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3 **Learners' use of communication strategies in text-based and video-based**  
4 **synchronous computer-mediated communication environments: opportunities**  
5 **for language learning**  
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10 This study investigates the different learning opportunities enabled by text-based and  
11 video-based synchronous computer-mediated communication (SCMC) from an interactionist  
12 perspective. Six Chinese-speaking learners of English and six English-speaking learners of  
13 Chinese were paired up as tandem (reciprocal) learning dyads. Each dyad participated in four  
14 kinds of interactions, namely, English text-based SCMC, Chinese text-based SCMC, English  
15 video-based SCMC and Chinese video-based SCMC. Their use of communication strategies  
16 (CSs) were analysed along with an after-task questionnaire and with stimulated reflection to  
17 explore systematically and comprehensively the differences between text-based and  
18 video-based SCMC. In addition to the main role of qualitative analysis, the quantitative  
19 analysis was undertaken to provide an overview of the relative frequencies of the occurrence  
20 of the different strategies and to understand their distribution in the different conditions. A  
21 MANOVA was applied to understand to what extent the differences are likely to have  
22 occurred by chance. The results showed that learners used CSs differently in text-based and  
23 video-based SCMC and indicated different learning opportunities provided by these two  
24 modes of SCMC. While text-based SCMC appears to have greater potential for learning  
25 target-like language forms, video-based SCMC seems particularly effective for fluency  
26 development as well as pronunciation improvement.  
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34 **Keywords:** Computer-mediated communication; Communication strategies; Tandem learning; Second  
35 language acquisition; Social interaction  
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## Introduction

Synchronous computer-mediated communication (SCMC) that occurs between people in real time via networked computers can be conveyed in either text or video mode. Text-based SCMC (i.e. text chat) integrates features of written discourse with spoken discourse and it also carries unique features such as lack of turn adjacency (cf. Sacks, Schegloff & Jefferson, 1974<sup>1</sup>) and use of simplified registers (e.g., timesaving spellings; Freiermuth, 2011; Smith, 2003a). Video-based SCMC (i.e. videoconferencing), on the other hand, is more like face-to-face communication in terms of the availability of visual and vocal cues such as intonation and gestures.

The two modes of SCMC are both increasingly being used to communicate across cultural and language differences. Dörnyei (1995) suggested that raising language learners' awareness of various communication strategies (CSs) through instruction, but then letting CSs work through learners' developing language competence and look after themselves during communication, so knowledge of CS use in SCMC environments may contribute in this regard. Moreover, CS use is closely connected with language acquisition in terms of second language acquisition (SLA) theories that emphasize the role of input, output, feedback, and cognitive processing (Kasper & Kellerman, 1997, p.7). While SCMC environments appear to shape CS use (Smith, 2003b), research on CS use in text-based and video-based SCMC environments may help account for the learning opportunities enhanced by the two modes of SCMC.

### *Synchronous computer-mediated communication*

Research (e.g. Kelm, 1992; Kern, 1995; Warschauer, 1996) has shown that text-based SCMC can promote equal participation, language production and complexity, and reduce anxiety caused by time or psychological pressure. Moreover, given that negotiated interaction can facilitate SLA by connecting input, feedback and output through selective attention (Long, 1996), many studies (e.g. Smith, 2004; Shekary & Tahririan, 2006; Sotillo, 2005) have shown the potential for SLA of text-based SCMC through the investigation of feedback and focus-on-form activities in meaning negotiation. Similarly, Lee (2008) found text-based SCMC can support focus-on-form procedure in collaborative interaction from a sociocultural perspective. Lai and Zhao (2006) suggested the text form (re-readability) and the extended processing time in text-based SCMC can enhance the processes of noticing (attention)

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3 that is essential for SLA (Schmidt, 2001).

4 While the majority of SCMC studies focused on text-based SCMC, studies in  
5 video-based SCMC are less common. Although video-based SCMC may not promote  
6 equal participation or reduce psychological pressure as text-based SCMC does  
7 (Kinging, 1998; Zöhner, Fauverge & Wong, 2000), it can be used with other  
8 modalities of communication such as text chats and pictures to promote interaction  
9 and facilitate the processing of SLA (Hampel & Stickler, 2012; Wang, 2006).  
10 Moreover, while Lee (2002b) suggested the fast meaning exchanges in text-based  
11 SCMC were likely to encourage fluency rather than accuracy as learners tended to  
12 ignore linguistic mistakes, the faster pace of interaction in video-based SCMC might  
13 reinforce the effect on promoting fluency.  
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21 Apart from linguistic development, Darhower (2002) proposed SCMC can  
22 facilitate the development of sociolinguistic competence due to the opportunities for  
23 authentic communication. Given the impact of social factors on interaction (Tarone,  
24 2010), an increasing number of SCMC studies have investigated interaction in  
25 different social contexts, particularly intercultural SCMC. Freiermuth and Huang  
26 (2012) confirmed intercultural SCMC can promote use of target language, but noted  
27 the possible effects of task design on learners' motivation. Kurata (2007) suggested  
28 learners' identities which appeared to be influenced by their language proficiency  
29 might affect their language choice.  
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### 38 *Communication strategies*

39 Recognizing the importance of CSs for language learners with restricted target  
40 language knowledge for effective interaction, problem-orientedness has often been a  
41 defining criterion for CSs in target language research (Dörnyei & Scott, 1997). Færch  
42 and Kasper (1983) viewed CSs as conscious plans for solving problems of language  
43 production and identified two divergent approaches to manage problems. When  
44 realizing problems, learners may either develop alternatives to achieve their original  
45 goals (achievement strategies that include compensatory strategies and retrieval  
46 strategies) or change the communicative goals to avoid errors or increase fluency  
47 (reduction strategies). Tarone (1980) proposed viewing CSs within an interactional  
48 framework and defined CSs as "mutual attempts of two interlocutors to agree on  
49 meaning in situations where the requisite meaning structures do not seem to be shared"  
50 (p.420). As such, CSs include not only problem-management strategies that are used  
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3 to prevent problems from happening but also problem-solving strategies that are used  
4 when problems have occurred during communication.  
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6 While Dörnyei and Scott (1997) extended the scope of CSs to include every  
7 potentially intentional attempt to manage problems that the speaker notices during  
8 communication, there is a growing trend to investigate CSs used in problem-free  
9 discourse, which is consistent with Canale's (1983) definition of CSs as attempts to  
10 "enhance the effectiveness of communication" (p. 11). Jamshidnejad (2011) found  
11 that the majority of CSs were used to promote target language accuracy or to keep  
12 interaction flowing when meanings were clear and unproblematic. While CSs enable  
13 learners to test their hypotheses or expand their knowledge to wider aspects of target  
14 language apart from solving problems and co-constructing knowledge, CS use may  
15 foster SLA if feedback on learners' output is provided (Swain, 1995).  
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### 24 *CS use in SCMC*

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26 Negotiated interaction can assist SLA through interactional modifications towards  
27 language comprehension (Long, 1996). While interactional modifications serve to  
28 either repair or prevent communication problems and thereby fall into the category of  
29 CSs, Lee (2001, 2002b) confirmed the beneficial effect of these strategies on language  
30 comprehension in text-based SCMC. Moreover, while a wide array of CSs, including  
31 interactional moves and discourse moves, can be employed in text-based SCMC  
32 (Chun, 1994; Kost, 2008; Smith, 2003), learners might use different interactional  
33 strategies in combination to facilitate collaborative interaction (Peterson, 2009).  
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40 Smith (2003b) separated CSs that were employed in problem-free discourse from  
41 compensatory strategies that were used to overcome lexical difficulties. He suggested  
42 that the heavy use of CSs of fillers, substitution (i.e. abbreviation), topic framing, and  
43 politeness was shaped by the absence of non-verbal aids such as intonation or facial  
44 expressions in a text-based CMC environment. Interestingly, while Smith suggested  
45 that interlocutors relied on fillers as explicit signals to tolerate extended pauses in  
46 text-based SCMC, Kost (2008) found no occurrence of this strategy, which she  
47 explained as learners not seeing each other, and thus not feeling the need to pass  
48 signals<sup>2</sup>.  
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54 Kost (2008) viewed CSs as discourse management devices to repair or prevent  
55 problems, and found code-switching, requests for clarification, and self-repair were  
56 used frequently in text-based SCMC. She also explained that her participants who  
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3 were with lower proficiency might be unable to use more elaborate strategies that  
4 require higher levels of linguistic ability. Similarly, Khamis (2010) suggested that the  
5 high frequency of topic continuation ('promoters' used to encourage the continuation  
6 of discourse) might occur because it was the easiest to use by learners in developing  
7 discourse, while forward inferencing was used less frequently as its use involved  
8 analyzing previous information and synthesizing new ideas, which are both more  
9 demanding tasks.  
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### 14 15 16 **Research purpose and questions**

