

## **Social Presence of Inservice Teachers in Distance Learning**

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### **Abstract**

Currently, various innovative uses of synchronous or asynchronous learning platforms to stretch the boundaries of traditional courses have been adopted for inservice teacher training. This paper aims to report a web-based distance learning course for teachers of secondary and primary schools in remote areas in Taiwan. Fifty-eight in-service teachers who teach different subjects participated in a four-week course on English reading strategies. Three reading texts were selected. For each text, video-based instruction was provided, followed by exercises and homework. The participants were required to participate in online discussions. The participants' social presence in the forum was investigated. Based on the findings, implications for teacher training were presented.

**Keywords:** social presence, asynchronous interaction, distance learning, teacher training

## **BACKGROUND**

Online professional development sounds very promising when compared with the traditional face-to-face training, due to professionals' control over the pace of their learning and the minimized limitation of physical locations (Zhou, Varnhagen, Sears, Kasprzak, and Shervey, 2007). The capacity of computer-mediated communication to support highly affective interpersonal interactions is supported by studies that focus on its use in educational settings (Angeli, Bonk, & Hara, 1998; McDonald, 1998; Kanuka & Anderson, 1998). Many scholars emphasized that teachers should be provided with training to integrate information and communication technology (ICT) with their teaching (Cho, Leung, & Oxford, 2004, Hall, Fisher, Musanti, & Halquist, 2006; Kanuka & Anderson, 1998). However, many studies on educational technology focus on the training of preservice teachers (e.g. Arnold & Ducate, 2006; Desjardins & Peters, 2007; Topcu & Ubuz, 2008). There is a need to explore the professional developments of the inservice teachers about how they learn with technology.

This paper aims to report responses of the inservice teachers to a course in an Inservice Distant Learning Program (IDL). The IDLP was provided by Ministry of Education for teachers of secondary and primary schools in the remote areas and on off-shore islands in Taiwan. This program has provided diversified inservice courses (three or four weeks) for teachers who live in remote areas to continue professional development. In this study, fifty eight participants, who taught different subjects, took part in this four-week course on English reading strategies. Social presence in the online discussions was analyzed using Rourke, Anderson, Garrison, & Archer's (1999) framework. The research question addressed in the study is "What types of social presence could be identified among inservice teachers in a distance learning program?"

## **LITERATURE REVIEW**

The most important technological development after 1990 is the Internet (Levy, 1997). The CALL projects in this stage make use of the Internet in varied ways. The principal role of computers is to provide alternative contexts for social interaction, to facilitate access to existing discourse communities and the creation of new ones (Warschauer & Kern, 2000). Hypermedia, simulation, virtual reality and open-ended learning environments increase benefits to a learner because they allow a user to explore information more freely, to apply his own learning styles, and to use software as a resource rather than as a teacher (Alessi & Trollip, 2001). For example, social

constructivist educators regard communication, mediated by computers (CMC), of various kinds such as electronic exchange of mail, Internet chat rooms and video-conferencing, as an increasingly appropriate use of technology because they allow both asynchronous and synchronous interaction between users. This unique environment for communication has overcome traditional barriers of time, space and isolation for remote learning.

Online learning communities provide a developmental window on to the learning process, allowing fuller formative feedback as well as providing a portfolio of learner contributions (Bradshaw, Powell, & Terrell, 2002). Moreover, online asynchronous learning communities provide a particularly rich opportunity to generate collaborative dialogue, which is directly linked to increased skills in critical thinking and problem solving (Gokhale, 1995). Charalambos, Michalinos, and Chamberlain (2004) emphasized that the idea of community rests upon two sets of values: on the one hand, the idea that co-operation and shared responsibility provide the best context for effectiveness in accomplishing some goals and, on the other hand, that close ties of affiliation are beneficial and supportive for the living of a good life. Many studies reported that learner interaction in text-based CMC can increase language output, enhance motivation, and create opportunities for learner-centered interaction (Kern, 1995; Garrison, Anderson, & Archer, 2001; Meskill & Ranglova, 2000; Rovai, 2002). These benefits could result from the reduction of inhibition and sociolinguistic cues that possibly constrain interaction in face-to-face learning contexts (Peterson, 2006).

Despite the above advantages of Internet technologies to increase collaboration and knowledge construction among distance learners, Pawan, Paulus, Yalcin, and Chang (2003) emphasized that it is a great concern of a lack of clarity of what online collaboration is or should be and a lack of knowledge on how to structure and engage in it. Moreover, the lack of social context cues such as facial expressions and eye contact has been argued to make CMC a reduced register (Ferrara, Brunner, & Whittemore, 1991) and fail to support social and affective interaction (Daft & Lengel, 1986). In other words, if participants in online learning merely share their past experiences and opinions without making efforts to react to thoughts of others, knowledge construction through interaction is hard to achieve.

