### Introduction

The rapid development of computer technology provides a new era for communication. It is natural that today's world college students communicate electronically with the help of computers (Krohn, 2004). The integration of computer technology into language teaching and learning has been widely accepted by many educators and researchers (Agiorgitis, 2003; Chapelle, 2001; Chen, 2004; Cubillos, 1998). Firmin and Miller (2005) indicated that it is essential to enable learners and teachers to harness these communication technologies in an educational context. Simultaneously, there is a need to better understand how students percieve the use of these tools. Concepts such as teaching learners how to learn, learner autonomy, and learner independence have significantly influenced on EFL language education (see Agiorgitis, 2003; Dickinson, 1993; Holec, 1981; Oxford, 1990; see Pinkman, 2005).

In recent years, the concepts of learner autonomy and learner independence have acquired important roles within the context of language learning (Little, 1991; see Thanasoulas, 2000). Nevertheless, learner autonomy/learner independence does not mean the teacher becomes superfluous. On the contrary, teachers play a crucial role in creating environments to facilitate and motivate learners to take responsibility for their learning, develop good learning habits, and become independent learners. Teachers also help students be better able to control learning environments so that they can practice language skills and communicate with others both in and out of the classroom. It is imperative that teachers help their learners become aware of the strategies they already use or may possibly use if the teachers want to help the learners have effective control over their own learning (Thanasoulas, 2000).

The purpose of this study was to investigate students' perceptions and preferences of using computer mediated communication (CMC) tools to support independent learning outside of the classroom. CMC is an acronym which refers to using the Internet to facilitate communication between human beings (Ellsworth, 1994). The CMC tools examined in this study included E-mail, MSN, Yahoo Messenger and Skype. It is hoped that this study will inspire all EFL instructors to be interested in the value of independent learning and incorporating Web-based environments into their curriculum for the improvements of the EFL pedagogy in the Taiwanese context.

## Relevant Literature: Learner Independence and Learner Autonomy

In recent years, because of the popularity of learner-centeredness, communicative language teaching, and strategy instruction in the field of foreign language education, the concepts such as learner autonomy, learner independence, and teaching learners how to learn, have had an important impact on the pedagogy of foreign language instructors (Holec, 1981; Oxford, 1990; Pinkman, 2005). In relevant literature, a common distinction is made between the terms learner independence and learner autonomy (Pinkman ibid). Learner autonomy and learner independence in language teaching are sometimes synonyms or used interchangeably (Agiorgitis, 2003; Pinkman ibid). According to Pinkman (ibid), the

meanings of each may cause confusion.

Berge (1995) defined learner autonomy as the notion of being ready to act independently and to co-operate with others, as a socially responsible person. Holec (1981; see Pinkman ibid) described learner autonomy as taking responsibility of one's learning, and being in charge of all the decisions in the learning process—for instance choosing methodology, and evaluating what has been learned. In fact, for Holec (1987; see Olmos, 1998), an autonomous learner is to be the manager of his or her own learning processes.

Independent learning as interpreted by Sheerin (1997; see Pinkman ibid), involves learning how to learn, or strategy development in the fundamental principle. According to Dickinson (1993; see Agiorgitis 2003), independent learners are better able to understand what is being taught, achieve learning objectives, monitor their own learning, and use appropriate learning strategies.

According to Thanasoulas (2000), many factors, such as learner needs, motivation, learning strategies, and language awareness, have to be taken into consideration for the development of learner autonomy. Learner autonomy or learner independence does not indicate that the teacher becomes redundant. Instead, learner autonomy or learner independence depends on teacher autonomy. Both teachers, as well as learners, should be fully involved and open to challenge and change if they would achieve the optimum effectiveness of language teaching and learning.

Little (2000) stated that in order to help learners become autonomous language learners, first of all teachers have to guide their learners to accept responsibility for their own learning. Secondly, students should be guided to be reflectively engaged in planning, monitoring and evaluating their learning with the support of writing. Thirdly, from the earliest stages teachers should require their learners to use the target language to express their own meanings by social interaction with others.

This present study is concerned with facilitating and assisting students to be responsible for developing their integrated language skills and communication skills outside the classroom. The term independent learning has been considered to involve both the ideas of learner autonomy and learner independence.

