A WEB-BASED, COLLABORATIVE TEACHERS’ RESOURCE CENTER FOR ENGLISH TEACHING AND PROFESSIONAL DEVELOPMENT

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An empirical study was conducted to investigate the effects of using a network-based, collaborative teachers’ information exchange web site (http://140.114.114.45) for twenty two English teachers for the Freshman English curriculum at National Tsing Hua University in Taiwan. An experimental, secured web site created with Microsoft® SharePoint™ Team Service was designed with the following functions: (1) Announcements & Events (2) Document Libraries (3) Discussion Boards (4) Survey. Twenty-two freshman English teachers who participated in this project were given a detailed questionnaire to find out their habits of using Internet, their opinions about using this online teachers’ resource center, and the limitations. Content analyses of the postings were documented to reveal to which extent these part-time teachers communicate with each other in order to improve students’ English learning or their own professional development. Research and pedagogical implications and suggestions are discussed.

Keywords: computer-mediated communication (CMC), professional development

1. Introduction

While some foreign language teachers in Taiwan recognize that email exchanges, a type of computer-mediated communication (CMC), can motivate EFL learners to communicate more actively with other L2 learners (e.g., Liaw, 1998), online chatrooms can facilitate cross-cultural understanding (e.g., Huang, 2002), and web learning can enhance students’ spelling skill (e.g., Kuo, Su, and Chiang, 2002), few have explored the framework and feasibility of CMC for English teachers. An empirical study has been conducted to investigate the effects of using a network-based, collaborative teachers’ information exchange web site (http://140.114.114.45) for twenty-two English teachers for the Freshman English (FE) curriculum at National Tsing Hua University, Taiwan, ROC.

In this paper, the notion of teacher development community serves as the underpinning of a study where a group of English teachers used CMC to help their own teaching practices and professional growth. This is followed by a review of some empirical studies, the study itself, implications and conclusion.

2. Rationale and Theory: Teacher Development Community

Teachers are learners of their professional development (Bailey, Curtis, and Nunan, 2001). During the development process, teachers’ reflective practices and action research happen in their local contexts and thus are individualistic. The culture of a teacher development web-based unit has to be individualistic in the sense that it meets each teacher’s needs and expectations. Further, teachers’ reflective practices are most of the time personally meaningful and individualized to his/her growth in daily teaching practice.

Dadds (2001) explored the context of teacher development from the perspective of continuing professional development via nurturing the expert within. Effective ways of teacher professional development in the field of language teaching specifically are suggested by Bailey,
Curtis and Nunan (2002): (1) self-awareness and self-observation as cornerstones, (2) reflective teaching (3) teaching journals, (4) using cases, (5) using videos, (6) action research, (7) peer observation, (8) team teaching, (9) mentoring and coaching, and (10) teaching portfolios. There are individual versus collaborative development, as far as professional development is concerned.

Vrasidas (2002) suggests that “What might seem as a routine interaction can have multiple layers of meaning” (p. 294). Intentions do drive interaction that influences knowledge construction of online participants. It is a worthy issue to explore “whether structuring for interaction decreases the psychological distance” (ibid.) among online users. The typology of interaction in Vrasidas (2002) points out some categories: get or provide help on technology, discuss and exchange ideas, get good grades (participants in their study are graduate students), socialize, and collaborate with peers and moderate discussions. Warschauer (2002) suggests that both language and technology are tools for individual and social development using two cases where technology was proved to change teachers’ teaching in Egypt. Thus, teachers are learners of their profession and they can form a professional community to help each other for their own development. Computer technology may help out in this professional development process.

3. Asynchronous Computer-Mediated Communication (CMC)

As an effective online communication model, computer-mediated communication has become popular these days. Warschauer (1997) points out CMC stands out from other communication media in the following features: “(1) text-based and computer-mediated interaction, (2) many-to-many communication, (3) time- and place- independence, (4) long distance exchanges, and (5) hypermedia links” (p. 470). In fact, these five features of CMC may also meet the specific teachers’ communication needs for Tsing Hua FE program.

1. text-based and computer-mediated interaction
   Unlike oral communication, most text-based and computer-mediated interaction can keep written records except synchronous online chat. FE teachers can refer to these written records of emails or discussion board when they forget their interaction with other teachers.