The availability of communication technology does not guarantee a successful online learning (Rovai, 2003; Zhou, Varnhagen, Sears, Kasprzak, & Shervey, 2007) even if online learning communities are claimed to have similar functions as offline communities and in particular, can increase participants' social presence in an online learning environment (Baym, 1998). An additional challenge to effective collaboration in online courses is that the intended outcomes of collaboration have not been clearly articulated by research and/or experienced in practice. In addition, Zhou,

Varnhagen, Sears, Kasprzak and Shervey (2007) indicated other factors that reduce the effectiveness of collaboration in online courses such as learners' low satisfaction with online learning, high attrition rate, poor quality of interaction, and heavy reliance on learners' proficiency with technology that does not always exist have dogged online learning.

Social presence is one of the key points to address the quality concern of online learning (Rourke, Anderson, Garrison, & Archer, 1999; Zhou et al, 2007). Social presence is defined as the ability of learners to project themselves socially and emotionally in a community of inquiry and refers to the affective domain as it relates to interpersonal communications (Garrison, Anderson, & Archer, 2001). Gunawardena, and Zittle (1997) pointed out that social presence was a predictor of satisfaction within a computer mediated conferencing environment. Rourke et al. pointed out that social presence can, on one hand, support cognitive objectives through its ability to instigate, sustain, and support critical thinking and, on the other hand, support affective objectives by making the group interactions appealing and engaging.

Different frameworks were used in different studies to examine the social presence of the participants (Gunawardena & Zittle, 1997; Richardson & Swan, 2003; Rourke, Anderson, Garrison, & Archer, 1999; Swan & Shih, 2005; Tu, 2000, 2002). For example, Rourke, Anderson, Garrison, and Archer (1999) identified three categories of social presence indicators—*affective responses*, *cohesive responses*, and *interactive responses*—and explored their use in online discussion. Tu (2002) also noted the relationship between perceived presence and success in online courses and distinguished three dimensions of course designs which influenced the development of social presence: *social context*, *social processes*, and *interactivity*. Swan and Shih (2005) indicated that content analyses of online interactions had identified ways in which participants made up for the lack of non-verbal and vocal cues through the use of textual social indicators. Their summarization of research on social presence showed that participants in CMC (computer-mediated communication) activities can strongly feel their social presence and that their perceptions of social presence have a strong influence on the satisfaction with online courses.

Arnold and Ducate (2006) indicated two reasons why technology should be an integral part of teacher training. On the one hand, asynchronous computer-mediated communication, among many computer applications, promotes interactive learning, which is central to the professional development of future and current educators. On the other hand, by means of collective online discussions, teachers experience the cognitive and social benefits of collaborating with their peers from the students' point of view and thereby evaluate its uses and benefits from a user perspective, which is an important step in preparing teachers for the effective use of educational technology.

Hall, Fisher, Musanti, and Halquist (2006) stated that “The lack of technology integration in classroom teaching practices would then indicate that teachers are experiencing little technology integration in their teacher preparation programs” (p. 25).

Collaborative interactions, although much touted as a means to effective, deep, and reflective learning online (Hara, Bonk, & Angeli, 2000; Hathorn & Ingram, 2002; Henri, 1992; Henri & Rigault, 1996), leave many instructors and students insecure at best and, at worst, reluctant to engage fully (Pawan, Paulus, Yalcin, & Chang, 2003). For example, it is crucial whether instructors are capable of offering guidance and information and help students employ appropriate strategies in an online learning environment. Federico (2005) suggested that instructors should have experienced what it takes to be an online student. In other words, instructors must be students themselves in an online learning environment to experience possible frustration and disappointment felt by online learners.

As noted above, there is some indication that more programs for teacher education attempt to foster collaboration among teachers in online environments with the rise of Internet technologies (Arnold & Ducate, 2006; Pawan, Paulus, Yalcin, & Chang, 2003; Terry, 2007). This paper aims to report a web-based distance learning course for teachers of secondary and primary schools in remote areas in Taiwan. The participants’ social presence in the forum was investigated to address related issues.