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18 Although numerous studies (e.g., Lee, 2002a; Toyoda & Harrison, 2002)  
19 suggested the value of CS use for target language use and acquisition in SCMC  
20 focusing on negotiations triggered by communication problems, only a few studies  
21 (e.g., Kost, 2008; Smith, 2003b) have investigated CS use comprehensively in SCMC.  
22 Even fewer have studied and compared CS use in text-based and video-based SCMC  
23 environments. To develop knowledge in this area, the present study investigated CS  
24 use systematically and comprehensively in text-based and video-based SCMC from  
25 an interactionist perspective. While the CS coding categories were defined in  
26 functional terms, the aim was to explore the different usage of the same CS in two  
27 modes of SCMC, particularly the way that the differences might be related to the  
28 different media. This study aims to identify the learning opportunities offered by these  
29 two modes of SCMC in terms of CS use. Two research questions were evaluated:  
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- 38 1. What communication strategies are employed by learners to facilitate the target  
39 language communication in text-based and video-based SCMC environments?  
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- 41 2. What differences are there between text-based and video-based SCMC in terms of  
42 the frequency and distribution of communication strategy use, particularly in terms  
43 of the potential for language learning?  
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### 48 **Method**

#### 49 ***Research design and participants***

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51 A total of 12 participants were recruited as volunteers and formed six tandem  
52 learning dyads between Chinese-speaking learners of English (LEs) and  
53 English-speaking learners of Chinese (LCs). All LEs were English majors at  
54 universities in Taiwan and all LCs were Chinese majors at universities in either  
55 United Kingdom or Ireland when they participated in this study. All dyads were  
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3 required to have four different reciprocal interactions and provide supportive  
4 information through questionnaires and reflections. Figure 1 illustrates the research  
5 design.  
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16 The duration of each interaction was around 30 minutes. MSN Messenger and  
17 Skype were chosen for text-based and video-based SCMC tools respectively since  
18 they are free but stable tools for online tandem interaction. Although each of them can  
19 support both modes of SCMC, the separation of software use was to ensure  
20 consistency in data collection and to reduce possible effects of prior experience as all  
21 participants were at least familiar with one tool. The built-in function in MSN  
22 Messenger was used to save all the chat logs and the software “Supertintin Skype  
23 Recorder” was used to record video-based interaction.  
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30 The qualitative analysis of four types of online interactions of the same group of  
31 participants precluded the use of a large sample; nevertheless, the sample size in this  
32 study is still at the acceptable lower limit for MANOVA (Guilford & Frunchter, 1978)  
33 particularly as it is used in this study to indicate to what extent the differences of the  
34 occurrence of CSs between the two modes of SCMC are likely to have occurred by  
35 chance. Although a total of 12 participants can only detect a very large effect size at  
36 the 0.8 power level ( $\alpha = .05$ ), the sample size is sufficient so long as any conclusions  
37 do not rely on claims about the representativeness of the sample.  
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#### 44 ***Online interactions***

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46 A single type of open-ended conversational task as suggested in Lee's (2002a)  
47 study was used all experimental interactions to avoid possible task type effect, but  
48 different topics were selected to avoid any practice effect or repetition of the task and  
49 specific vocabulary. The four topics as shown in Table 1 were selected to encourage  
50 participants to share opinions and exchange information relevant to their life  
51 experiences and a set of open-ended questions based on each selected topic were  
52 provided to help participants actively engage in two-way interaction as that is an  
53 important element of an effective SLA task (Ellis, 2003). For example, while  
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3 discussing leisure activities, participants were asked to exchange information about  
4 popular leisure activities among university students in their countries and their  
5 opinions of these activities. They also shared their experience of online leisure  
6 activities and their thoughts about spending free time on social media.  
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### 18 ***Retrospective reports***

19 To help validate the results of interaction analyses as suggested by Kasper and  
20 Kellerman (1997), participants were asked to fill out the after-task questionnaire  
21 (Appendix 1) right after completing the last online interaction, and give stimulated  
22 reflection a week later. Stimulated reflection involves having participants review their  
23 interactions as a prompt to help them recall their concurrent thoughts during  
24 interaction. Since it was to help clarify coding, the primary analysis was undertaken to  
25 preselect the segments for clarification. Before being asked to reflect on these  
26 preselected turns, participants were encouraged to reflect on their interaction freely.  
27 As participants gave verbal reports in their first language, they generally started by  
28 clarifying their intended messages in their first language and then pointed out the  
29 problems they encountered along with the solutions they could think of when  
30 communicating in the target language. The cognitive processes of using CSs to solve  
31 language problems of comprehension and expression were reported in this way.  
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### 43 ***The CS coding categories***

44 Most CSs were adapted from Dörnyei and Scott's taxonomy (1997) and other  
45 CSs were added from studies such as Smith's (2003b) to provide a more  
46 comprehensive CS coding scheme for SCMC. Despite extending the scope to include  
47 more categories of CSs for both modes of SCMC, some functionally similar CSs were  
48 integrated. For example, time gaining strategies in this study include use of fillers and  
49 repetitions from Dörnyei and Scott's taxonomy. Defining repetitions as a strategy is  
50 problematic when not all repetitions carry the same function. The function of  
51 repetition is clear in Dörnyei and Scott's taxonomy only because it is situated in a  
52 matrix made up from three ways of problem management by four types of  
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3 communication problem.

4 CSs investigated in this study were grouped into categories in terms of their  
5 functions. Apart from the three commonly recognized categories in previous  
6 taxonomies, namely, Interactional Strategies, Compensatory Strategies, and Reduction  
7 Strategies, this study also recognized Focus-on-form Strategies and Sociocultural  
8 Strategies. The investigation of Focus-on-form Strategies is to identify if learners  
9 attend to language forms in meaning-oriented interaction. As sociocultural  
10 competence has been considered as one component of communicative competence  
11 (Canale, 1983), Sociocultural Strategies are included in this study. Moreover,  
12 Paralinguistic Strategies are separated from the aforementioned categories as the  
13 subcategories can only be used in one mode of SCMC, not the other. The six CS  
14 coding categories are carefully defined below to avoid overlapping with each other  
15 and the complete list of CSs with examples selected in the present study is introduced  
16 in Table 2.  
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- 28 • Interactional Strategies refer to CSs used to repair or manage conversational  
29 discourse.
- 30 • Compensatory Strategies are limited to CSs used to solve language problems of  
31 expression through manipulating available language knowledge.
- 32 • Reduction Strategies are used to tackle language problems of expression by  
33 changing the intended message.
- 34 • Focus-on-form Strategies are used to attend to target-like forms.
- 35 • Sociocultural Strategies are mainly to sustain a collaborative and friendly  
36 interaction.
- 37 • The paralinguistic strategy (i.e. mime) recognized in the previous studies can be  
38 used to solve problems of expression or facilitate language problem-free  
39 expression in video-based SCMC. Despite the common function of facilitating  
40 expression, the other paralinguistic strategies investigated in this study are used  
41 exclusively in text-based interaction to compensate for the modality restrictions<sup>3</sup>.  
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### *Data analyses*

The use of CSs was investigated through a qualitative analysis of interaction data along with learners' retrospective reports. In addition, a quantitative analysis was undertaken to provide an overview of the relative frequencies of the occurrence of the different strategies and to understand their distribution in the different conditions. Learners were naturally more productive and thus more turn-taking appeared in video-based SCMC (speaking) within 30 minutes than in text-based SCMC (typing). A positive correlation between the number of turns and the number of CSs used was significant at the 0.01 level ( $r = 0.81$ ). To control for the difference in production, the percentage of particular CSs in either mode of SCMC and the mean occurrence of individual CS per turn were examined along with the total occurrences of CSs. Despite the different turn-taking systems in text-based and video-based SCMC, a turn commonly refers to "each time there was a transfer of the 'floor' from one participant to the other"<sup>4</sup> (Smith, 2003a, p. 39). MANOVA was used to understand to what extent the differences were likely to have occurred by chance.

### **Results**

#### *The distribution patterns of CS use*

The total number of occurrences of all CSs in text-based SCMC was 287 out of 386 turns, whereas the total in video-based SCMC was 665 out of 1142 turns. The most to least frequently used CSs in text-based SCMC were Paralinguistic Strategies (164; 57.14%), Sociocultural Strategies (67; 23.34%), Interactional Strategies (42; 14.63%), Focus-on-form Strategies (10; 3.48%), Compensatory Strategies (4; 1.39%), and Reduction Strategies (0; 0%). On the other hand, the most to least frequently used CSs in video-based SCMC are Interactional Strategies (318; 47.82%), Sociocultural Strategies (131, 19.70%), Focus-on-form Strategies (102; 15.34%), Compensatory Strategies (74; 11.13%), Paralinguistic Strategies (34, 5.11%), and Reduction Strategies (6; 0.90%). The distribution patterns of CS use in the two modes of SCMC are shown in parallel (Figure 2).