2. many-to-many communication
   Through group email exchanges, e.g. the distribution list of Microsoft Outlook®, a teacher can easily send messages to a group of recipients listed in the distribution list.

3. time- and place- independence
   This feature allows teachers to write and receive messages at any time from any computer with Internet access, which is especially useful to these part-time English teachers because they teach in many differently located complex buildings around the campus and about seven of the new teachers come to NTHU all the way from Taipei twice or four times per week. It is not easy for these teachers to meet each other when they have classes, not to mention a face-to-face conversation once in a while. Therefore, CMC offers an optional solution.

4. long distance exchanges
   CMC definitely makes long distance exchanges easier and less expensive, especially those one-to-many distance exchanges through emails (e.g. distribution list and “reply all” function) or discussion board.

5. hypermedia links
   This final feature of CMC allows teachers to distribute and retrieve multimedia documents including images, photos, sound, or video clips.

Hawkes and Romiszowski (2001) compared the computer-mediated discourse and face-to-face meetings of 28 in-service teachers in 10 Chicago suburban schools and concluded that “the value of CMC lies in its ability to facilitate professional collaboration between teachers and encourage critical reflection on educational policy and practice” (p. 285).
4. **SharePoint™ Team Services-based Platform and its major features**

Most integrated online packages or environments provide CMC functions. For instance, SharePoint Team Services is a Web-based team collaboration environment built on a highly reliable and manageable platform. It gives anyone with a Web browser the ability to create and access virtual workspaces for managing documents, discussions, lists, and surveys. It also gives users the ability to quickly create and contribute to team or project-focused websites from within their browser. This experimental web site had the following major functions:

1. **Announcements & Events**
2. **Document Libraries**
3. **Discussion Boards**
4. **Survey**

This user-friendly platform, developed to facilitate information sharing both within organizations and over the Internet, has some strengths. First, it can be easily set up, managed, used and maintained by teachers with entry-level technology background. Second, unlike most web sites on which one can only read or download documents, this information-exchange web site is literally interactive. Users given suitable permissions can not only read and download articles but also write and upload documents so that it is easy for teachers to share resources with their colleagues. A discussion board, a reply to a message or a survey can be easily constructed. Two survey options give survey making more flexible. One option is “show user names in survey results?” and another is “Allow multiple responses?” The survey designer can decide whether he/she would like to enable these two options depending on the nature and purpose of the survey. There are also various types of answer to the survey question you type; they can be, for example, yes/no check box, multiple choice, multiple lines of text, currency, or date and time, etc.

Furthermore, users can subscribe to most functions of this web site so that they will be notified by email when there are changes in these subscriptions. It is very useful for those teachers who would like to be updated on the change of postings, but do not have time to log in this web site frequently. Finally, this web site is customizable and expandable. Most functions in this web site can be modified to meet user’s needs if they are given enough right. Teachers can even create a subweb of their own.

Microsoft produced a set of two technologies: Microsoft SharePoint Portal Server 2001 and SharePoint Team Services¹. Since we have only twenty-two FE teachers at Tsing Hua, SharePoint Team Services is powerful enough to support all teachers logging in at the same time. Two types of asynchronous CMC, e-mail and web site, were first used among teachers’ information exchanges considering teachers’ computer literacy and time constraint in a synchronous CMC context.

A SharePoint Team Services-based web site (SPTSWS) is an interactive and customizable platform that gives teachers the ability to organize information, readily access that information, manage documents, and enable efficient collaboration – all in a familiar, browser-based and Microsoft Office–integrated environment. Many educators have pointed out one of the advantages of using computers and Internet for pedagogical purposes is their interactive capability. While the real communicative interaction between users and computers is limited, computers can facilitate human interaction among users (Chun, 1994). Without the programming knowledge of CGI, ASP, Java, or PHP, most web site masters can only design a web site presenting information. SPTSWS, on the contrary, allows users, not just the webmasters, to tweak the functions of this web site – to make an announcement, to upload or edit documents, to initiate or reply messages in the discussion boards, and to create a survey if they are given appropriate rights. Furthermore, the webmasters do not have to know any programming languages to make an interactive and professional web site.