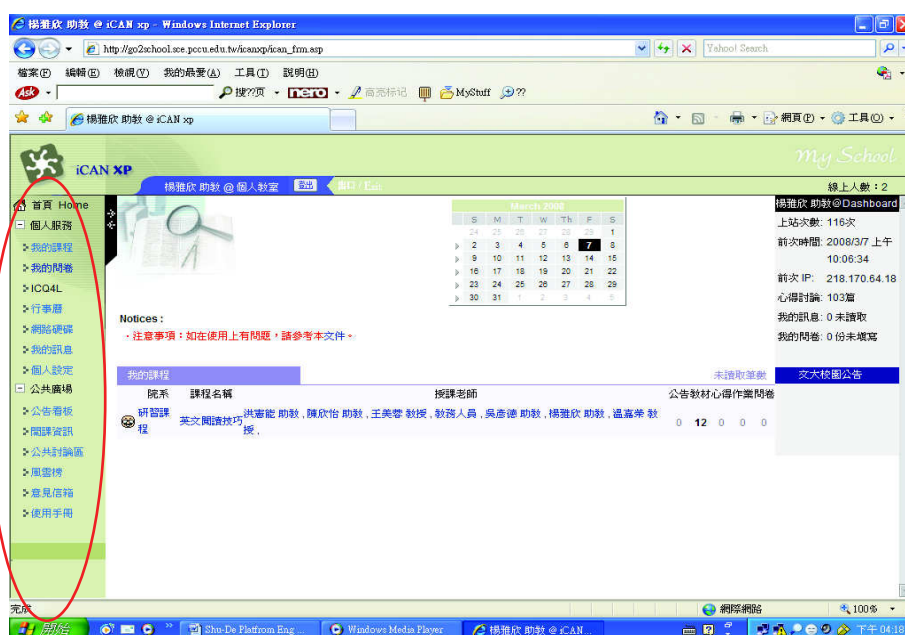
## **METHOD**

58 in-service teachers participated in the course on English reading strategies. They are elementary or secondary school teachers who would like to promote their own English proficiency. Participant data are presented in Table 1. The participants are heterogeneous, with teaching experience ranging from less than five years to more than 15 years. They taught different areas including Chinese, English, history, mathematics, and so on. Their English proficiency varied to a great extent according to the scores of the pre-testing. Most of them attended this course due to interests and 90% of them have the experience of learning online before attending this course.

**Table 1**  
Participants' profile (N=58)

Years of experience	1-5	16
	6-10	20
	11-15	12
	16-20	10
Teaching area (n>58 due to participants teaching in more than one area)	Chinese	24
	Mathematics	30
	Social science	6
	English	8
	Other (e.g. art, science, etc.)	8
Teaching level	Elementary	41
	Junior	17
Reason for taking the course (n>58 due to participants marking more than one reason)	Interested	52
	Professional development	16

The learning platform designed included two major areas: Personal Service & Public Plaza. As Figure 1 shows, platform users can see the functions listed in the left column. The second major category, Public Plaza, provide users with a variety of channels of communication so that participants are able to obtain or inquire information about the courses on the platform.



**Figure 1.** The homepage of the learning platform

The most frequent used links are those course subjects listed under My Courses. In this study, clicking English Reading Strategies, you will see the following page (Figure 2).

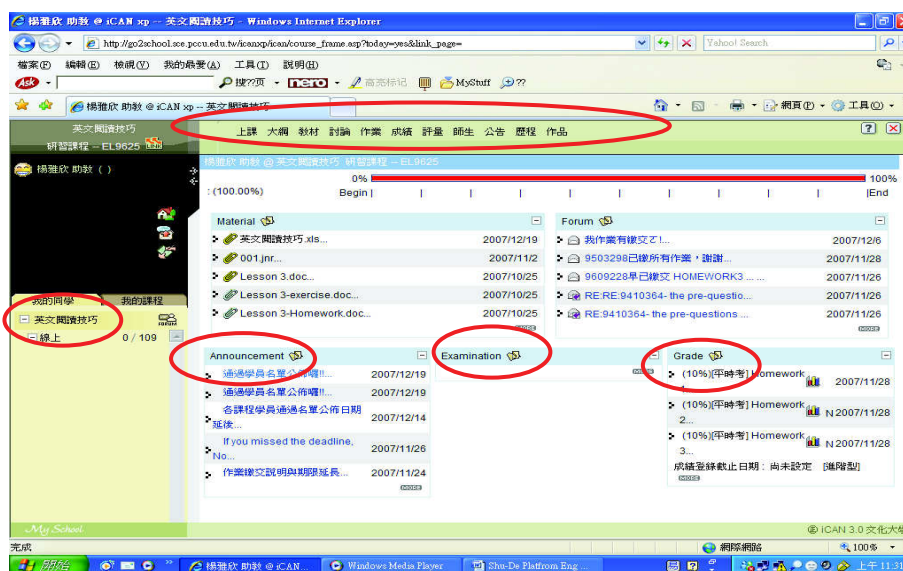


Figure 2. The page of the reading course

This page is the main entry to obtain the specific information about the certain course taken by the participant. The layout is convenient for course participants to download course materials from Material, discuss with other participants on the Forum, obtain important information from Announcement, take exams from Examination, and check the exam results from Grade. Apart from those frequent used functions, the major function of the platform is to provide participants with the online courses. Thus, English Reading Strategies course takers can see the lecturing page (Figure 3) when clicking the icon “In Class”. Participants see the lecture video on the top right with the teacher’s clear image and voice.