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Insert Figure 2 about here  
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Learners used Sociocultural Strategies frequently and Reduction Strategies equally rarely in text-based and video-based SCMC, whereas they tended to use the other CSs differently in these two modes of SCMC. In addition to the different subcategories of Paralinguistic Strategies investigated in the two modes of SCMC, learners used fewer Compensatory Strategies and interactional modifications (i.e. requests for clarification, confirmation checks, comprehension checks, and requests for help) in text-based SCMC. Moreover, while learners generally requested clarifications of unfamiliar terms in video-based SCMC, they tended to get situational meanings that could only be clarified by their partners in text-based SCMC. Indeed, learners did not really use CSs to solve their language problems of expression and comprehension in text-based SCMC. It is worth noting that the interaction data from text-based SCMC were collected from chat logs as this study attempted to investigate CS use within an interactional framework. As such, self-corrections (one type of Focus-on-form strategies) made in the unsent messages were not investigated in this study. Learners in this study reported editing their unsent messages, so some of the repairs were missing in chat logs, as noted by Smith (2008).

### *Use of individual CSs*

Moving the focus closer to individual CSs, the statistical analysis showed that most CSs were used differently in text-based and video-based SCMC (Table 3). The results of the MANOVA showed that differences on 16 out of 22 CSs in the two modes of SCMC were statistically significant at the 0.05 level. The analysis shows that CSs were used more intensively (the mean occurrence per turn) in video-based SCMC than in text-based SCMC. The difference might partially result from the fact that some repair moves occurred in unsent messages. Another explanation might be because some CSs (or some usage of CSs) are more naturally or more easily used in a video-based SCMC environment.

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Insert Table 3 about here  
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In text-based SCMC, learners tended to use inferential strategies and

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3 self-correction to build up discourse collaboratively and to ensure target language  
4 accuracy (see Table 4). In video-based SCMC, they often used input elicitation  
5 strategies along with other CSs to actively engage in target language interaction and  
6 to solve communication problems.  
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### 18 *Learners' reflections*

19 Two thirds of participants believed they performed better and had more  
20 confidence in text-based SCMC than in video-based SCMC. With less time pressure,  
21 all participants used online resources such as simultaneous dictionaries and Google  
22 Images<sup>5</sup> to help their interaction in text-based SCMC. Despite being more confident  
23 as a result of the help from consulting other resources, some learners admitted that the  
24 inadequate keyboard skills (e.g. typing speed) and grammatical abilities sometimes  
25 restricted their production in text-based SCMC.  
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28 Learners were less able to use online resources in video-based SCMC due to the  
29 faster pace and more intensive interaction. Indeed, four of them reported that they  
30 stopped using other resources entirely in video-based SCMC. They also reported the  
31 difficulties caused by reception problems<sup>6</sup> and inadequate listening skills. Despite  
32 feeling more pressure, one learner pointed out that "it [video-based SCMC] forces me  
33 to practically use the language, but without the time to check a dictionary so I get to  
34 learn in a more immersive way."  
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### 45 **Discussion**

46 Learners used a wide range of CSs in text-based and video-based SCMC,  
47 although they tended to use the CSs differently in the two modes of SCMC. This  
48 section summarizes the similarities and differences of CS use in the two modes of  
49 SCMC and discusses the teaching and learning possibilities offered by the two modes  
50 of SCMC.  
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### 56 *Similarities in text-based and video-based SCMC*

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*Sociocultural Strategies.* Learners used social formula and code-switching frequently in both modes of SCMC, which might be due to having a positive social relationship and the reciprocal design of the study where each participant acted as a language expert and as a learner. While sociocultural competence is important to successfully engage in a social interaction (Canale, 1983), the use of social formula shows the potential for its development through social interaction in CMC (Chun, 1994). It is worth noting that a higher level of politeness seemed to be promoted in text-based SCMC from a qualitative perspective, despite the frequent use of polite formula for requesting repetitions or clarifications in video-based SCMC due to the bad reception or inadequate listening abilities. One learner of English used “sorry” frequently as a prompt reaction when she could not clearly hear her peer’s talk in video-based SCMC. The same learner politely answered to her partner’s question about if she heard of a Sunday Roast by “sorry I haven’t, but I suppose it must be a good one.” in text-based SCMC. This example in text-based SCMC seems more deliberate than the reactions in video-based SCMC. Moreover, whereas one learner of Chinese typed a polite formula “谢谢! (*Thank you*)” in response to her peer’s experience sharing and also to mark the closure of the old topic in text-based SCMC, she just said “好的 (*good*)” in video-based SCMC for the same purpose. The higher, and perhaps more formal, level of politeness in text-based SCMC might result from learners’ intentions to ensure they were engaging in cooperative behaviour in a limited communication medium as suggested by Smith (2003b), where simultaneous non-verbal communication was not possible. Besides, an extended planning time in text-based SCMC might allow for more complete or longer polite expressions.

Learners in this study often used first language terms in target language discourse to introduce their native culture rather than compensate for any inadequacy in target language abilities. One learner of English used “台灣小吃 (*Taiwanese snacks*)” along with the literal translation “small eat” to introduce one group of Taiwanese delicacies. After knowing that Taiwanese often have this food for meals rather than in between meals, his partner agreed that “snack” is not an equivalent word for “小吃”. While code-switching helped maintain a “dialogue of cultures” (Savignon & Sysoyev, 2002), the strategy also promotes the development of sociocultural competence. Indeed, learners also switched code to have a positive social relationship when they were playing the role of native speakers. One learner of Chinese agreed with his partners

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3 that one dish is delicious and added, “especially if you eat it with 台灣啤酒!  
4 (*Taiwanese beer*)” in English conversation. Similarly, another learner of Chinese used  
5 “早上好 (*Good morning*)” in English conversation.  
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### 10 ***Differences in text-based and video-based SCMC***

11 *Interactional Strategies.* Despite the potential of negotiated interaction in both  
12 modes of SCMC, the use of interactional modifications appeared to be affected by the  
13 communication medium. Requests for clarification and confirmation checks were  
14 used consistently more than requests for help and comprehension checks in both  
15 modes of SCMC. While the former two strategies are to ensure the comprehension of  
16 input and the latter two are to ensure the output comprehensibility, the result might  
17 suggest a greater demand for solving the problems of comprehension than the  
18 problems of expression.  
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25 The finding that the strategy of requests for clarification was one of the six most  
26 frequently used CSs in text-based SCMC is broadly consistent with previous studies  
27 (Kost, 2008; Lee, 2001, 2002b). Nevertheless, easy access to consult other resources  
28 for lexical terms and to re-read messages in text-based SCMC appeared to reduce the  
29 use of requests for clarifications, as well as the need for confirmation checks. They  
30 requested clarifications in text-based SCMC when the meanings needed to be clarified  
31 by their partners. In contrast, learners often requested explanations for unfamiliar  
32 terms to keep a fast pace of interaction in video-based SCMC, and they often  
33 confirmed what they heard before requesting clarifications due to poor reception and  
34 any listening difficulties.  
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42 While learners requested help frequently in video-based SCMC which maintained  
43 the pace and flow of the conversation, they often took time to come up with a  
44 comprehensible expression or consult a dictionary for an intended term in text-based  
45 SCMC. Despite the infrequent use of comprehension checks in both modes of SCMC,  
46 the reason for the infrequent use of this strategy in the two modes of SCMC did not  
47 appear to be the same. The infrequent use of this strategy in text-based SCMC might  
48 be connected to the fact that most learners felt confident in their own performance,  
49 whereas the infrequent use in video-based SCMC appeared to be because their  
50 partners often showed their understanding or interest with short responses in learner’s  
51 turn space (see one example of giving responses without taking over the ‘floor’ of the  
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3 primary speaker in Table 2 – input elicitation strategies).

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5 Learners constructed meaning collaboratively through not only meaning  
6 negotiation but also discourse management. The use of input elicitation strategies and  
7 verbal strategy markers appeared to easier in video-based SCMC. While learners  
8 often gave responses in their partners' turn space in video-based SCMC, such usage  
9 of input elicitation strategies was not really possible in text-based SCMC. Indeed,  
10 learners tended to wait patiently for their interlocutors to finish typing messages in  
11 text-based SCMC due to their awareness that simultaneous typing might damage the  
12 adjacent turn and make the interaction difficult to read<sup>7</sup>. A good task with a clear  
13 structure helps keep both participants focussed and prevents topic decay (Herring,  
14 1999).

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21 As learners often rephrased their own expressions or used other CSs to ensure  
22 output comprehensibility in video-based SCMC due to the relatively short planning  
23 time, verbal strategy markers were used frequently to prevent problems from  
24 happening by giving signals to their partners about less than perfect language use or to  
25 allow them to prepare for rephrasing. In contrast, learners never rephrased their sent  
26 messages in text-based SCMC, and consequently, did not have any need for verbal  
27 strategy markers.

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33 As regards the conflicting results about the use of fillers were found in Smith's  
34 (2003) and Kost's (2008) studies, which both investigated CS use in text-based  
35 SCMC, overall this study appears to corroborate Kost's, as fillers along with other  
36 types of time-gaining strategies were used more frequently in video-based SCMC  
37 than in text-based SCMC. The less frequent use of time gaining strategies in  
38 text-based SCMC might be related to the effort of typing as well as reduced time  
39 pressure. Learners often repeated their partners' questions to gain some planning time  
40 in video-based SCMC, but they never did so in text-based SCMC as the text remained  
41 visible and retyping is more effortful than verbal repetition.

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48 While most Interactional Strategies appeared to be more frequent and perhaps  
49 easier to use in video-based SCMC, inferential strategies and framing did not seem to  
50 be affected by the medium. Despite being the most frequently used CSs in text-based  
51 SCMC (Table 4), differences in the uses of these two strategies in the two modes of  
52 SCMC were not significant (Table 3). The use of inferential strategies required a good  
53 understanding of the preceding conversation and also a certain level of production  
54 ability (Farrell & Mallard, 2006; Rost & Ross, 1991). From this aspect, an extended  
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3 processing time and easy access to consult other resources in text-based SCMC might  
4 help learners with lower target language proficiency become more capable at using  
5 this strategy.  
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8 Marking off a new topic is one way to improve input comprehensibility (Long,  
9 1983) and the strategy of framing might help prevent the confusion in the current  
10 topic caused by misleading turn taking in text-based SCMC (Smith, 2003b). The  
11 larger number of examples of framing in video-based SCMC compared with  
12 text-based SCMC might just reflect the fact that participants went through more  
13 suggested questions in video-based SCMC. As topic-based questions were provided  
14 to help the interaction, participants often clearly marked topic shifts by suggesting  
15 moving on to the next question. Most dyads did not go through all the suggested  
16 questions within the 30 minutes of time in text-based SCMC, but they had no problem  
17 in this regard in video-based SCMC. Moreover, learners often suggested moving on to  
18 the next question when they could not expand further on the preceding topic and they  
19 did not really mark topic shifts when the new topic was elicited by the preceding one.  
20 A well designed task with specific objectives might promote use of framing and help  
21 learners develop topics as well, although approach to topic development would differ  
22 from typical conversation between native speakers. It is noted that topic framing in  
23 text-based SCMC with multiple participants would probably be more difficult as  
24 several topics might be discussed in parallel. Indeed, some topics might decay due to  
25 simultaneous typing and multiple threads in text-based SCMC with multiple  
26 participants (Herring, 1999). Overall, the frequency of the use of framing did not  
27 seem to be affected by the communication medium.  
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*Compensatory Strategies.* While the infrequent use of Compensatory Strategies in text-based SCMC might be affected by easy access to consult other resources for intended terms, the frequent use of Compensatory Strategies, particularly self-rephrasing, in video-based SCMC were likely to be encouraged by the faster pace of interaction in video-based SCMC.

*Focus-on-form Strategies.* Despite a greater number of Focus-on-form Strategies occurring in video-based SCMC, examples in text-based SCMC seems to indicate greater potential for learning target-like forms and promoting accuracy. The finding that self-correction was one of the most frequently used CSs in text-based SCMC appears to corroborate the previous studies (e.g. Lai & Zhao, 2006; Shekary & Tahririan, 2006) in that the visual salience and the self-paced feature of text-based



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3 communication facilitates the noticing of the target language form. Moreover, when  
4 exchanging their life experience or personal opinions, some learners attempted to  
5 imitate their native-speaking partners' terms and sentence patterns to express similar  
6 points (see one example in Excerpt 1). These examples also supported the benefit of  
7 learning target-like language forms in text-based SCMC at the point that learners  
8 could look back at what they have noticed and this perhaps reinforced their  
9 awareness.  
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#### Excerpt 1: Text-based SCMC in Chinese

18 <Turn 1> LE: 你喜歡旅行嗎? (*Do you like travelling?*)

19 <Turn 2> LC: 喜欢 (*Like*)

20 <Turn 3> LE: 我也喜歡 (*I like it too*)

21 LE: 因為旅行能增廣見聞<sup>8</sup> (*Because traveling can broaden my horizons*)

22 LE: 你為何喜歡旅行呢? (*Why do you like traveling?*)

23 <Turn 4> LC: 因為我也能增廣見聞 (*Because I can broaden my horizons too*)

24 LC: 我也喜欢说外语 (*I also like speaking foreign languages*)

25 LC: 吃外国饭 (*eating exotic foods*)  
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32 The use of tonal corrections by learners of Chinese in text-based SCMC suggests  
33 the potential of a text-based interaction for the phonological awareness in Chinese,  
34 which is a tonal language and the four tones in Chinese are essential to convey  
35 meaning of what is being said. Although Kitade (2000) found that text-based chat  
36 helped learners notice their phonological errors in phonetic languages, there seemed  
37 no warrant to infer the effect on Chinese as its writing system is either ideographic or  
38 ideo-phonographic. When pinyin (or zhuyin in Taiwan), the official phonetic system  
39 to transcribe Chinese characters, is often used as an input method to enter Chinese  
40 characters into computers, the typing also involves entering the correct tone. This  
41 typing method allows learners of Chinese to be aware of the correspondence between  
42 a Chinese character (an ideographic word) and its pronunciation. As such, learners of  
43 Chinese in this study often corrected a lexical item by using another tone (e.g. correct  
44 the word “沒 (měi; *no*)” to “每 (méi; *every*)”) when noticing of tonal mistakes  
45 through an incorrectly typed word.  
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55 Despite the potential for promoting phonological awareness in text-based SCMC,  
56 it seemed more natural to learn target-like pronunciation in video-based SCMC.  
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3 Learners tended to check the accuracy of pronunciation in video-based SCMC (see  
4 one example in Table 2 – own accuracy check). Moreover, as learners tended to  
5 repeat the terms they noticed in their partners' messages for various functions in  
6 video-based SCMC, they often received help from their partners to pronounce more  
7 accurately when their repetitions were not sufficiently accurate.  
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11 Although meta-talk (use target language to reflect on one's own or interlocutor's  
12 target language use) was one of the most frequently used CSs in video-based SCMC,  
13 most examples of its use were repetitions to indicate learners' perceptions of the  
14 correct form they noticed from their partners' responses (see one example in Table 2 –  
15 meta-talk). Except for two participants who gave explicit corrections due to the  
16 awareness of the tandem or reciprocal learning relationship, most participants tended  
17 to accept learners' language mistakes, unless the meaning could not be easily  
18 comprehended, or give implicit corrections (i.e. recasting) as would be expected in  
19 any real communication situation. The meaning-focused interaction with limited  
20 corrective feedback might promote fluency rather than accuracy (Lee, 2002b).  
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24 In addition to explicit and implicit corrections, participants sometimes  
25 unintentionally offered a corrected form of learners' lexical mistakes when  
26 responding to learners' messages. While implicit and incidental corrections might  
27 easily be overlooked, Egi (2010) found a positive correlation between the uptake and  
28 the awareness of recast in his study. Learners who reacted to their partners' recasting  
29 often recognized the recasting as implicit correction. Learners who did not recognise  
30 this often viewed the recasting as a response from their partners to show achieved  
31 agreement. Learners in this study often repeated the correct form or on occasion  
32 applied it to their messages that indicated their awareness of the correct form in  
33 different types of feedback, although such reactions might not engage learners as  
34 actively as the strategy of negotiation of form (Lyster & Ranta, 1997).  
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38 Despite the indication of noticing, a greater number of repetitions of the noticed  
39 accurate terms/phrases in video-based interactions does not indicate that video-based  
40 SCMC promoted noticing, but rather indicates repetitions as one type of indicative  
41 reaction promoted in a spoken discourse. Generally, oral repetitions took less effort  
42 (and are more automatic) than typing. It is also possible that learners felt less need to  
43 repeat for memorisation in text-based SCMC since they could review the text anytime  
44 they wanted. Indeed, some types of recasting appeared to be easily missed in  
45 video-based SCMC. Learners of English often missed the corrections to plural nouns  
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3 made by their partners such as correcting the mistake of “milks” to “milk”. The  
4 correction appeared to be easier for learners to notice in text. From this aspect, the  
5 result corroborated Lee’s (2008) suggestion that focus-on-form is more salient in  
6 text-based SCMC. Moreover, despite only a few occurrences of meta-talk in  
7 text-based SCMC, three out of four examples involved discussing or asking for  
8 information about one particular language usage that learners had noticed in their  
9 partners’ messages, which probably engaged learners in higher level of form  
10 reflection than repetitions of a correct form. Overall, text-based SCMC appeared to be  
11 more effective to enhance this kind of noticing than video-based SCMC.  
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18 *Paralinguistic Strategies.* These strategies used exclusively in text-based SCMC  
19 were affected by learners’ first language. Learners of English used tilde ‘~’ for  
20 extended sounds due to the inapplicable of multiplying letters in Chinese conversation,  
21 and they tended to carry over this habit into English conversation. Learners might  
22 need to learn some special expressions in target language discourse (e.g. ideographic  
23 emoticons<sup>9</sup> in Chinese conversation) and pay attention to different interpretations for  
24 the same expression. The emoticon “XD” often means laughing out loud in English  
25 discourse, whereas it may mean laughing when feeling slightly embarrassed in  
26 Chinese discourse. Without knowing the difference, learners of Chinese might not  
27 understand why learners of English ‘laughed out loud’ at some points.  
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Mime, the paralinguistic strategy occurring in video-based SCMC, was not used as frequently as learners reported they did in face-to-face communication. One learner reflected that she did not use this strategy as her webcam was too close to catch her gestures. This corroborates the findings of previous studies that the absence of visual access between interlocutors causes a general reduction in the frequency of gesture use (Gullberg, 2006).

## Conclusion

Except for the frequent use of Sociocultural Strategies, learners tended to use CSs differently in text-based and video-based SCMC and that might indicate different learning opportunities enhanced by these two modes of SCMC. Learners used Interactional Strategies along with other CSs more (statistically significantly so) in video-based SCMC than in text-based SCMC to solve problems and keep a faster pace of interaction. The prompt meaning exchanges without much reflection and feedback on the language forms in video-based SCMC might promote fluency

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3 development rather than accuracy. Moreover, the possibility of checking the accuracy  
4 of pronunciation and receiving help in this regard in video-based SCMC might  
5 facilitate pronunciation improvement, although native speakers or at least more  
6 proficient interlocutors are required.  
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10 On the other hand, learners used CSs less frequently for language problem  
11 solving in text-based SCMC. As learners preferred to consult other resources and edit  
12 their unsent messages to ensure comprehension and accuracy of target language in  
13 text-based SCMC, a task designed to use this feature to promote accuracy  
14 development may be an alternative direction to pursue. Indeed, the examples of use of  
15 Focus-on-form strategies indicate the greater potential for promoting accuracy in  
16 text-based SCMC than in video-based SCMC. The extended processing time in  
17 text-based SCMC may help learners attend to target language forms beyond the  
18 concern of basic comprehensibility. The text may enhance learners' noticing of certain  
19 types of correction from their partners and retain the noticed terms for them to review  
20 or employ later. From this aspect, learners may benefit from being explicitly  
21 encouraged to develop accuracy through attending the language forms in text-based  
22 SCMC. To enhance the benefit of being in a tandem learning relationship, their  
23 partners should also be encouraged to help learners in this regard.  
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33 This study has extended the investigation of CS use in both text-based and  
34 video-based SCMC. Although the study has paved the way for similar studies, there  
35 are several limitations that call for more research. The limited generalizability of the  
36 findings is an inherent restriction of this study. In addition to a larger sample size,  
37 SCMC studies of CS use in different social settings are suggested since CS use and  
38 the availability of corrective feedback appear to be affected by social and cultural  
39 factors apart from the different SCMC environments. Moreover, given the importance  
40 of focus-on-form procedure to SLA, studies that investigate repair moves in both sent  
41 and unsent messages are indicated to have a better understanding of learning  
42 opportunities enhanced by text-based SCMC.  
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49 To conclude, this study supports the positive potential of both text-based and  
50 video-based SCMC for SLA through the investigation of CS use. While text-based  
51 SCMC appears to have greater potential for learning target-like language forms,  
52 video-based SCMC seems particularly effective for fluency development as well as  
53 pronunciation improvement.  
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### Notes

1. They characterized a turn in spoken discourse as a unit interactively determined by interlocutors in a way interconnecting “stop by a current speaker” and “start by a next speaker” and noted that every turn should address to its adjacent pair, unless otherwise provided for.
2. Participants in Kost’s study were asked to complete a task of role-play to practice their learnt materials in 10-20 minutes, while participants in Smith’s study might have to work on some unfamiliar words to complete a task of jigsaw or decision-making in 30 minutes. In addition, most participants in Kost’s were native speakers of English, while participants in Smith’s study were of mixed first language backgrounds. These differences might affect learners’ processing time and thereby affect their use of fillers; nevertheless, none of them seems to explain the conflicting results of the use of fillers.
3. The present study investigated these strategies to emphasize the different communicative environments in the two modes of SCMC, but did not attempt to compare the differences of participants’ facial expressions and use of intonation in the two modes of SCMC due to the difficulty to quantify the occurrences of facial expressions and intonation in video-based SCMC.
4. A turn in text-based interaction seems easier to be defined since overlapping talks as in video-based interaction cannot appear on screen. Nevertheless, a turn should not be determined by each time an interlocutor sends out the message. Interlocutors might split turns to hold the ‘floor’ in text-based interaction (Simpson, 2002), while they might rush to reach a point into the next turn before a brief pause in spoken discourse for the same purpose (Schegloff, 1981). As the extended turn in spoken discourse is treated as one turn, splitting turns in text-based interaction is viewed as one turn in this study unless these turns are cut in by their interlocutor’s message.
5. Learners sometimes searched Google Images and sent their partners photos of particular objects to either facilitate their expression or ensure their comprehension occasionally.
6. The bad reception (sound lagging, stuttering, and echo sound) made the messages more difficult for learners to understand and sometimes the problem was so severe that native speakers might not get the messages as well.
7. Some learners stated that they would wait if they noticed the little icon on MSN

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3 screen showing their partners were typing. One learner claimed that his partner  
4 probably spent time on editing unsent messages as he noticed his partner often sent  
5 short messages after long time typing. Even so, he still waited patiently to avoid  
6 overlapped turns.  
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10 8. This learner of Chinese appeared to copy her partner's term (增廣見聞) directly.  
11 She used simplified Chinese characters (one standard character set used in China)  
12 during interaction apart from this term, which was in the form of traditional  
13 Chinese characters (another standard character set currently used in Taiwan). It is  
14 interesting to note that this particular term was also discussed by another dyad. The  
15 learner of Chinese in this dyad asked “最后四个汉字是成语吗? (*Are the last four*  
16 *words an idiom?*)” before requesting clarification. She reflected that she wanted to  
17 know if it was a 4-words idiom as she noticed native-speakers of Chinese used  
18 4-words idioms largely in daily conversation.  
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25 9. This type of emoticons is originally from Chinese characters.  
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## References

- Canale, M. (1983). From communicative competence to communicative language pedagogy. In J. C. Richards & R. Schmidt (Eds.), *Language and Communication* (pp. 2-27). London: Longman.
- Chun, D. M. (1994). Using computer networking to facilitate the acquisition of interactive competence. *System*, 22(1), 17-31.
- Darhower, M. (2002). Interactional features of synchronous computer-mediated communication in the intermediate L2 classroom: a sociocultural case study. *CALICO*, 19(2), 249-276.
- Dörnyei, Z. (1995). On the teachability of communication strategies. *TESOL quarterly*, 29(1), 55-85.
- Dörnyei, Z., & Scott, M. (1997). Communication strategy in a second language: Definitions and taxonomies. *Language Learning*, 47(1), 173-210.
- Egi, T. (2010). Uptake, modified output, and learner perceptions of recasts: Learner responses as language awareness. *The modern language journal*, 94(1), 1-21.
- Ellis, R. (2003). *Task-based language learning and teaching*. Oxford: OUP.
- Færch, C., & Kasper, G. (1983). On identifying communication strategies in interlanguage production. In C. Færch & G. Kasper (Eds.), *Strategies in interlanguage communication*. (pp. 210-238). London: Longman.
- Farrell, T. S. C., & Mallard, C. (2006). The use of reception strategies by learners of French as a foreign language. *The modern language journal*, 90(3), 338-352.
- Freiermuth, M. R. (2011). Debating in an online world: a comparative analysis of speaking, writing and online chat. *Text & Talk - An Interdisciplinary Journal of Language, Discourse & Communication Studies*, 31(2), 127-151.
- Freiermuth, M. R., & Huang, H. C. (2012). Bringing Japan and Taiwan closer electronically: A look at an intercultural online synchronic chat task and its effect on motivation. *Language Teaching Research*, 16(1), 61-88.
- Guilford, J. P., & Frunchter, B. (1978). *Fundamental Statistics in Psychology and Education*. Singapore: McGraw-Hill Book Co.
- Gullberg, M. (2006). Handling discourse: Gestures, reference tracking, and communication strategies in early L2. *Language learning*, 56(1), 155-196.
- Hampel, R., & Stickler, U. (2012). The use of videoconferencing to support multimodal inter- action in an online language classroom. *ReCALL*, 24(2), 116-137.
- Herring, S. (1999). Interactional coherence in CMC. *Journal of Computer-Mediated Communication*, 4(4), 0-0.
- Jamshidnejad, A. (2011). Functional approach to communication strategies: An analysis of language learners' performance in interactional discourse. *Journal*