#### **Learner Attitudes and Motivation**

Wenden (1998) interpreted attitudes as motivation, beliefs and evaluations. According to the author, learners' beliefs about their role in the learning process and their capability as learners are two types of vital attitudes learners keep. Brown (1987) pinpointed that awareness of self, of others, and of the culture of the target language can be part of attitudes. Positive attitudes are helpful for increasing motivation while negative attitudes have a different result. According to Dornyei (1998), most scholars accept that motivation is one of the primary forces that affect whether second language (L2) or foreign language learning can be successful or not. Motivation offers the key factor to initiate L2 learning and then maintain it during the long and often tiresome learning process.

Thanasoulas (2000) pointed out that in language learning, learners are motivated in different ways and to various degrees. For example, some learners like doing grammar and memorizing, others want to speak and role-play; while still others prefer reading and writing, but avoid speaking. Finding a good job and being interested in the culture of the target language can be sources of learners'

motivation. Furthermore, a learner's willingness to be responsible for her own learning and her confidence in her ability as a learner can be possible ways of promoting learner autonomy. Simultaneously, teachers play a crucial role in creating environments to facilitate and motivate learners to take responsibility for their learning, develop good learning habits, become independent learners and be better able to control learning environments to practice language skills and communicate with others both in and out of the classroom. The author also suggested that teachers should guide their learners to notice the strategies they already use or may possibly use if they want to help learners control their own learning effectively.

# The Value of Computer-Mediated Communication in Language Learning

To provide students with opportunities to continue learning outside of the classroom, many EFL instructors are taking advantage of technology (Blin, 1999; see Pinkman, 2005). Hanson-Smith (2000) and Pinkman (2005) pointed out that Web-based learning environments provide students with authentic and global environments and interesting tools to achieve learner autonomy or learner independence and offer them an opportunity to learn, practice and communicate with others in the target language outside of the classroom.

Computer-mediated communication (CMC) is gaining widening acceptance because it has the capacity to contribute to the second language learning process. CMC includes both synchronous ("at the same time") and asynchronous ("at different times") forms of communication (Stockwell 2005). As Morse (2003) pointed out, there has been an increasing use of CMC by college students since 1994 because of flexibility in time and geography. According to Ellsworth (1994), CMC is an acronym to relate to all circumstances in which computers are operated to facilitate human communication when using the Internet. As Smith (2003) stated, synchronous CMC refers to real-time interaction (usually written) in which messages are typed and sent, and received instantaneously. Skype, MSN Messenger, and Yahoo Messenger are the popular instances of synchronous communication. On the other hand, asynchronous communication, where there is a significant delay between when the message is sent and when it is received. E-mail is one of the most common examples of asynchronous communication.

Due to the widespread attention paid to CMC, numerous e-mail exchange projects have been organized as the target conducted in foreign language education and research (Son and O'Neill, 1999). According to Henry and Li (2005), e-mail was used for the exchange of information between teacher-to-students and students-to-students in most studies. Wang (see Henry and Li, 2005) also pointed out that email has been used for exchanging information, discussing opinions and socializing with people, increasing students' confidence, especially in the process of their writing abilities. Kern (1996) and Warschauer (1995) indicated that using e-mail exchanges can be a useful activity for providing learners with opportunities and motivation for real communication.

Findings from Furmanovsky's (1999a, 1999b, 2000; see Nozawa, 2002) intercultural keypal projects implied that keypal exchanges across cultures were effective, and a motivating factor for developing intercultural communication. Dahlin (1997) and Muehleisen (1997, 1998a, 1998b) also stated that e-mail

exchanges can motivate language learners by giving them a chance to develop language skills while, at the same time, forming a relationship with a person from another culture. Furmanovsky (2000) further suggested that EFL teachers can use their home pages to design e-mail exchange projects. Von Kolln (1998) offered a theoretical framework and practical applications of the e-mail tandem in foreign language learning. The author advocated the appropriate use of the international e-mail tandem for motivating students to develop learner autonomy.