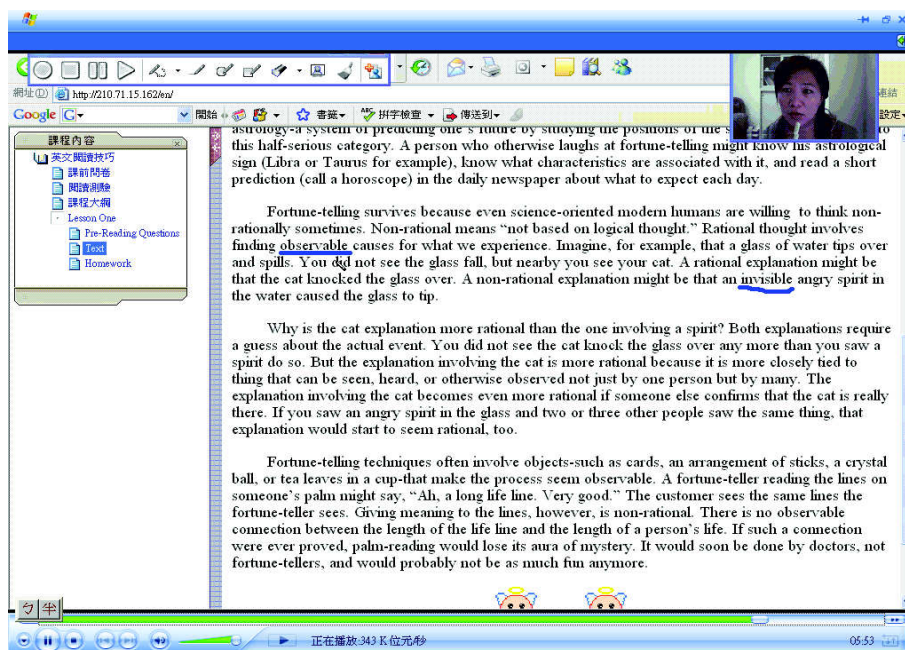


Figure 3. The sample page of the online reading instruction

This study focused on the analysis of data obtained from participants in the online forum. Content analysis is a technique often used to analyze transcripts of synchronous and asynchronous computer mediated discussions in an educational setting (Arnold & Ducate, 2006; Chen & Looi, 2007; De Wever, Schellens, Valcke, & Van Keer, 2006). We adopted the framework (Table 2) of Rourke, Anderson, Garrison, & Archer (1999) because it was designed to explore the nature of interaction in online environment. Three categories of social presence were provided, along with indicators, definitions, and examples.

In this study, “thematic unit” was employed as the unit for analyses. Budd and Donohue (1967) define thematic unit as “a single thought unit or idea unit that conveys a single item of information extracted from a segment of content” (p. 34). Thematic units, such as Henri’s (1992) and McDonald’s (1998) “meaning unit” reflect the logic of the indicators. The coding process involved iterative cycles of examination of the data, identification of key themes, and the drawing of tentative conclusions, which was consistent with Sowden and Keeves’ general framework (1988) for the analysis of qualitative data: (a) reducing data, (b) displaying and



**Table 2**  
**Model and template for assessment of social presence**

Category	Indicators	Definition	Example
Affective	Expression of emotions	Conventional expressions of emotions, or unconventional expressions of emotions, includes repetitious punctuation, conspicuous capitalization, emoticons.	“I just can’t stand it when ... ! ! ! !” “ANYBODY OUT THERE !”
	Use of humor	Teasing, cajoling, irony, understatements, sarcasm.	The banana crop in Edmonton is looking good this year)
	Self-disclosure	Presents details of life outside of class, or expresses vulnerability.	“Where I work, this is what we do ...” “I just don’t understand this question”
Interactive	Continuing a thread	Using reply feature of software, rather than starting a new thread.	Software dependent, e.g., “Subject: Re” or “Branch from”
	Quoting from others’ messages	Using software features to quote others entire message or cutting and pasting selections of others’ messages.	Software dependent, e.g., “Martha writes:” or test prefaced by less-than symbol<.
	Referring explicitly to others’ messages	Direct references to contents of others’ posts.	“In your message, you talked about Moore’s distinction between...”
	Asking questions	Students ask questions of other students or the moderator.	“Anyone else had experience with WEBCT”
	Complimenting, expressing appreciation	Complimenting others or contents of others’ messages.	“I like your interpretation of the reading”
	Expressing agreement	Expressing agreement with others of content of others’ messages.	“I was thinking the same thing. You really hit the nail on the head.”
Cohesive	Vocatives	Addressing or referring to participants by name.	“I think John made a good point.” “John what do you think?”
	Addresses or refers to the group using inclusive pronouns	Addresses the group as we, us, our, group.	“Our textbook refers to...” “I think we veered off track...”
	Phatics, salutations	Communication that serves a purely social function; greetings, closures.	“Hi all” “That’s it for now” “We’re having the most beautiful weather here”

