings and e-mails. One participant put it this way: "I think our communication would have been radically different. I think we would not have achieved as much cooperation and progress on the curriculum." Similarly, another respondent said: "We would most likely have either had the need for many more face-to-face meetings or not have had the opportunity to discuss as many matters of importance. Several positive changes made during this past year might not have occurred as quickly or as easily." Another put it this way: "Communication would have been inefficient, and it would have been more tedious to get everyone on the same page." The ability of the forum to more efficiently develop consensus among IEFLs was again addressed by another participant among a list of several other potential differences: "Many more small meetings with less timely consensus – Less united stances on issues brought to the higher-ups – Many email exchange nightmares replying to all – Less laughs – it's not all professional!"

Discussion

The forum usage results seem to indicate that a great deal of communication was taking place on the LLL Forum over the course of one year. The figures alone are striking but to put these results in perhaps better perspective, with the total number of posts at 3798 over the course of the year and the average number of posts per day at 10.38, equivalent numbers of multi-recipient e-mail messages would surely have overwhelmed the instructors involved and in all likeli-

hood would never have transpired. In terms of the topics that generated the most discussion, it seems that topics that involved official departmental decisions to be made on shared class materials, software, or equipment generated the most active discussion threads, as is perhaps to be expected as the ramifications of these decisions would have had an immediate impact on all involved. It seems safe to say that the use of the online discussion forum did spur on increased communication between the participants, especially in relation to topics which involved official departmental decisions with wide-ranging consequences for all instructors.

While the quantitative data culled from the online discussion forum at the end of one year of use provides some indication that departmental communication increased as a direct result of forum use, the quality of the communication is undoubtedly a more important measure of its success. For the purposes of this study, the participants' overall opinions toward the use of the online discussion forum to foster intra-departmental communication and collaboration and the perceived advantages, disadvantages, and differences created by doing so serve as the major qualitative evaluation of its effectiveness. Although a more detailed analysis of the entire transcript of communication conducted over the course of the year would also provide telling information, such an analysis is beyond the scope of the current study and, in some ways, not as broadly relevant as the perceptions of those who took an active part in the online discussions throughout the length of the study.

In terms of the participants' perceptions, the unanimously positive opinions held toward the LLL Forum and the long list of perceived advantages generated on the questionnaire administered at the end of the study provide further substantiation for the success of the forum in fostering communication and collaboration among departmental colleagues, and more generally for a more efficiently coordinated department overall. While several shortcomings were also identified through the questionnaire responses, most of these perceived disadvantages may be traced back to the lack of both a universally agreed upon goal for the use of the online discussion forum and a set of clearly outlined usage guidelines established by group consensus from the outset. Without a clear purpose or agreed upon framework for use, individual instructors each brought their own approach to communicating via the online discussion forum. The disparity among these individual approaches obviously had a negative impact on the effectiveness of the communication in many participants' eyes. Putting these drawbacks aside though, all participants still viewed the use of the online discussion forum as promoting an overall improvement in the communication and collaboration among department members.

Conclusion

Both the quantitative and qualitative measures employed in this study indicate that the use of an online discussion forum was successful in improving intra-departmental communication and collaboration among colleagues over the course of one year. Although several limitations to such use were revealed, all of the participants in the study still expressed an overwhelmingly positive opinion toward the online discussion forum and a firm commitment to continue its use throughout the subsequent academic year. Importantly, all participants also felt strongly enough about the effectiveness of the online discussion forum to indicate an inclination toward recommending the use of such an online discussion forum for departmental communication to other university instructors as well as to express their willingness to advocate for the use of an online discussion forum within the department of their next teaching position.

While the results of this study demonstrate that the use of an online discussion forum can lead to improved communication and collaboration among a small cadre of instructors within the same department, they also serve to illuminate several ways in which the effectiveness of the communication can be negatively affected when the goals and guidelines for use are not mutually agreed upon and followed out by all users. Although further studies are clearly needed to more precisely determine how online discussion forums may be most effectively utilized to support improved communication and collaboration among departmental colleagues, the largely positive results of this study are nonetheless encouraging. Instructors at the university level in Japan may remain subject to many aspects of professional isolation; however, online discussion forums may provide one way in which all of the isolated professionals within a department can still communicate and collaborate effectively in order to improve the overall educational environment.

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