5. **Some Empirical Studies**

In an ethnographic study of two senior high English teachers for a year, Lin (2001) found that teachers and students agreed that in order to incorporate network-based activities

¹ Its name was changed to Windows® SharePoint Services in March 2003.
into their syllabi, the present evaluation system in the school and in the nation must be modified because skills and constructs required by the network-based activities are different from those tested in their exams. Next, computer networks created a joyful atmosphere and environment for learning either in a classroom connected to the Internet or in a computer lab. While students with enthusiasm embraced the network-based activities that intrigued their interests in learning the target language, the Internet's challenge of the teachers' images in a conventional classroom posed a dilemma of whether or not for the two teachers to incorporate such activities in their future lessons.

Various online mechanisms can be applied to language teacher education practices; for instance, Kamhi-Stein (2000) used computer-mediated communication in a teaching materials and methods course of 20 MA-TESOL students. She believes if pre-service teachers “are to use technology effectively for teaching in the future, they must use it for learning when they are students” (p. 424). In the study, a bulletin board (BB) system was used to promote constructivist, student-centered, and collaborative learning. Kamhi-Stein found there was about equal amounts of discussions generated during face-to-face and BB settings, between native and nonnative learners. Students showed positive attitudes toward the BB discussions as a means of hearing peers’ perspectives.

Liou and Yang (2002) used MOO (multi-user domain object oriented, http://formoosa.fl.nthu.edu.tw) in a English materials and methods course for 20 pre-service teachers and found using technology for teacher education or development can be effective. Based on a questionnaire survey, discussion logs, students’ electronic portfolio, the results of the study indicate that teachers are convinced that technology is important for English teaching and promises learning gain. Though it’s not hard for them to acquire electronic literacy, they recognize that there are still limitations to use technology widely in high schools in Taiwan given the sociocultural constraints. In the same context, Liou (2002) found that these 20 student-teachers used online discussion for articulated reflection on their teaching practices and pedagogical or personal theories.

6. Context of the Freshman English Program at National Tsing Hua University

To face the challenge of raising students’ English level, Tsing Hua spent about one year re-designing its old curriculum. The new curriculum has several features. First, different course requirements were imposed based on students’ English entry levels. In Tsing Hua, about 1150 non-English major college freshmen were admitted in the fall semester of 2002. The Freshman English course with eight credits was required of about 850 college freshmen whose English scores in the entrance examination did not reach the 15th level or top 10% among all students in this university. The rest of about 300 students were encouraged to take one to several advanced English I courses with different topics in their first semester, and one to several advanced English II courses in the following semester. Second, the curriculum was re-designed with a stricter structure; in the past, each course instructor was completely autonomous for his/her own syllabus and teaching. Third, the FE course was designed as four credits each semester focusing on integrated four skills with a uniform reader, Reactions, plus uniform mid-term and final examinations. The advanced English courses were designed by each individual instructor with individualistic assessment. Finally, the class size was reduced. All the class size was reduced to 35 students; in the past, the minimum enrollment of the FE courses is about 50 students per class. Due to such expansion, twenty-two instructors were involved in FE teaching, two of whom were full-time professors and fourteen of whom are newly recruited teachers. They teach from 8 to 10 a.m. Mondays and Thursdays, or 10 to 12 a.m. Wednesdays and Fridays.

The administrative structure was expanded. In the past, only one coordinator, full-time professor, was elected or volunteered from the Department of Foreign Languages and Literature to serve as the FE program coordinator. At present, two additional full-time professors joined this committee, Foreign Languages Committee. Two additional part-time teachers who teach in the two time slots served as section coordinators. The communication of the Freshman English teachers community in this university in the past was established through
two major meetings each semester. Due to a uniform curriculum with the same reader and mid-term and final examinations, more collaboration work was needed. Besides regular group meetings, teachers would meet in smaller groups once or twice with section coordinators.

Since the FE program was completely overhauled and fourteen teachers were newly recruited in 2002, an effective communication among these mostly part-time teachers is quite essential to carry out this new curriculum smoothly. CMC was brought up to be a major communication tool except the twice-in-a-semester, face-to-face FE faculty meeting. Examples of CMC include electronic mail, listervs, bulletin board system (BBS) or discussion board, network videoconferencing, etc, two of which, e-mail and discussion board, were used as network-based communication media. The brand new curriculum that Tsing Hua is implementing, the fourteen newly recruited teachers out of twenty-two English teachers, the fixed and concentrated schedules, and some part-time teachers living out of town all give this FE program a suitable environment to promote teacher professional development, to reflect on the new curriculum, and to establish two-way communication in a network-based teacher information exchange center.