examining, and (c) drawing conclusions and verifying. Afterwards, each unit from the discussion board was coded by two coders according to the social presence template designed by Rourke, Anderson, Garrison, and Archer (1999). One of the authors and the research assistant (master's degree in TESOL) coded the messages. The inter-rater reliability was evaluated using Cohen's (1960) kappa ( $\kappa$ ), which is a chance-corrected measure of inter-rater reliability. The inter-rater reliability between the two coders was  $\kappa=0.75$ , which might be taken to represent substantial agreement beyond chance (Banerjee, Capozzoli, McSweeney, & Sinha, 1999). Since the threshold for reliability testing with Kappa is 0.7, the reliability of the coding in this paper is acceptable. In addition, the reliability of the questionnaire employed in the present study was 0.94 using Cronbach's alpha coefficient of internal consistency. This value reached the satisfactory level according to Nunnally and Bernstein (1994).

### **Procedure**

The course lasted for four weeks. The requirements of the course, English Reading Strategies, included after class online discussions, three homework posts, final examination, and a questionnaire. In the course, three well-written reading texts were selected. For each text, video-based instruction was provided. For the first three weeks, the participants could log in the system (<http://go2school.sce.pccu.edu.tw/>) and follow the instruction at their own learning speed. After studying the text, there were homework and exercises for them to practice the reading strategies. The homework for each text included three questions based on the reading selecting. The participants were asked to post their homework in the discussion board (see Appendix). After reading the postings of other online classmates, the participants were encouraged to participate in the online forum. In other words, their posting did not influence their scores of the course. In addition, one research assistant participated in the discussion and answered questions relevant to the course. At the fourth week, the participants were required to complete an online final test and a questionnaire. After the course ended, the data in the online discussion forum were collected and analyzed.

## **RESULTS AND DISCUSSIONS**

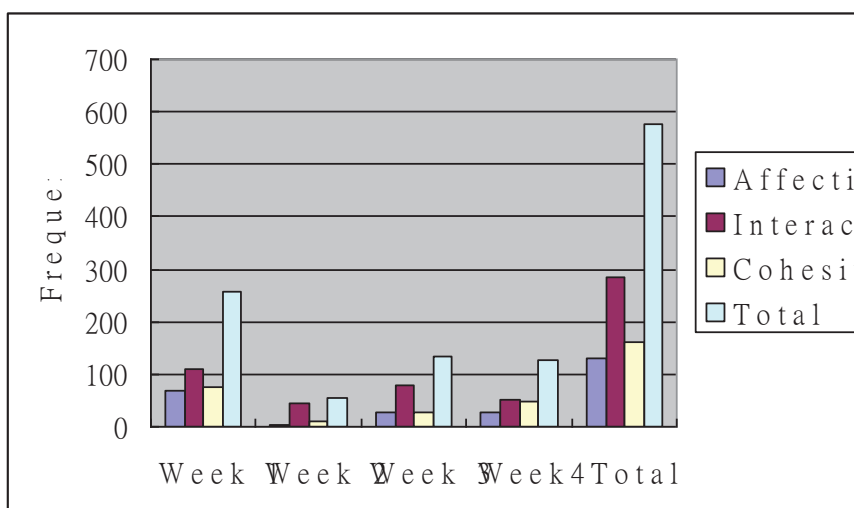
The frequency of social presence is the highest during the first week as shown in Figure 1 whereas it is the coolest during the second week (See Table 3 & Figure 4). Then, the frequency inclined during the following two weeks. This phenomenon probably results from the requirement for the participants to post self-introduction in the first week. Then the participants were engaged in the tasks and temperately

reduced the online social presence in the discussion board. In addition, among the three categories, the frequency of interactive responses ranked as the highest, followed by cohesive and affective responses. The detailed results of social presence are presented in Table 4.