The result in Henry and Li's (2005) study showed that students preferred e-mail to online discussion because of time and privacy. However, not all studies concluded that asynchronous communication in CMC enhanced learning. For instance, Biesenbach-Lucas (2003) pointed out that some studies have also indicated that having students discuss course issues after class through an asynchronous medium was insufficient for enhancing critical thinking skills and for promoting classroom group dynamics. In their experience, Henry and Li (2005) found that the students with whom they worked did not use CMC as they had hoped. Hsu (2005) also found that e-mail keypal exchanges were not very successful because only 4 students out of 46 students used e-mail frequently to practice English e-mail writing with international keypals. Most of other students responded that they preferred to chat with international keypals through Skype or MSN because they were very eager to practice their speaking skills, to relate to people from other countries, and to understand their cultures.

Kitao and Kitao (1997) and Robb (1996) provided suggestions for finding keypals, and concluded that keypal exchanges can be worthwhile for students, but noted that they may not be very successful the first time someone undertakes an exchange. Nozawa (2002) mentioned that in the initial stages of e-mail exchanges, students may encounter difficulty because they do not have much experience in written exchanges. As a result, they may not know what to write in follow-up letters. The author suggested that keypal instructors should provide topics for e-mail discussion. Stockwell (2005) also asserted that the barrier may appear between the participants and the success of such exchanges may be jeopardized if learners do not have the sufficient skills to read the messages which they receive, or if they are unable to construct messages which are comprehensible to their partners.

Overall, more previous studies revealed that most CMC activities increased learners' motivation by giving them a chance to develop language skills and build relationships with people from other cultures. This present study focuses on participants' perceptions of using computer mediated communication (CMC) tools to support independent learning outside of the classroom. It should be noted that the research methodology of this study is more qualitative than quantitative. The methodology for the study is described below.

#### **Research Ouestions**

The research questions which guided this study were as follows:

- 1. What problems and difficulties did students encounter in using CMC tools to learn to communicate with others?
- 2. Did students develop learning strategies in using CMC tools to learn to

#### communicate with others?

- 3. Which CMC tools did students prefer to use to learn to communicate with others? What were the reasons for their preference?
- 4. What were students' attitudes and opinions towards their independent learning in using CMC tools?

## Participants and the Setting

In this study, a third-year undergraduate English class was chosen from the Air Force Academy in Taiwan. The English class was an integrated skills class, which met three hours a week. There were 20 students in the class who majored in Aviation Management. All of these participants were males. They wished to be eligible for admission to postgradate programs at universities in the USA, or to have the chance to be chosen as representatives of Taiwan to go abroad for some military training programs in the future. Accordingly, the purpose of this English program was to enhance students' language skills and communication skills, and raise cultural awareness and understandings.

This study lasted for one semester starting from September 2005 to January 2006 at the Air Force Academy. In order to help these participants develop language skills and communication skills for independent learning outside the classroom, CMC tools including Skype, MSN Messenger, Yahoo Messenger, and E-mail were introduced at the beginning of the project. Ten groups of 2 students from the class were formed for keypal exchanges. Suggestions for choosing topics and finding international keypals were offered. Simultaneously every week these participants were required to use English to write e-mails or chat with their keypals from their class or from abroad through CMC tools. They were asked to write at least two e-mails in English every week. Alternatively, students could choose to use Skype, Microsoft MSN Messenger, or Yahoo Messenger to chat with at least five key pals, especially international people online, and then write a report regarding their experience socially interacting with others across cultures.

### **Research Methods**

Self-reporting is a useful tool in understanding the language learning process (Cohen and Hosenfeld 1981). Wenden (1998) indicated that self reports can be a means of raising awareness of learners' strategies, goals and outcomes. According to Wenden, without awareness, learners will never be completely autonomous. For obtaining students' retrospective self-reports to reflect on their own learning, in this study, three methods of gathering information were used: keeping diaries, interviews and questionnaire.

In this project, the participants were asked to keep diaries regarding how they learned English through CMC tools every week (see Appendix A). Individual or small group (two to three students) interviews were held in the teacher's office depending on the participants' preference and convenience two weeks before the mid-term and final examinations. A questionnaire (see Appendix B) was given out at the end of the class. The interviews and questionnaire were used to explore numerous factors, such as: problems students encountered, techniques they

resorted to to deal with these problems, learners' views on optimum strategies or ways of developing integrated language skills, students' preference and choice of options for using asynchronous and synchronous communication in CMC and learners' attitudes towards independent learning through CMC tools.