An interactive web site created with SharePoint™ Team Services was designed on a Windows® 2000 server with Windows® SQL 2000™ as its database server. The initial purpose of this SPTSW is to enhance out-of-campus communication to get the new curriculum implemented smoothly and effectively, and to promote teachers’ professional development. The long-term goal of SPTSW is to serve as a resource center for all the Freshman English teachers if the shared document library can be established bit by bit. With the help of built-in document-searching function, the users can easily retrieve useful documents from this resource center.

7. Research Process and Results

Two major sources of data collection are e-mail exchanges and postings on the discussion board of this SharePoint Team Services-based web site. The first SPTSW, installed on a PC running Windows 2000 server, was established in the beginning of September 2002 when the new FE curriculum was just implemented. Later, this SPTSW was migrated to a Dell® PowerEdge 2600 server on February 21, 2003. As to e-mail communication, all the e-mail exchanges after November 8, 2002 were chronologically stored whereas e-mail exchanges before then were all deleted by accident. Content analyses were focused on postings on this SPTSW and were classified according to the four major functions of this SPTSW. Postings documented here dated from September 6, 2002 to April 3, 2003; the repeated postings were not counted.

Announcement & Events

Altogether twenty announcements have been made; four of them were made by other two English teachers while the rest was issued by the first author. In sum, all fifteen events have been posted by the first author. As one of the section coordinators and the creator of this SPTSW, it is normal that I post most of the announcements and events. The content of the Announcements is mainly administration-related postings such as “Articles for the Final Exam” or “Reading Workshop”. The breakdown of the Announcements and Events postings is shown in Table 1.

Table 1. The Breakdown of the Announcements and Events Postings

<table>
<thead>
<tr>
<th></th>
<th>Announcements</th>
<th>Events</th>
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<tbody>
<tr>
<td>administration-related</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>usage/function of this web site</td>
<td>6</td>
<td>x</td>
</tr>
<tr>
<td>English teaching-/learning-related</td>
<td>2</td>
<td>x</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>2</td>
<td>x</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>15</td>
</tr>
</tbody>
</table>
Announcements list located in an easily spotted place is used to post important messages that teachers can see them quickly. Events list serves to keep teachers informed of upcoming meetings, deadlines, and other important events. Of course, it is also effective if a teacher would like to post his/her messages in this noticeable position to emphasize their importance or to attract more readers. An example of English teaching-related announcement is shown in Figure 1.

![Figure 1](http://www.time.com/time/asia/magazine/article/0,13673,501028729-322695,00.html)

**Figure 1. Sample of English Teaching-Related Announcements Given by One FE Teacher**

**Document Libraries**

Most web sites permit users to download files or graphics to their own computer; it is also very easy for webmasters, but not general users, to upload documents, photos, videos, etc. to the web site. SPTSWS functioning as a secure Intranet allows all the teachers with proper authorization to upload and edit documents. In other words, SPTSWS can act as an FTP server allowing teachers to exchange and share files with others. Teachers can create their own document libraries so that documents with similar topics or purposes can be systematically classified and easily retrieved. Except the default Shared Documents, six other document libraries were created by the first author: (1) Articles, (2) Handouts Collection, (3) Teaching Materials & Tips, (4) Short Stories, (5) REACTIONS Library, and (6) Jokes, Puns, and Funny Stuff.

Nevertheless, even after teachers were strongly encouraged to share documents with their colleagues, the postings in the Document Libraries were mostly submitted by the first author. One teacher posted the graduation speech by the president of Tsing Hua on the Articles library; another submitted one student translation work of Unit 2C in Reactions, the uniform textbook that Tsing Hua freshmen use from 2002 ~ 2003 academic year.