**Table 3**

**Results of the frequency of the subjects' social presence**

Category	W1	W2	W3	W4	Total
Affective	69	3	29	28	129
Interactive	111	43	79	53	286
cohesive	77	9	27	47	160
<b>Total</b>	<b>257</b>	<b>55</b>	<b>135</b>	<b>128</b>	<b>575</b>



**Figure 4. The weekly frequency of the subjects' social presence**

**Table 4**

### Weekly frequency of each category of the subjects' social presence

Category	Indicators	W1	W2	W3	W4	Total
Affective	Expression of emotions	49	2	25	17	93
	Use of humor	0	0	0	0	0
	Self-disclosure	20	1	4	11	36
Interactive	Continuing a thread	45	18	18	24	105
	Quoting from others' messages	5	2	0	0	7
	Referring explicitly to others' messages	4	1	0	0	5
	Asking questions	47	9	22	20	98
	Complimenting, expressing appreciation	6	7	29	7	49
	Expressing agreement	4	6	10	2	22
Cohesive	Vocatives	19	9	19	41	88
	Addresses or refers to the group using inclusive pronouns	32	0	8	6	46
	Phatics/Salutations	26	0	0	0	26
<b>Total</b>		<b>257</b>	<b>55</b>	<b>135</b>	<b>128</b>	<b>575</b>

In all discussions, affective responses accounted for 22% of the social utterances. Especially, 53% of affective expressions occurred during the first week when the participants were getting to know each other. Moreover, almost two thirds of the affective expressions were “expressing of emotions”. Below are examples of units coded under affective expression and the transcripts were translated into English by the researcher:

My English is poor. I know there's still a lot of room for me to make improvement. I believe that we can learn English together.  
Learning a language takes time. This course provided me with the opportunity to learn English. I am happy that I learn some strategies and found them useful. It feels good that I can get the main ideas by guessing the word that I don't know.

At the first week, plenty of the participants expressed their nervousness about taking the course because of their English proficiency. This might result from the fact that only one sevenths of the participants teach English, so the others worried about whether they can follow the course or not. Toward the end of the course, they reflected on the experiences of the online course. The participants shared the sense of achievement with others as the second example above illustrated

In addition, the use of emoticons also occurred in this study. This is unique in the online environment. Take the following emoticons for example.

you are so sweet... =)  
It's good that you got the file~~ :)

These examples indicate that emoticons were used to express nonverbal cues in written forms (Gunawardena & Zittle, 1997) when facial expressions and vocal intonations are eliminated in text-based interaction. However, humor was not identified from the transcript, which was likely due to the fact that teachers or students in Taiwan took learning seriously. As a result, they might think humor as inappropriate in such a learning context.

The second category is interactive responses. Interactive responses accounted for 53% of social presence. Interactive responses build and sustain relationships, express a willingness to maintain and prolong contact, which helps build a community and keep each other engaged in the task. Within this category, the participants used various ways in which they created a dialogue. Two prominent functions were the “reply” function to post messages (36%) and “asking questions” (32%). In addition, expressing appreciation and encouraging were ways of communicating reinforcement used in this study. In contrast, the participants seldom referred to previous postings, incorporated others’ comments into their own postings, and built on each other’s postings. Rourke, et al. (1999) stated that the high percentage of the reply function might be due to the less labor-intensive of this function and it might be a superficial artifact of online communication rather than a defining indicator of social presence. When we looked into the data, we found that 60% of the reply function was used between the participants and the assistant mainly to check problems with techniques and homework. The following transcript is a good example.

Author : Sue  
Theme : RE:RE:9410364- the pre-questions of lesson3  
Hi Sandra,  
I've sent you the homework 2 and 3 through email. ( I've got the grade of Homework 1 )  
Could you please check it for me?  
Thanks!!  
Sue  
---- Original Message ----  
Author : Sandra  
Date : 2007/11/26 下午 04:43:06  
Theme : RE:9410364- the pre-questions of lesson3  
Dear Sue  
it's good to see you finish the pre-reading questions, but you didn't upload your homework1&2.  
please email me the answers of homework 1 and 2. Thanks  
cheers,  
Sandra

Many of the messages were related to the checking of homework; consequently, the assistant used the reply function to answer those questions and then the participants, again, used reply function to express their acknowledgement. Due to the above context, the other prominent function in the discussion is asking questions. The participants either asked such technical problems as how to view the video-instruction or where to post the homework or checked whether the teacher received their homework.