### **Results and Discussion**

## (1) Difficulties and Problems Encountered

In the interviews and questionnaire, all of the participants responded that they had had many online experiences before coming to the class. According to their reports, regardless of their numerous online experiences, they said they had never thought of chatting with someone online in English or had no experience in using English to communicate with others, specifically foreigners, in both spoken and written forms. In their diaries, all of the students reported that they experienced the feeling of being nervous when they first used English to talk with others, particularily with foreigners. Most of them stated that they felt frustrated and embarrassed when they encountered language blocks.

All of them reported that they had studied English for more than ten years. This learning experience was quite different from any others they had encountered before. Many participants criticized the inefficiency of their past learning experience. As one student stated in his diary,

Before I simply memorized the vocabulary and studied some grammatical rules and then I could pass the tests and examinations. When I found that I could not understand the international key pals' English at all and had difficulty in the conversations, I felt very stressful and frustrated

Another student also made a similar complaint:

I had studied English since I was 10. When I found that I still had the difficulty in using English to chat with people online, I felt quite angry and frustrated with my language inability. I had spent so much time in my life in the past studying the boring grammatical rules and memorizing vocabulary. I think that it is not right to learn only grammar or vocabulary. We should learn to use English to communicate with people from abroad.

Thus they declared their dissatisfaction with their previous learning experience because it had not prepared them to use the target language for communication. Accordingly, they faced certain difficulties before adjusting to the new communicative learning experience and venue. In initial stages, linguistic problems were major roadblocks for students who felt frustrated by the learning process. Besides linguistic problems, there were some other difficulties which these participants pointed out in their diaries, such as:

• "It takes time to download sounds, and getting disconnected

while communicating with others online."

- "I do not have a personal computer and when I want to do my own assignments and access the Internet, the computer lab has classes."
- "I have difficulty to use the computer. I can't use the computer well. My typing skill is poor and slow. I need to spend a lot of time to finish doing assignments."
- "It was quite time consuming to learn English online. It is a waste of time to use computer."

Learning habits were also found to be one of the difficult things for many participants to change at the beginning stages. For example:

- "I don't have any learning habits. I usually studied just one day or two days before mid-term or final examinations."
- "I just expect my teacher to teach me English in the classroom and not to get me to learn English or something for myself outside of the classroom."

From the above evidence, it was quite clear that these participants were not satisfied with this style of learning at first becasue they faced many difficulties and had to spend much time to learn to use both English and computers proficiently to communicate with others online outside of the classroom. Indeed, this learning experience was very different from any others they had previously encountered. In other words, they had negative attitudes towards language learning and language use via CMC tools at the initial stages.

# (2) The Development of Learning Strategies

From the indication of findings, it was odd and difficult for these students to learn to use English to communicate with others initially. At the beginning phase, linguistic problems were major barriers for these students involved in the project. However, it is interesting to note that almost all of these students had strong motivation and determination to be successful in their language learning in their future plan. Therefore, they encouraged themselve to have social interaction with international key pals and take risks in using the target language. As they became more familiar with the learning and social contexts online and acquired more international keypals, their negative feelings or anxieties vanished sooner or later. In the interview, one student reported how his anxiety lessened:

As I became more interested in social interacting with international key pals and familiar with the environment online, I tried to seek more international key pals and more practice opportunities in using English online. The more I practiced using English, the more confidence I built up in using it. My anxieties seemed to become lower and then vanish.

Another student also reported how he overcame his nervousness and built up his confidence in using the target language through the help of his international key pals:

After three months later I had several international key pals who came to look for me online first and who were very patient and helpful to improve my English. At first I was very nervous, and I often said that I was sorry that I could not speak English well. They said that I did not need to say sorry and I should be proud of myself and they should feel shamed for they could not speak anything in my language at all. They gave me a lot of encouragement, confidence and opportunities in using English. Through the continuous practice English with them, now I already built up my confidence in using English. Now I can communicate with my international key pals and they can understand me.

In a similar way, one student stated how he promoted his linguistic and affective developments:

At first I was very nervous to talk to the international key pals. Very soon I overcame my nervousness and my fear in using English. Once you overcome the fear, it will be easier for you to achieve something. Now I feel very happy and very confident in speaking English and have confidence in myself. I plan to apply the scholarship to study in the USA.