It seems that cooperation with peers and colleagues to reach educational objectives is not universally common. Hawkes and Romiszowski (2001) mentioned “In schools, however, teachers often work more in isolation from – than in collaboration with – each other” (p. 287). Earlier Rosenholtz’s study (as cited in Hawkes and Romiszowski, 2001) also confirmed that collaboration in teaching hardly existed, and that exchanges of teaching materials and pedagogical ideas rarely happened. The findings seem to correspond with the number of uploaded files in the Document Libraries of our SPTSWS.
It is true that e-mail exchanges with attachment files can also fulfill similar functions like Announcements, Events, and Document Libraries. However, SPTSWS gains more advantages than e-mail exchanges. First, not all the teachers are interested in the information (i.e. announcements, activity messages, or “shared” documents), other colleagues are disseminating. It will not be so aggressive if we use a pull technology tool such as a web site instead of delivering information push-style such as e-mail. Second, unlike email exchanges in which the senders can not retrieve e-mails they just sent, the contributors of SPTSWS can easily edit or delete their own postings even before their colleagues read them. Third, on an Internet-ready public computer, teachers can access SPTSWS anywhere to read announcements, and upload or edit documents without configuring that computer. On the contrary, unless teachers know how to use Telnet to log in to a server to check their personal e-mail or teachers have a free webmail account (e.g. hotmail or Yahoo webmail), it needs some basic computer literacy for teachers to change the configuration to check their email. Finally, if SPTSWS is put on a reliable and secure server, a web master can centrally maintain and back up all the data in it. Teachers can still retrieve information they want from SPTSWS in the future.

Discussion Boards

Discussion boards involve more teacher’s participation than any other functions of SPTSWS. From September 2002 to November 2002, the duration when SPTSWS was put on a PC-based server, there were 49 postings from two discussion boards – General Discussion and REACTIONS. Later, after the winter vacation, this SPTSWS was transferred to a Dell PowerEdge 2600 server on February 21, 2003. Most teachers might not tell the differences except that they had to key in the different IP address to access the new SPTSWS. Until April 3, 2003, there were 27 messages of the discussion board on this new SPTSWS. Altogether these 76 postings cover 21 threads; 19 threads of them elicited at least one and mostly more than two responses from other colleagues. The postings in the discussion board were similar to turn-taking participation of face-to-face conversation. In total 9 out of 22 teachers have ever participated in discussion boards (see Table 2). The definition of initiation and response were partially borrowed from Kamhi-Stein (2000). An initiation is defined as starting a new thread which involves asking a question, make a statement, or sharing information on a particular topic; a response is defined as the second or following turns which involve giving an answer or providing information in response to the first posting in the same thread. On average, one initiation drew 2.6 responses.

Table 2. Teachers’ Participation in Discussion Boards

<table>
<thead>
<tr>
<th></th>
<th>Initiations</th>
<th>Responses</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>5</td>
<td>17</td>
<td>22</td>
</tr>
<tr>
<td>T2</td>
<td>5</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>T3</td>
<td>4</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>T4</td>
<td>3</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>T5</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>T6</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>T7</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>T8</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>T9</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>56</td>
<td>76</td>
</tr>
</tbody>
</table>

*Note.* In order to protect teachers’ privacy, a letter “T” is used to represent a teacher.

2 In client/server applications, push technology means that the sender sends data to a client without the client requesting it. The World Wide Web is based on a pull technology where the client browser must request a Web page before it is sent. Probably the oldest and most widely used push technology is e-mail. This is a push technology because you receive mails whether you ask for it or not – that is, the sender pushes the message to the receiver.
Most of these 21 threads were English teaching-related and administration-related postings; some messages mixed both. Examples of thread titles include “The coverage of midterm exam” (8 responses), “Textbooks for Fall semester 2003” (7 responses), “How to use the lab machines?” (3 responses), “Students complain text too difficult to understand” (3 responses), “Nobody cared who Kitty Genovese was!!” (3 responses), etc. Since six of these nine teachers were new at Tsing Hua and even the teachers who had taught at Tsing Hua were not familiar with the new FE curriculum, many postings indicated that teachers who used SPTSWS were desperate to seek curriculum-related and pedagogy-related help, especially when the new FE curriculum was newly implemented in 2002 or when an important decision was being made. Although teacher participation in Discussion Boards was limited, messages shown there did illustrate that teachers who used SPTSWS:

(1) though this teachers’ information exchange web site was useful, for example:
Teacher 1: “It’s good to have this Web site with all the information to follow.”
Teacher 2: “Just wanna show my appreciation for this wonderful, user-friendly and professional-looking web site….”