- 1  
2  
3                   *of Pragmatics*, 43, 3757-3769.
- 4 Kasper, G., & Kellerman, E. (1997). *Communication strategies: psycholinguistic and*  
5                   *sociolinguistic perspectives*. London and New York: Longman.
- 6 Kasper, G., & Kellerman, E. (1997). Introduction: approaches to communication  
7 strategies. In G. Kasper & E. Kellerman (Eds.), *Communication strategies:*  
8                   *psycholinguistic and sociolinguistic perspectives*. London and New York:  
9 Longman.
- 10 Kelm, O. (1992). The use of synchronous computer networks in second language  
11 instruction: a preliminary report. *Foreign Language Annals*, 25(5), 441-454.
- 12 Kern, R. G. (1995). Restructuring classroom interaction with networked computers:  
13 effects on quantity and characteristics of language production. *The modern*  
14                   *language journal*, 79(4), 457-476.
- 15 Khamis, H. (2010). Communication Strategies in computer-mediated communication:  
16 An Egyptian EFL context. *CALICO journal*, 28(1), 35-48.
- 17 Kinginger, C. (1998). Videoconferencing as access to spoken French. *The modern*  
18                   *language journal*, 82, 502-513.
- 19 Kitade, K. (2000). L2 learners' discourse and SLA theories in CMC: Collaborative  
20 interaction in internet chat. *Computer assisted language learning*, 13(2),  
21 143-166.
- 22 Kost, C. R. (2008). Use of communication strategies in a synchronous CMC  
23 environment. In S. S. Magnan (Ed.), *Mediating discourse online* (pp. 153-189):  
24 John Benjamins B. V.
- 25 Kurata, N. (2007). Language Choice and Second Language Learning Opportunities in  
26 Learners' Social Networks: A Case Study of an Australian Learner of Japanese.  
27 *Australian Review of Applied Linguistics*, 30(1), 05.01-18.
- 28 Lai, C., & Zhao, Y. (2006). Noticing and text-based chat. *Language Learning &*  
29                   *Technology*, 10(3), 102-120.
- 30 Lee, L. (2001). Online interaction: Negotiation of meaning and strategies used among  
31 learners of Spanish. *ReCALL*, 13(2), 232-244.
- 32 Lee, L. (2002a). Enhancing learner's communication through synchronous electronic  
33 interaction and task-based instruction. *Foreign Language Annals*, 35(1),  
34 16-23.
- 35 Lee, L. (2002b). Synchronous online exchanges: A study of modification devices on  
36 non-native discourse. *System*, 30, 275-288.
- 37 Lee, L. (2008). Focus-on-form through collaborative scaffolding in expert-to-novice  
38 online interaction. *Language Learning & Technology*, 12(3), 53-72.
- 39 Long, M. H. (1983). Native speaker/non-native speaker conversation and the  
40 negotiation of comprehensible input. *Applied Linguistics*, 4, 126-141.
- 41  
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2  
3 Long, M. H. (1996). The role of the linguistic environment in second language  
4 acquisition. In W. Ritchie & T. J. Bhatia (Eds.), *Handbook of second language*  
5 *acquisition* (pp. 413-468). Orlando, FL: Academic Press.
- 6  
7 Lyster, R., & Ranta, L. (1997). Corrective feedback and learner uptake. *Studies in*  
8 *Second Language Acquisition*, 20, 37-66.
- 9  
10 Peterson, M. (2009). Learner interaction in synchronous CMC: a sociocultural  
11 perspective. *Computer assisted language learning*, 22(4), 303-321.
- 12  
13 Rost, M., & Ross, S. (1991). Learner use of strategies in interaction: typology and  
14 teachability. *Language Learning*, 41(2), 235-273.
- 15  
16 Sacks, H., Schegloff, E. A., & Jefferson, G. (1974). A simplest systematics for the  
17 organization of turn-taking for conversation. *Language Learning*, 50, 696-735.
- 18  
19 Savignon, S. J., & Sysoyev, P. V. (2002). Sociocultural strategies for a dialogue of  
20 cultures. *The modern language journal*, 86(4), 508-524.
- 21  
22 Schegloff, E. A. (1981). Discourse as in interactional achievement: Some uses of “uh  
23 huh” and other things that come between sentences. In D. Tannen (Ed.),  
24 *Analyzing discourse: Text and talk* (pp. 71-93). Georgetown: Georgetown  
25 University Press.
- 26  
27 Schmidt, R. W. (2001). Attention. In P. Robinson (Ed.), *Cognition and second*  
28 *language instruction* (pp. 3-32): Cambridge University Press.
- 29  
30 Shekary, M., & Tahririan, M. H. (2006). Negotiation of meaning and noticing in  
31 text-based online chat. *The modern language journal*, 90(4), 557-573.
- 32  
33 Simpson, J. (2002). Discourse and synchronous computer-mediated communication:  
34 uniting speaking and writing? In K. S. Miller & P. Thompson (Eds.), *Unity*  
35 *and diversity in language use* (pp. 57-71). London: Continuum.
- 36  
37 Simpson, J. (2005). Learning electronic literacy skills in an online language learning  
38 community. *Computer assisted language learning*, 18(4), 327-345.
- 39  
40 Smith, B. (2003a). Computer-mediated negotiated interaction: An expanded model.  
41 *The modern language journal*, 87(1), 38-57.
- 42  
43 Smith, B. (2003b). The use of communication strategies in computer-mediated  
44 communication. *System*, 31, 29-53.
- 45  
46 Smith, B. (2004). Computer-mediated negotiated interaction and lexical acquisition.  
47 *Studies in Second Language Acquisition*, 26(3), 365-398.
- 48  
49 Smith, B. (2008). Methodological hurdles in capturing CMC data: the case of the  
50 missing self-repair. *Language learning and technology*, 12(1), 85-103.
- 51  
52 Sotillo, S. (2005). Corrective feedback via instant messenger learning activities in  
53 NS-NNS and NNS-NNS dyads. *CALICO journal*, 22(3), 467-496.
- 54  
55 Swain, M. (1995). Three functions of output in second language learning. In G. Cook  
56 & B. Seidlhofer (Eds.), *Principle and practice in applied linguistics: studies in*  
57  
58  
59  
60

- 1  
2  
3           *honour of H.G. Widdowson* (pp. 125-144). Oxford: Oxford University Press.
- 4 Tarone, E. (1980). Communication strategies, foreigner talk, and repair in  
5 interlanguage. *Language Learning & Technology*, 30(2), 417-431.
- 6  
7 Tarone, E. (2010). Social context and cognition in SLA: A variationist perspective. In  
8 R. Batstone (Ed.), *Sociocognitive Perspectives on Language Use and*  
9 *Language Learning* (pp. 54-72). Oxford: Oxford University Press.
- 10  
11 Toyoda, E., & Harrison, R. (2002). Categorization of text chat communication  
12 between learners and native speakers of Japanese. *Language Learning &*  
13 *Technology*, 6(1), 82-99.
- 14  
15 Wang, Y. (2006). Negotiation of meaning in desktop videoconferencing-supported  
16 distance language learning. *ReCALL*, 18(1), 122-146.
- 17  
18 Warschauer, M. (1996). Comparing face-to-face and electronic discussion in the  
19 second language classroom. *CALICO journal*, 13, 7-26.
- 20  
21 Zöhner, C., Fauverge, A., & Wong, J. (2000). Task-based language learning via  
22 audiovisual networks: The LEVERAGE project. In M. Warschauer & R. Kern  
23 (Eds.), *Network-based Language Teaching: Concepts and Practice* (pp.  
24 186-203). New York: Cambridge University Press.
- 25  
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## Appendix 1: After-task Questionnaire

Please answer in English or Mandarin, whichever you feel comfortable to express your thoughts.



### Part 1:







Please read the following statements and then choose a response from 1 to 5 to fill in the box after each statement.

1. Never or almost never true of me → 2. Generally not true of me → 3. Somewhat true of me  
→ 4. Generally true of me → 5. Always or almost always true of me

As a language learner, I.....when communicating in the learned language	1 → 5
1. am willing to take risks even though I may make mistakes	
2. pay attention to keep the conversation flowing	
3. change ways of saying things to get my message across	
4. pay attention to the social/cultural aspect of language use	
5. pay attention to the language form such as grammar or word order	
6. use nonverbal techniques to help	
7. give up when I feel I can't do it	
8. think getting the message across is the most important part	
9. take my time to express what I want to say	
10. pretend I understand what my peer said to avoid interrupting the flow of conversation	






### Part 2:

Please answer the following questions based on your experience in pair interactions. (Copy and paste “ ✓ “ to the right box)		Yes	No
1.	Did you chat with your peer in MSN or Skype other than the five times of required?		
	If yes, how many times more and what language did you two use when chatting? 		
2.	Did you talk about any of these suggested topics with others in your learned language prior to this participation?		
	If yes, which topic(s) did you talk before and did you think the prior experience help you express yourself better? (Suggested topics in this study: Festivals, Travel, Food, and Leisure activities.) 		
3.	Did you prepare how to answer these topic-based questions in your learned language in advance?		
4.	Did you use resources such as Google or simultaneous dictionary when chatting with your peer?		
	If yes, you use in MSN, Skype, or both?		

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5	5.	Did you review the content of records before sending them back to me? If yes, why did you do so and what did you think/feel when you review the content?	
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10	6.	Did you feel any differences in MSN interaction from other types of interaction? Why did you feel so?	
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14	7.	Did you feel any differences in Skye interaction from other types of interaction? Why did you feel so?	
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18	8.	Did you reckon you were more capable of using the learned language in MSN or the Skype interaction?	MSN Skype
19		Why?	
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24	9.	Did you feel less anxious in MSN or the Skype interaction? Why?	
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28	10.	Were you able to understand your peer better in MSN or Skype interaction? Why?	
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**Part 3:**

Please share more about your experiences in the paired interactions and think about your MSN and Skype experiences respectively.

1. What efforts did you make to keep the flow of conversation in MSN/Skype interactions?  

2. How did you overcome language difficulties in MSN/Skype interactions?  

3. How did you show your cultural/social awareness (social routine/ politeness/ cultural difference) in the learned language in MSN/Skype interactions?  

4. What nonverbal aids did you use to help you communicate with your peer in MSN/Skype interactions?  

5. How did you make your expressions (the word pick and order/grammar) as accurate as possible in MSN/Skype interactions?  


**Thank you for your participation!**

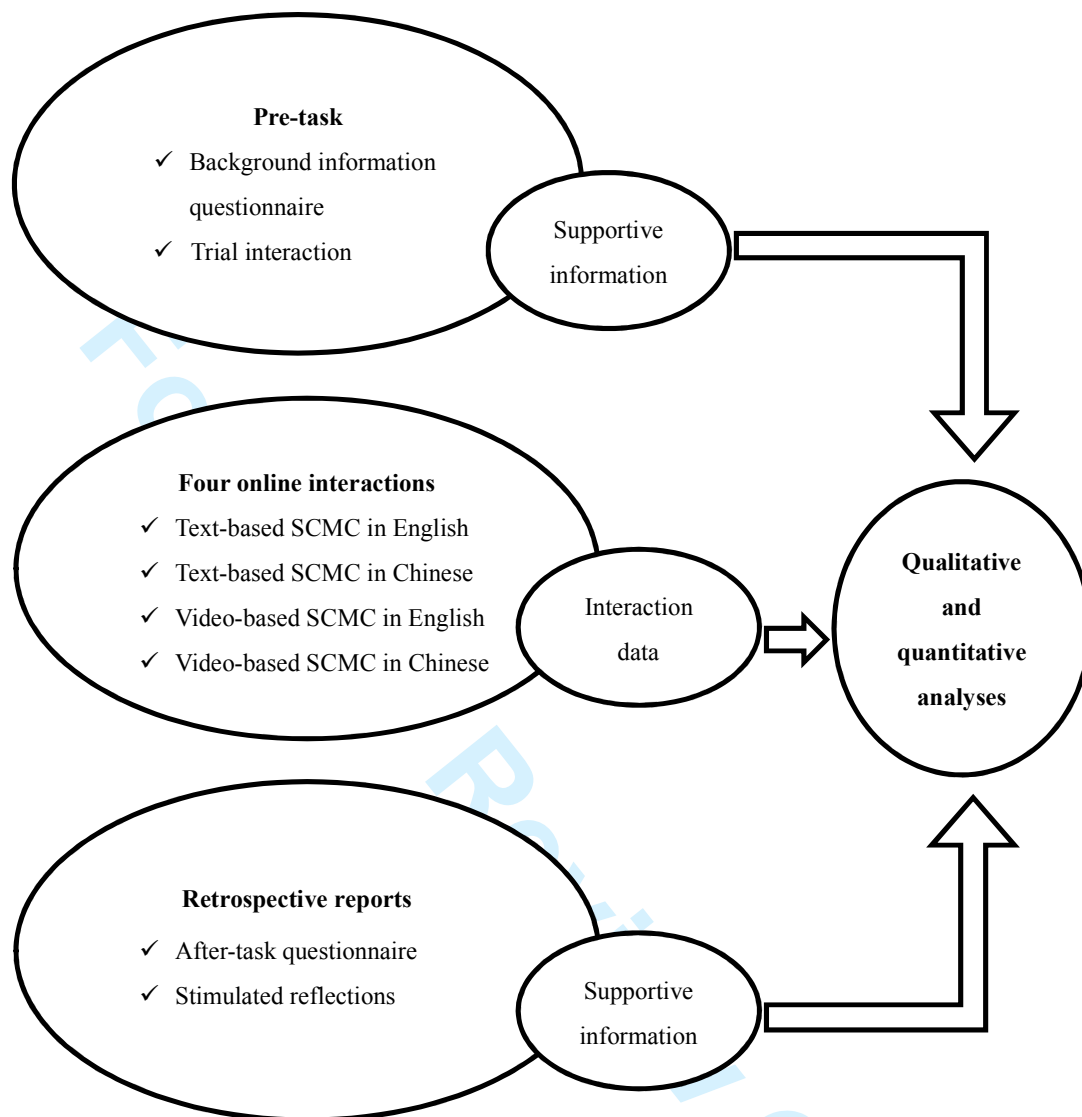


Figure 1 Research design

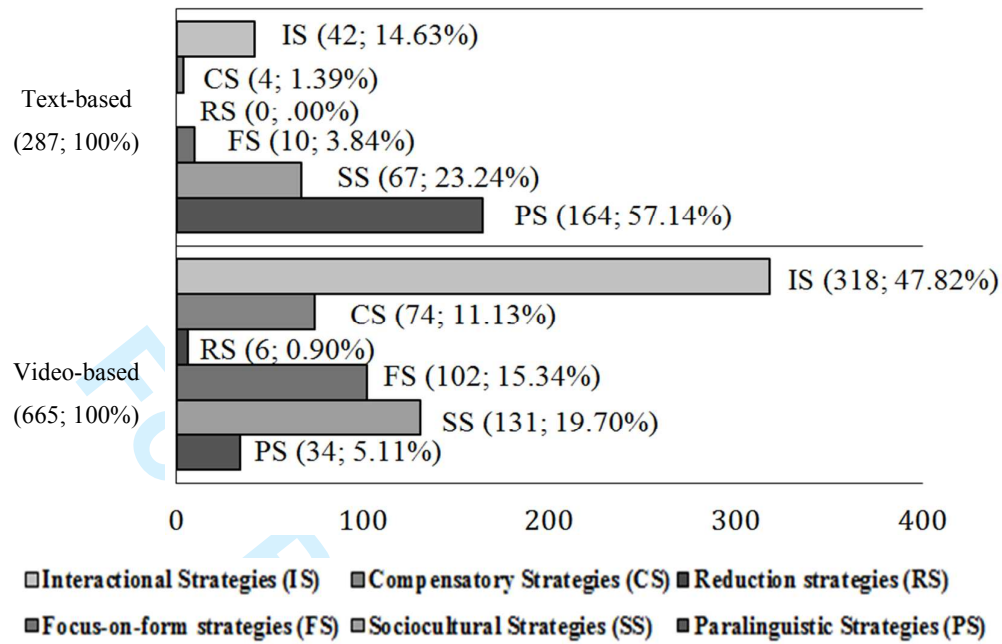


Figure 2 The distribution patterns of CS use in text-based and video-based SCMC

*Table 1 Conversation topics*

Mode of SCMC	Target Language	Topic
Text-based	English	Local Delicacies
Text-based	Chinese	旅遊 ( <i>Travel</i> )
Video-based	English	Leisure Activities
Video-based	Chinese	節慶 ( <i>Festivals</i> )

For Peer Review Only

Table 2: Inventory of communication strategies with descriptions, selected examples, and a check list of practicability in the modes of SCMC

Communication Strategies	Description	Example	Text-based	Video-based
<b>Interactional Strategies:</b>				
- Request for Clarification	Asking for explanation of unfamiliar terms or messages.	“What is Bolognese?”	✓	✓
- Confirmation Check	Repeating the trigger in a rising intonation to ensure one heard something correctly, or using a first language term or asking a full question to ensure the correctness of the input comprehension.	“You you thought it funny to...to speak good of your country. Is that what you mean?”	✓	✓
- Comprehension Check	Asking questions to ensure one’s messages are understood.	“You know what I mean?”	✓	✓
- Direct Request for Help	Asking for assistance by an explicit question concerning a gap of one’s knowledge in the target language.	“怎麼說 festival? 用中文.” (How to say festival? In Chinese.)	✓	✓
- Indirect Request for Help	Trying to elicit help from one’s interlocutor by indicating the problems either verbally or nonverbally.	A: …所以出去玩, 跟他們的…同:: ↑ (...so when going out, with their... co-::↑) B: 同事, colleague. (co-worker; colleague.)	✓	✓
- Input Elicitation Strategies	Expressing explicitly or passing signals to encourage one’s interlocutor to continue talking.	A: Umm now I like rowing. Urr rowing boats[, ] urr so that keeps keeps me fit with the university ↑ [. ] Umm and what else. (several lines are deleted here) B: [Yeah.] <sup>a</sup> [Uh huh.]	✓	✓



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7	- Feigning Understanding	Pretending to understand the preceding message in order to carry on the conversation.	A: So she is like a mentor to you. B: Yeah. A: Do you know the word mentor? B: Not exactly.	✓	✓
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12	- Inferential Strategies	Asking questions or making comments based on established information to test one's hypothesis of the preceding message, show one's current state of understanding, or gain new information.	A: I never I never went to an actual Taiwanese class. What'd they like? B: So your class just for urr some foreigners to attend.	✓	✓
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18	- Framing	Marking the shifts of topics.	Use "Ok. First one." to indicate the closure of chatting and start of topic-based interaction.	✓	✓
19					
20					
21	- Verbal Strategy Markers	Using verbal marking phrases such as "you know" or "kind of" to indicate the use of strategy or less accurate form in the target language.	"我不知道怎么说用中文。 我们叫 Taj Mahal." ( <i>I don't know how to say it in Chinese. We call it as Taj Mahal.</i> )	✓	✓
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26	- Omission	Leaving an unknown word as a gap and carrying on as if it has been said with the hope that the interlocutor can fill the gap by context.	"Do you have any ( ), you know? Do you?"		✓
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30	- Time-gaining Strategies	Using fillers such as "umm..." or repeating interlocutor's words to fill pauses in order to maintain conversation at times of thinking.	A: What's your favorite leisure activity? B: Umm my favorite leisure activities. Ok. urr I love to see movies.	✓	✓
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34	<b>Compensatory Strategies:</b>				
35					
36	- Circumlocution	Exemplifying, illustrating, or describing the features of the target object or action.	Use "...urr for example if we play the Facebook, we have to... If I click. If I click an button and I have to wait." to replace "the loading time".	✓	✓
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7	- Approximation	Using one single substitute term with which the target term shares semantic features.	Use the term “vegetables” to replace one specific type of vegetables “mustard leaf”.	✓	✓
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10	- Use of All-purpose Words	Using a general “empty” lexical term to replace a specific term to compensate for vocabulary deficiency or to avoid making mistakes.	“So do you play that?” Use “that” to replace one particular term until the learner finally learned how to say it from her peer’s talk.	✓	✓
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14	- Literal Translation	Translating a first language term literally to a target language term.	Translate “小吃” literally into “small eat”.	✓	✓
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16					
17	- Self-rephrasing	Paraphrasing, restructuring, or repeating one’s own utterance. Sometimes new information may be added to the repetition	“Cause there are no place for, urr no proper place for umm like boxing↑ in Taiwan. There are not many places for that.”	✓	✓
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21	<b>Reduction Strategies:</b>				
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23	- Message Abandonment	Leaving a message unfinished due to an inability to cope with language difficulty.	“因為我的朋友說，因為..如果..阿...阿我不知道，呵. 阿算了，算了，呵.” (Because my friend said, because... if...ah...ah I don't know hh. ah forget it, forget it hh.)	✓	✓
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29	- Message Replacement	Replacing the original message by a new one when feeling incapable of executing it.	“That's..haa..that's ha Rea...haa. Are you are you serious that?”	✓	✓
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31					
32	<b>Focus-on-form Strategies:</b>				
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34	- Self-correction	Making self-initiated corrections.	“He don't urr he doesn't usually talk to people.”	✓	✓
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- Meta-talk	Using the target language to reflect on one's own or interlocutor's use of the target language.	The learner described how people celebrate Halloween in his country and mentioned kids go ask for “好吃的東西 (something tasty)”. As he noticed the term “糖果 (candy)” from his peer's talk a few turns later, he added “摠，就是糖。對，是給他們吃糖果。(Um, it is can-. Yeah, what they are given to eat is candy)” before responding to his peer's talk.	✓	✓
- Own Accuracy Check	Checking the correctness of one's own expression by asking a concrete question or repeating a word with a rising intonation (or a question mark in text).	One learner checked if she pronounced the term “節慶 (festival)” accurately by asking “jiē-tǐng? Festivals, jiē-tǐng.”	✓	✓
<b>Sociocultural Strategies:</b>				
- Social Formula	Using fixed patterns for social purposes such as greetings, leave takings, or apology.	“Sorry to interrupt you.”	✓	✓
- Code-switching	Using first language words in the target language speech for purposes such as to show familiarity or to negotiate or establish intersubjectivity.	“雖然我沒有宗教，但是我也過聖誕節。(Several lines are deleted here.) 摠一樣的就是那個..復活節。那個Easter, 你知道嗎?”(Although I don't have religion, I also celebrate Christmas. (Several lines are deleted here.) um what is the same is that...Easter, that Easter, do you know?)	✓	✓
<b>Paralinguistic Strategies:</b>				
- Mime	Using gestures and body movements to help delivering intended messages.	“真的聖誕樹，樹會..摠..它的葉會..可能會破掉 ((gesturing something is falling)).” (The real Xmas tree, tree would.. um.. its leafs could be broken <sup>b</sup> .)		✓

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7	- Use of Text or Symbols to	Capitalizing words for stress (ex. AMAZING) or	“there are lots~~~ of foods”	✓
8	Display the Effects of	multiplying letters (ex. Sooooo cute) for extended sounds.	The symbol of tilde here is to display the extended sound.	
9	Intonation			
10				
11	- Use of Emoticons	Using emoticons (ex. 😊) or keyboard symbols (ex. ^__^)	Use a facial expression icon “ : ( “ to represent a sad	✓
12		to display facial expressions and emotional states.	feeling.	
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15	- Punctuation	Using punctuation extensively such as using a question	“Yes?” The question mark here indicates the rising	✓
16		mark to indicate a rising intonation or using it alone to	intonation.	
17		show a confused state, using exclamation to express		
18		surprise, or using ellipsis points to indicate the intention to		
19		shift turns or topics or to mean “no comment”.		
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23	- Substitution	Using abbreviated form of a word (ex. u for you) or a	“Have u ever tried it?” The letter “u” is a substitution for	✓
24		phrase (ex. LOL for laugh out loud) to save typing time or	“you”.	
25		to avoid mistakes.		
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a. Brackets are used to mark the overlapping speech. This is an example of giving short responses in the primary speaker’s turn space.

b. According to the context and her gesture, the learner meant to say “falling” rather than “broken”.

Table 3 Quantitative comparisons of CS use in text-based and video-based SCMC

Communication Strategies <sup>a</sup>	Text-based SCMC (N = 12)		Video-based SCMC (N = 12)		Sig.	
	Sum	Mean	Sum	Mean	p ≤ .05	p > .05
<b>Interactional Strategies:</b>						
- Request for Clarification	7	.017	16	.014		.054
- Confirmation Check	3	.007	42	.039	.001	
- Comprehension Check	0	-	5	.006		.058
- Direct Request for Help	1	.002	5	.005	.043	
- Indirect Request for Help	1	.002	21	.021	.000	
- Input Elicitation Strategies	2	.004	108	.099	.000	
- Feigning Understanding	0	-	4	.004	.016	
- Inferential Strategies	15	.045	25	.022		.611
- Framing	9	.029	19	.018		.074
- Verbal Strategy Markers	0	-	45	.042	.000	
- Omission <sup>b</sup>	0	-	5	.005	.024	
- Time-gaining Strategies	4	.006	23	.021	.002	
<b>Compensatory Strategies:</b>						
- Circumlocution	1	.001	11	.009	.016	
- Approximation	1	.001	9	.009	.013	
- Use of All-purpose Words	0	-	6	.007	.047	
- Literal Translation	2	.009	2	.002		.872
- Self-rephrasing	0	-	46	.044	.000	
<b>Focus-on-form Strategies:</b>						
- Self-correction	5	.012	26	.024	.017	
- Meta-talk	4	.015	47	.049	.000	
- Own Accuracy Check	1	.004	29	.032	.009	
<b>Sociocultural Strategies:</b>						
- Social Formula	42	.172	79	.069	.031	
- Code-switching	25	.076	52	.043		.158

<sup>a</sup> Reduction strategies are not included in this table as they were used rarely in both modes of SCMC and left little data to make any further examination.

<sup>b</sup> The text form makes it impossible to “pretend” a word has been said in text-based SCMC. Besides, it is arguable to code any skipped words as intentional use of this strategy while nonverbal clues such as a pause were unavailable in the interaction data. Although Smith (2003) reported that this strategy was used by his participants in text-based SCMC, he did not give examples of use which makes it difficult to compare findings.

Table 4 The six most frequently used CSs in text-based and video-based SCMC

Rank	Text-based SCMC	Video-based SCMC
1.	Social Formula (SS; 48 times, 33.33 % <sup>a</sup> )	Input Elicitation Strategies (IS; 108 times, 17.12 %)
2.	Code-switching (SS; 26 times, 18.06 %)	Social Formula (SS; 79 times, 12.52 %)
3.	Inferential Strategies (IS; 21 times, 14.58 %)	Code-switching (SS; 52 times, 8.24 %)
4.	Framing (IS; 10 times, 6.94 %)	Meta-talk (FS; 47 times, 7.45 %)
5.	Self-correction (FS; 9 times, 6.25 %)	Self-rephrasing (CS; 46 times, 7.29 %)
6.	Request for Clarification (IS; 7 times, 4.86 %)	Verbal Strategies Markers (IS; 45 times, 7.13 %)

<sup>a</sup> The proportion of this strategy use to all used CSs excluding paralinguistic strategies.