Another student likewise reported in his diary how he encouraged himself to make international key pals and use the target language:

I believed that if I did not open my mouth to speak English, I would not be able to improve my English. Therefore I encouraged myself to make international key pals and to have social interaction with them in using English. Now I am not afraid of using English and feel comfortable and confidence in speaking it.

Thus through constant using the target language for social interaction with international key pals, their anxieties became lower and eventually disappeared. Simultaneously, in the questionnaire, 75% (N=15) of students reported that it was important to learn to think in English. As one student described his experience in his interview.

At first, I always tried to think in Chinese, then to translate it into an English sentence, and then to check if it was grammatically correct or not. It usually took me a long time in order to make a sentence in English before I spoke a sentence out. I found out that translation does not make sense to people. Now while I am using English, I try to think only in English.

One student also described how he stopped worrying about the grammatical errors and key words:

At first I really worried about grammar, and then I found that I concerned too much on grammar. Then I tried to use key words to express my ideas, and tried to speak as much as I could. Soon I found out that it doesn't matter in makeing grammatical errors. The most important thing is that I try to use English to express my ideas and people can understand me.

Another student also reported similar strategies:

At first, I tried to understand every word my key pals said. Then I often missed the messages on the following sentences. And then I fould that I could understand more when I took only key words. Sometimes I also guessed the meanings of unfamiliar key words from the situations in listening and in reading as well.

From the above findings, we can see that these participants gradually developed such learning strategies as follows: for instance, encouraging themselves to overcome negative feelings and anxieties, take risks and build up confidence in using the target language, purposely seeking the opportunities for social interaction with internation key pals, thinking in English instead of depending on translation, catching the meanings from the key words rather than trying to understand every word in reading or in listening, guessing the meanings of unfamiliar key words from the situations in listening or in reading,taking an active approach and seeking practice opportunities for using the target language, and developing learning habits out of classroom to aid learning. At the end of the course, the questionnaire indicated that 90% (N=18) of participants had become much more relaxed and confident in using the target language. In short, they gradually developed their learning strategies in the learning process over time. CMC tools seemed to be important for them in developing learning strategies and in learning to communicate with others more effectively and confidently.

### (3) Preference and Choice of Asynchronous and Synchronous Communication

Although almost all of these participants encountered a lot of difficulties at the beginning of the project, 90% (N=18) of them showed that they enjoyed using CMC tools to learn to communicate with others in English outside of the classroom in the questionnaire at the end of the class. Moreover, these participants also preferred to have international key pals rather than their classmates online. According to their notes in the questionnaire, they liked to know about the lives and opinions of their international key pals, raise awareness of cultural similarities and differences, and practice using the target language to learn to communicate with people from abroad. Other students explained the reasons why they did not like to have their classmates as their key pals: e.g. they tended to use Chinese when they chatted with or wrote to their classmates by CMC tools; they did not try to express themselves in English when they encountered vocabulary they did not know or were not familiar with; they were curious about the outside world because they all lived in the same dormitory, had similar lives and knew everything about each other; and they hoped to go abroad for further study so they would like to

learn to communicate with foreigners instead of their classmates.

Almost all of these participants reported that it is essential to have more international key pals and seek more opportunities to learn to use the target language to communicate with others outside of the classroom. Most of them stated that they even made friends with some international people, and held discussions with them regularly. In the interview one student reported that talking on SKYPE is an efficient way to help develop language skills, telephone skills, and, especially, communication skills. As another student also stated in his diary:

I have become interested and confident in speaking English because I frequently talk with an international key pal from Malaysia via Skype to discuss assignments, and political and environmental issues. He also likes to practice his spoken English. We are of the same age. We always enjoyed talking to each other. I think that I am very lucky to have such a good international friend online.

The results from the questionnaire showed that 70% (N=14) of students preferred synchronous communication. That is, they preferred online chatting or discussion through MSN Messenger, Yahoo Messenger or Skype which was easy for them to access and interact with international key pals. According to their notes in the questionnaire, MSN Messenger, Yahoo Messenger or Skype was very convenient, and they did not need to wait to get immediate responses. Moreover, they liked the challenge of having to learn to understand English, and to think and respond in English immediately.