(2) exchanged their teaching tips with other colleagues, for example:
Teacher 1: “I had this crazy idea of asking my students to translate the text of Unit 2C right after we finished discussion, a very thorough one in my standard, from English to Chinese. It was a group work done by 5 groups of 7 members each, with each group responsible for 1 to 2 paragraphs only….”
Teacher 2 (responded): “This is an excellent idea. Since the midterm exam will include translation questions, such an assignment gives students the chance to practice. I can’t wait to see the results.”

(3) reflected critically on the new FE curriculum or uniform textbook, for example:
Teacher 1: “I’m thinking if it is possible to readjust the syllable after midterm exam. If the original schedule is too tight for many teachers, is it possible to cut one or two articles (the most difficult ones among the articles)? So, the final exam will cover only 3 to 4 articles.”
Teacher 2 (responded): “I agree with Vicky that we should seriously consider deleting the article “Expelled” from our syllabus for the following reasons:…”

(4) looked for solutions to some pedagogical issues, for example:
Teacher 1: “My fellow Freshman English teachers, why is it that I just couldn’t quite have this article figured out? Please kindly help me grasp the meaning of the statement that ‘we have left school the job of producing adults but schools are where the young are kept, not where they grow up.’…”

One of the obvious advantages of asynchronous CMC over face-to-face interaction is that it does not impose any time and place constraints. The written records stored with chronologically order are easy for the users to follow the discussion (See Figure 2).
In order to offer a better service to FE teachers, all these twenty-two FE teachers were invited to fill in a self-designed “Internet and SPTSWS Use Survey” in order to find out their habits of using Internet and their opinions about using this SPTSWS. There were 14 items with two sections on Internet Use (on a 5-point Likert scale) and this information exchange website (See Appendix A for detail). However, even after two more reminder e-mails were sent within the following two weeks, only 11 out of 22 teachers completed the online survey and another two teachers who had difficulty logging in SPTSWS answered the survey through email. Although the return rate was not satisfactory, most responses to the survey are positive and supportive (See Appendix B). In fact, all the respondents agreed that this SPTSWS was helpful for them to exchange and share information with colleagues at Tsing Hua (5 chose “strongly agree” and 8 chose “agree”). Asked further which function of this SPTSWS was most useful to them, 9 out of 13 FE teachers chose Discussion Board and 3 chose Announcements. Furthermore, 8 out of 13 teachers indicated that “interactive” is the most important feature of this teachers’ information exchange website whereas two of them thought “user-friendly” is the most important one. As Kamhi-Stein (2000) indicated “the integration of CMC tools into the teaching practicum has the potential to promote collaboration among teacher-in-preparation and reduce the isolation felt by novice teachers” (p. 426). Working part-time at Tsing Hua, most English teachers hardly meet each other. SPTSWS offered an interactive platform for these new teachers to exchange opinions in Discussion Board so that they would not feel so isolated.

8. Limitations of the Study

First of all, due to the short period of time (more than one semester) and weak solidarity among teachers (most of them were new in this campus), the online participation rate was not satisfactory. FE teachers were repeatedly encouraged to use this SPTSWS to share information and opinions with other colleagues. However, there is no way to force teachers to use this web site. Yet those few who were active using the board or e-mail indicated these
online channels were very helpful to their inter-colleague communication and English teaching.

Second, a couple of teachers mentioned that they had hard time logging in this SPTSWS and others complained that the display of this web site was very slow. Strangely enough, there was no problem for the first author to log in this SPTSWS with their account and password; the speed of screen presentation was also pretty normal. Some also indicated that they could log in this web site around Tsing Hua campus but failed to log in this SPTSWS at home. Perhaps those teachers did not correctly configure their home computer, which was beyond our control. Yet it revealed that computer literacy of FE teachers at Tsing Hua should be improved so that teachers can more or less debug an unexpected computer or Internet glitch.

9. Conclusion

Different universities have different administrative structures of implementing their campus-wide English program; some have a designated language center to take charge; others assume its responsibility in an English/foreign languages department. Often, the management of this English program is demanding as in this specific case a great number of part-time teachers are involved, who stay in the campus shorter than full-time faculty. A SPTSWS used in this study seems promising as it provides an optional channel of interaction for all teachers and it is an effective means of communication to help coordinate efforts from many teachers at different places.