Another indicator is “complimenting or expressing appreciation”. In this study, participants expressed their gratitude when they received help from others. Take the following messages for example:

You are really experienced about online learning! It took me some time to figure out how to use this learning platform.  
I really appreciate the instructor’s tips on English reading strategies. Based on her explanations, I can read the English article more smoothly, and have better understanding about the articles. Besides, one of the reading strategies is to find the topic sentence from the first sentence in each paragraph; such technique can benefit writing as well. So, I’m so glad that I did not only learn the reading strategies, but also the writing skills. Thanks for Wang’s instruction.

The above examples reflect that the participants used different ways to interact with others and consequently created dialogues where they felt listened to and were encouraged to participate.

The last category of social presence is group cohesion. This category was the second most frequent social indicator in this study (28%). Similar to affective responses, cohesive responses occurred most frequently in the first week. Also, in the first week, inclusive pronouns such as *we* or *all* were used most frequently. But gradually when participants got to know each other better, the use of vocatives increased.

Hello, everyone:  
I am Tina. It’s very nice to have this opportunity to learn English with all of you. (Week 1)  
Dear Sandra:  
I sent my assignment-homework 3 again  
Could you do me a favor to check it for me.  
Thanks. (Week 3)

Vocatives, inclusive pronouns, and phatics were used in this study to facilitate social presence. This indicated that the participants attempted to establish a closer relationship with others and thus built a sense of group commitment.

## CONCLUSIONS AND IMPLICATIONS

The main findings were summarized as follows. The highest frequency of social

presence occurred in the first week while the frequency of social presence dropped in the second week. Moreover, among the three categories, the frequency of interactive responses ranked as the top one, followed by cohesive and affective responses. Interactive responses accounted for 53% of social presence. Within this category, two prominent functions, “replying” and “asking questions”, were used to create a dialogue, build relationships, and maintain contact. With regard to group cohesion, vocatives, inclusive pronouns, and phatics were used in this study to facilitate social presence. When it comes to affective responses, more than half of this category occurred during the first week of ice-breaking. Moreover, “expressing of emotions” was the most used affective communication by the participants while humor was not identified in this study.

Not surprisingly, affective responses were most frequent during Week 1 when several participants included self introductions in their messages. The number of affective responses decreased as the course progressed. This might be attributed to the fact that participants felt more comfortable with each other as the week continued. By Week 4, participants knew each other well enough from class and the conference was mostly focused on the task at hand.

Based on the findings, the implications are presented. First, online learning is becoming one of the popular modes of education either for returning students and inservice teachers. As aforementioned, teachers who experience ICT have greater potential to integrate ICT into their own teaching and have better capability to handle the course. Recognizing the importance of information technology, most teachers may need more training to harness the power of modern ICT to deliver the curriculum in a more efficient manner. Take this course for example. Among the 58 participants attending the course activities, only one third frequently joined the discussions. The others just posted homework or ask some questions about the course but seldom joined the discussions on other topics. If teachers participated in distance learning in such a passive way, their capability to integrate ICT into their own classes would be doubted. Hence, teachers’ roles must radically alter. Teachers must not merely serve as teachers or knowledge delivers but also become learners themselves. Teachers’ skills with regard to the use of ICT as a means to support powerful learning environments should be fostered. Uzunboylu and Tuncay (2010) pointed out that great diversity existed in the teachers’ digital world, which may adversely affect their ability to prepare the students to become a part of the knowledge society. Therefore, mastery of technology, as part of the curriculum for teacher training is essential if students and society are to develop fully.

Second, the extensive amount of online information and communication requires teachers to reconstruct the curriculum in order to incorporate technology-enhanced

communication and project work. Technology courses may not sufficiently offered in teacher preparation courses as Kessler (2006) indicated. What the use of computers and ICT can implicitly give the students is the simultaneous, natural, and typically incidental acquisition of ICT skills necessary to handle hardware and software to fulfil tasks and to solve problems. Such kind of new curriculum promotes the learning of literacy and ICT throughout the curriculum. Opportunities to develop literacy, and to use and apply ICT, should be highlighted in each area of learning at primary or secondary school education. Overtly embedding opportunities to develop literacy skills throughout the curriculum can give the school more scope to develop these crucial skills through a broad and balanced curriculum. This could, for example, include report reading and writing not only in English or Chinese subjects, but in history, science, or even physical education. In this respect, issues on the use of ICT in curriculum differentiation and the organization of ICT to support co-operative group work are of particular importance.

Third, how to increase students' motivation for online courses is worth thorough examination. The decreased proportion of social presence at W2 to W4 was significant. As only the research assistant participated in the discussion and answered questions relevant to the course, one possible reason of de-motivation was that participants looked forward to receiving responses to their postings and were more inclined to post again if they received responses from the course instructor. Once a minimum level of participation in course discussions is initiated, the momentum is relatively easier to maintain. Participants probably placed upon the role of the course instructor as initiator, facilitator and maintainer of momentum in discussions. Providing the initial impetus and modeling, the forms of social presence that maintain momentum are the key to successful facilitation of online courses.

In fact, for those who enthusiastically took part in the online discussions, they were willing to share their opinions about the lesson content and homework discussion. They seemed to be quite familiar with the operation of the platform, so fewer questions about the platform operation were raised. Despite the issue of homework submission, more and more participants provided relevant information about the reading content and would like to give feedbacks or reply others' posts on the forum. However, there were only 500 postings on the forum given that more than 2500 times of logging records were found. Without sufficient support, those who were less competent in IT or language demonstrated their resistance and hesitation in participation. It needs further study to better explain persistence and attrition among the largely nontraditional students that enroll in online distance learning courses and the causes for student withdrawals. The existence of a relationship between learners' perceptions of social presence and their motivation for participation in online



discussions is also worth further exploration.

Last but not least, the online discussion tool can help students understand the content knowledge and learn how to interact with peers. Students, however, often discount this link by treating it as a means to complete a particular task only, rather than an opportunity to engage in rich discussion and debate with their peers and instructors. Analyses of student electronic interactions, like the study shown here, suggest that, if designed appropriately, CMC tools have the potential to become rich instructional systems and powerful learning environment.

There are several limitations for the present study. First, the span of the study is short. The establishment of community and positive learning environments takes time. A long-term study could be designed to explore the change of social presence over time. Second, only one researcher coded the data, it might be subjective. More coders could be involved in the coding process and the reliability and validity of the coding scheme could be examined. Finally, there is no accountability for the perceptions of social presence from the viewpoint of the participants. Factor such as gender or age difference, an individual's social presence in online environment, and the subject's perceived social presence are worth future exploration.

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## APPENDIX

### Sample Homework

#### Lesson 1: Fortune Telling

1. Where might you find a fortune-teller?

People can find a fortune-teller in a temple, night market, through friends › advertising › newspaper.

2. What questions do people usually ask fortune-tellers?

People usually ask fortune-tellers about their future on family matters, study, working, relationships, marriage, health and how old they are going to live.

3. Can fortune-tellers really say what will happen in the future?

I believe the fortune-tellers cannot tell us what will happen in the future. If it does happen like the fortune-tellers says, it might be coincidence.

#### Lesson 2: Cosmetic Surgery

1. What kinds of cosmetic surgery do you know about?

There are eyelid surgery, breast enlargement, butt augmentation, chemical peel, breast lift, ear surgery, and cheek augmentation.

2. Is cosmetic surgery socially acceptable in your country?

Yes, cosmetic surgery is socially acceptable in my country. Most people are not afraid to let others know that they have made some changes of their bodies.

3. Do you know anybody who has had cosmetic surgery?

I know many entertainers who have had cosmetic surgery. The most famous one is Michael Jackson. "Jackson's skin was a medium-brown color for the entire duration of his youth, but starting in 1982 his skin gradually became paler. This change became so noticeable that it gained widespread media coverage, with some tabloids claiming that he was bleaching his skin. The structure of his face has changed as well, and a number of surgeons claim that Jackson had undergone multiple nasal surgeries as well as a forehead lift, thinned lips and cheekbone surgery."  
([http://en.wikipedia.org/wiki/Michael\\_Jackson#Physical\\_appearance](http://en.wikipedia.org/wiki/Michael_Jackson#Physical_appearance))

#### Lesson three: Witnesses

1. How good are you at remembering faces?

I have a good memory at remembering faces. I can remember students' faces quickly.

2. What is a very clear memory you have from your childhood?

I was given a shot from the nurse when I was six years old.

3. Have you ever witnessed an accident or crime? What happened?

Yes, I have witnessed a car accident. Two motorcycles hit each other and one person was sent to the hospital.

## 遠距教學中在職教師之社會臨場感

### 摘要

目前各式創新的同步及非同步學習平台被採用以延伸傳說之教師在職課程進修，使其不受時空之限制。本研究旨在報導為台灣偏遠地區之中小學教師開設之網路遠距教學課程其中一門「英語閱讀策略」中，針對學員參與線上討論之「社會臨場感」加以探討。共有58位在職教師參與此為期4週之課程。其中三課課文選讀及閱讀策略均以視訊進行教學，學員並需於非同步討論區中互動。根據研究發現，提供教師在職訓練之相關建議。

**關鍵字：**社會臨場感 非同步互動 遠距教學