On the other hand, the questionnaire data also showed that four students preferred the asynchronous communication on e-mail exchanges. In the questionnaire, two participants noted that they chose e-mail exchanges because they would like to increase their confidence especially in their writing ability. Another two students reported that time was the reason for their preference in choosing e-mail, as their time schedules was a factor.

However, there were two students who remained negative attitudes towards using CMC tools to support learning at the end of the course. In the questionnaire, they showed reluctant to continue independent learning in the authentic online learning settings. They complained that both email exchanges and online discussion were too difficult to them and too time consuming. They preferred reading English books and magazines instead of CMC tools to support independent learning.

In summary, 90% of these participants agreed that using CMC tools was advantageous to developing their learning and communication in English. Simultaneously, they overwhelmingly chose synchronous communication and they preferred to have key pals from abroad rather than from their class. The result showed that key pal exchanges across cultures were successful and effective in motivating these participants by giving them a chance to develop language skills and communication skills, and form a relationship with people from abroad. The result in this study is consistent with findings from Furmanovsky's intercultural keypal projects (1999a, 1999b, 2000).

## (4) Students' Attitudes towards Using CMC Tools

In the interviews, all of the students stated that they did not possess any habits in learning to use English or in practicing English every week; they usually studied English just one day or two days before their mid-term and final examinations. Nevertheless, it is interesting to find that many students' attitudes towards this style of learning by using CMC tools for developing the target language learning and use changed from passive to active and from negative to positive. The findings in this study indicated that these participants encountered difficulties to some degrees by using the CMC tools for the first time. In the interviews, many students reported that fortunately, their teacher offered immediate and necessary support and encouragement sufficient to prevent them from being overwhelmed by difficulties. Many of them also appreciated that the teacher guided them to use CMC tools, find international key pals and develop effective learning strategies to learn to use the target language for communication.

In the questionnaire, 90% (N=18) were positive about independent learning through CMC tools. In the interviews, most of participants claimed that using CMC tools was important and useful for them in developing their language skills, communication skills, and cultural understanding. As one student mentioned in his interview:

I did not really learn English until I began to make international key pals and learned to use English to communicate with them through SKYPE or MSN Messenger outside of the classroom. It was very difficult for me to overcome my fear and build up my confidence to start conversation with international key pals at the very beginning. Now I enjoy and am confident in using English to talk with my international key pals.

In the questionnaire, 90% (N=18) of students would like to continue to learn through this way even after the course is over. These participants positively perceived independent learning through CMC tools. Nevertheless, there were another two students who seemed reluctant to continue in using CMC tools for independent learning. In the interviews, two students complained that it was too difficult, too time consuming and learned nothing in using CMC tools for independent learning; they just wanted to read English books and magazines. As well, it is interesting to point out in the questionnaire, 30% (N=6) of students did not concur that participation in using CMC tools should be made compulsory. As one student noted, we want to learn English because we want to learn, not because we are forced to learn.

In summary, from the indication of the findings in this study, we can conclude that the majority of students' attitudes towards using CMC tools to learn to communicate with people in their independent learning process outside the classroom changed from negative initially to positive eventually. Simultaneously, they also changed from dependent learners to become more independent ones. The teacher played an important role to support and encourage these students to use CMC tools to learn to use the target language for communication and prevent them from being overwhelmed by difficulties. Although most of them agreed that CMC tools could be useful and helpful for developing language skills, communication skills, and cultural understanding, several of them disagreed that participation in

online discussion should be made obligatory.

# **Conclusion and Implications**

It is important to note that the small scale of this study means that it can only be considered as a pilot study, and the generalisability of the results is limited. Despite this, this study produced some interesting results, and therefore does help to further our understanding of what happens in facilitating students to use CMC tools to learn to communicate with others and support independent learning.

Firstly, the results showed that participants in this study overwhelmingly chose synchronous communication through MSN Messenger, Yahoo Messenger or Skype which was easy and convenient for them to access and interact with their key pals and get immediate responses. They preferred to have key pals from abroad rather than from their class to help develop language skills, communication skills, and understand cultural similarities and differences. In spite of some difficulties encountered initially, the majority of students overcame their difficulties and developed effective learning strategies. That is to say, CMC tools, especially synchronous communication, can be authentic, global, interesting and communicative devices that offer students opportunities to develop learner independence to practice language skills and to communicate with others.