Because Tsing Hua FE program offered a unique teaching context, SPTSWS can serve as an interactive and user-friendly framework on which the administrator or the department of foreign languages can build a better communication with these newly recruited part-time teachers without the constraint of time and location. For example, a new policy or regulation can be easily posted on the Announcements, a coming activity can be quickly found in the Events, and the feedback of public-opinion poll can be accessed via a Survey. In addition, SPTSWS can also be used a communicative platform on which all the FE teachers can exchange their teaching tips, share their opinions toward the new curriculum, and collaborate to establish a virtual document library for professional development.

While all the thirteen respondents of the survey thought that SPTSWS was useful for them to exchange and share information with other colleagues at Tsing Hua, not all of them actively engaged in this SPTSWS. What causes the gap between knowing that SPTSWS is useful and really using it?

First of all, a couple of FE teachers expressed their frustration about failure to access the SPTSWS smoothly whereas most teachers could log in normally. Second, perhaps most FE teachers still believed that web site could be only used as a presentation medium. They might not know that a browser of SPTSWS could also act as a different roles such as contributor, author, advanced author, or administrator depending the configuration of web master. In fact, many features of SPTSWS were under-utilized, for example document search, subscription service, and creation of subweb. It is obvious that promotions of SPTSWS among FE teachers at Tsing Hua are urgent and educational technology workshops to enhance teachers’ electronic literacy and to ease their computer anxiety are also much needed. Finally, using CMC is a change of communication habit and it is usually time-consuming to change a habit. All the thirteen respondents ever visited SPTSWS, but only a couple of them posted messages or uploaded documents on it. If all the silent viewers of SPTSWS can become active contributors, this SPTSWS will become a successful mode of online communication.

No matter we like it or not, CMC has already become an integral part of network-based language teaching and learning. 8 out of 13 FE teachers at Tsing Hua mentioned that reading and writing e-mails is the major purpose of using Internet. In terms of practical functions, SPTSWS is absolutely more powerful than e-mail exchanges; the
integration of e-mail exchanges into SPTSWS is perhaps the best solution to network-based communication among FE teachers at Tsing Hua. SPTSWS can’t substitute face-to-face interaction, but it offers an alternative mode of effective communication and the FE teachers who ever used it at Tsing Hua all agreed that it was useful to exchange and share information with their peers.

Acknowledgements:

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REFERENCES


Appendix A

Internet and SPTSWS Use Survey
Questions about Internet Use
1. How long have you been using Internet (e.g. email, BBS, or website)?
   (A) more than 8 years  (B) 5 ~ 8 years  (C) 3 ~ 5 years
   (D) 1 ~ 3 years  (E) fewer than 1 year  (F) I never used it.
2. Generally speaking, how many hours do you spend in using Internet (including email, BBS, website, chat room, etc.) during weekdays?
   (A) more than 10 hours  (B) 8 ~ 10 hours  (C) 5 ~ 8 hours
   (D) 3 ~ 5 hours  (E) 1 ~ 3 hours  (F) fewer than 1 hour
3. While you used Internet, most of the time was spent in…
   (A) reading and writing emails
   (B) surfing websites to retrieve information
   (C) using BBS/discussion board/electronic message board
   (D) using MOO
   (E) using online chat/instant messaging
   (F) other (please specify: _______________________________)
4. Do you agree emails are effective for you to exchange and share information with your friends or colleagues?
   (A) strongly agree  (B) agree  (C) not sure
   (D) disagree  (E) strongly disagree
   If you choose “disagree” or “strongly disagree”, please tell me why you think so?
5. Do you agree websites are effective for you to exchange and share information with your friends or colleagues?
   (A) strongly agree  (B) agree  (C) not sure
   (D) disagree  (E) strongly disagree
   If you choose “disagree” or “strongly disagree”, please tell me why you think so?
6. Do you agree that synchronous online chat is effective for you to exchange and share information with your friends or colleagues?
   (A) strongly agree  (B) agree  (C) not sure
   (D) disagree  (E) strongly disagree
   If you choose “disagree” or “strongly disagree”, please tell me why you think so?
7. Do you agree that BBS or/and discussion board are effective for you to exchange and share information with your friends or colleagues?
   (A) strongly agree  (B) agree  (C) not sure
   (D) disagree  (E) strongly disagree
   If you choose “disagree” or “strongly disagree”, please tell me why you think so?
8. What is your most frequently visited website_________________________________

Questions about Teachers’ Information Exchange Web Site
1. Do you know that we have a “Teacher’s Information Exchange Website”?
   (A) Yes, I do.  (B) I don’t.
2. Have you ever visited this website?
   (A) Yes  (B) No
   If you choose “No”, please tell me the reason(s).
3. Do you agree that this website is useful and helpful for you to exchange and share information with your colleagues at NTHU?
   (A) strongly agree  (B) agree  (C) not sure
   (D) disagree  (E) strongly disagree  (F) I never used it, so I don’t know.
   If you choose “disagree” or “strongly disagree”, please tell me why you think so?
4. Which functions of this website is most useful to you?
   (A) Announcements  (B) Events  (C) Documents
   (D) Discussion Board  (E) Contacts  (F) Tasks
   (G) Links  (H) Survey  (I) Search Documents
   (J) Subscribe  (K) Subweb  (L) None of them

5. What is the most important feature of “Teacher’s Information Exchange Website”?
   (A) interaction/bidirectional  (B) stable  (C) user-friendly
   (D) secure  (E) fast
   (F) a lot of ELT information offered by other professionals
   (G) other (please specify: _______________________

6. Please write down any comments and suggestions you have about “Teacher’s Information Exchange Website”: ___________________________
### Appendix B

#### Results of Internet and SPTSWS Use Survey (Selected)

<table>
<thead>
<tr>
<th>Questions</th>
<th>n</th>
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<tr>
<td>How long have you been using Internet?</td>
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<tr>
<td>more than 8 years</td>
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<td>5 ~ 8 years</td>
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<td>3~5 years</td>
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<td>I never used it</td>
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<tr>
<td>Generally speaking, how many hours do you spend in using Internet</td>
<td></td>
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<tr>
<td>(including email, BBS, website, chat room, etc.) during weekdays?</td>
<td></td>
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<tr>
<td>more than 10 hours</td>
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<td>8 ~ 10 hours</td>
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<tr>
<td>1 ~ 3 hours</td>
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<td>While you used Internet, most of the time was spent in…</td>
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<tr>
<td>reading and writing emails</td>
<td>8</td>
</tr>
<tr>
<td>surfing websites to retrieve information</td>
<td>4</td>
</tr>
<tr>
<td>using BBS/discussion board/electronic message board</td>
<td>0</td>
</tr>
<tr>
<td>using MOO</td>
<td>0</td>
</tr>
<tr>
<td>using online chat/instant messaging</td>
<td>1</td>
</tr>
<tr>
<td>Do you agree that this web site is useful and helpful for you to exchange and share information with your colleagues at NTHU?</td>
<td></td>
</tr>
<tr>
<td>strongly agree</td>
<td>5</td>
</tr>
<tr>
<td>agree</td>
<td>8</td>
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<tr>
<td>not sure</td>
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<td>Which function of this web site is most useful to you?</td>
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<td>Announcements</td>
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<td>Documents</td>
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<tr>
<td>Discussion Board</td>
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<td>Contacts</td>
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<td>Tasks</td>
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<td>Links</td>
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<td>What is the most important feature of our “Teachers’ Information Exchange Web Site”?</td>
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<td>interactive</td>
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<td>secure</td>
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<td>fast</td>
<td>0</td>
</tr>
<tr>
<td>a lot of ELT information offered by other professionals</td>
<td>1</td>
</tr>
</tbody>
</table>

Please write down any comments and suggestions you have about “Teachers’ Information Exchange Web Site.”

(Sample Answers)
1. It’s very useful. Without it, I would have missed a lot of important information. Thank you for your efforts!

2. It’s taking so long to show the home page as well as all other pages. It used to take just a second, before you re-opened the website. And there’s something wrong with the subscription service. It’s not working. It used to work perfectly.

3. I enjoy this way of sharing information with my colleagues, which reminds me of my good old days at the graduate school.

4. It’s a great site and extremely helpful for me. I only hope more of our colleagues will log in to enjoy the valuable resources and, of course, moral support there. Thanks to you, Michael, for putting together this wonderful website for us. It means a great deal to me.

5. I am sure this website contains good information for the teachers and wish to use it more often. My only problem is I could never log in. I wonder why.