This study also indicated the importance of offering students an opportunity to develop autonomy and the interdependence of teacher and learner autonomy. Motivation, self-confidence and taking responsibility for learning play very significant roles in language learning. Thus, teachers and learners should work together and open to challenge and change. Simultaneously, it is crucial for teachers to create quality language learning environments to motivate and encourage learners to accept responsibility for their own learning. Teachers also need to guide students to reflect, monitor, and evaluate their own learning. Moreover, teachers have to help students overcome their difficulties and develop effective strategies to learn and use the target language to communicate with others confidently.

However, there were two students who seemed reluctant to continue independent learning in the authentic online learning settings. As well, several students did not concur with that participation in using CMC tools should be made compulsory. Further studies into the strategies to encourage students to the online discussion would be valuable, since online discussion has been proved helpful for students learning process in most studies. As Herrington, Oliver and Reeves (2002) suggested, there is the need for strategies to support and encourage learners who are reluctant to engage with authentic online learning environments that focus on student-centered rather than teacher-centered learning activities.

Warschauer & Meskill (2000) reminded us that computer technology is not a panacea. It is still too early to state whether Web-based environments, or CMC, are useful methods to encourage greater learner independence and provide interesting learning and communication tools for independent learning outside of the classroom. Thus it is significant to have further research endeavors to investigate the principles that can accommodate and assist these learning processes and outcomes in online venues where the need for learner participation is paramount to learning success.

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## **Appendix A: Diary Guidelines**

Dear Students,

Thank you very much for your help with this research project, which aims to investigate how students learn English through CMC tools (e.g. Skype, MSN Messenger, Yahoo Messenger, and E-mail). Here are the guidelines on how to write your diary.

- 1. Please do not worry too much about your grammar.
- 2. Please do not use your dictionary too often and try to express your ideas clearly.
- 3. Please write anything and everything you feel soon after learning through the CMC tools. You can write about, for instance:
  - (a) your CMC activities after class and your purpose and feelings about these activities.
  - (b) your reflections on your problems, difficulties and progress in your learning process.

(c) your opinions about how English should be learned.

Appendix B: Questionnaire (Translated from Chinese into English)
1. Do you have your own computer?
YesNo
2. Is your computer connected to the Internet?
Yes No
3. Did you have a lot of online experiences before this English course?
Yes No
4. Did you have any English writing experience before this English course?
Yes No CMCNM
5. Did you use CMC tools (e.g. Microsoft MSN Messenger, Yahoo messenger,
SKYPE and E-mail) to chat with international key pals in English before this
English course?
Yes No CMC to also useful and arraigl for you to learn to use English to
6. Is using CMC tools useful and crucial for you to learn to use English to
communicate with others?
Yes No Comment: 7. Do you believe that using CMC tools can help you improve your language
skills?
Yes No Comment:
8. Which CMC tools do you use most often?
Skype MSN Messenger Yahoo Messenger E-mail
9. Which do you prefer, to have asynchronous (e-mail) or synchronous
communication (Microsoft MSN Messenger, Yahoo messenger, SKYPE)?
Asynchronous communication Synchronous communication
Comment:
10. Would you describe how you felt when you first used CMC tools to
communicate with people in English?
11.Do you have international key pals to talk to or write to regularly?
Yes No Comment:
12. Would like to have international key pals to practice English with?
Yes No Comment:
13. From your experience, what have you learned from your international key pals?
14. Which do you prefer, to have keypals from your class or from abroad?
From my class From abroad Unsure Comment:
15. Did you encounter difficulties in using English to chat with native or non-native
English speakers through CMC tools?
Yes No Comment:
16. What other difficulties did you experience learning through CMC tools?
17. How did you do to deal with these problems you encountered through CMC
tools?
18. Do you translate or think in English when you are using English? Do you think
it is important to think in English?
19. Do you need to develop new learning strategies or habits in order to learn to
communicate with others through CMC tools?
Yes No Comment:
20. Will you continue to use CMC tools to use English to communicate with people

even after the class end	ds?
Yes No Con	nment:
21. Have you become mo	ore relaxed and confident in using English to communicate
with others in English	through CMC tools?
Yes No Con	mment:
22. Do you consider that	using CMC tools for the independent learning should be
compulsory?	
Yes No Con	mment:
1 3	mment: