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同步線上同儕互評：以一門大學英語寫作課為例

Peer Revision via a Synchronous CMC Mode in an English

Writing Course

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中文摘要

近年來由於過程寫作法的發展，同儕互評 (peer revision) 成為第二語言寫作中不可或缺的角色之一。而由於網路和電腦科技的普及，線上同儕互評彌補了第二語言寫作課程中課堂時間不足的缺點。儘管已有許多研究探討面對面和線上同儕互評，但很少研究探討學生對於線上同儕互評的感受。另外，有部分文獻探討線上互動中所出現社交訊息 (social cues) 的類型及功能，但很少研究檢視社交訊息在線上同儕互評中扮演的功能。本研究以台灣北部一所國立大學非英語系的大學生為對象，探討學生在為期一學期英語寫作課程中，進行同步線上同儕互評所使用的評論類型、社交訊息在同步線上同儕互評中的功能、以及學生對於同步線上同儕互評的感受。本研究資料取擷自線上對話 MSN 記錄、寫作草稿、訪談、問卷調查表，以及課程文件(如課程大綱、上課投影片和講義)。MSN 對話記錄先依據 de Guerrero 和 Villamil (1994) 所提出的對話模式分成三種類型：與主題相關、相關主題以及與主題無關。與主題相關的對話內容再依據 Liu 和 Sadler (2003) 所提出之分析表格分析出不同類型的評語。最後，社交訊息依據 Henri (1992) 所提出之社交訊息分析模式來探討其在同步線上同儕互評中的功能。

本研究結果發現學生給予的意見大多是關於單字或句子方面的評論和正確答案。社交訊息幫助學生進行同步線上同儕互評，並使得線上文字溝通變得更加生動。學生們認為同步線上同儕互評可幫助他們培養友誼，並幫助他們獨立自主學習。此外，由於學生對 MSN 很熟悉且其對話紀錄可當作修正參考等優點，使得 MSN 對於同步線上同儕互評的進行有助益。然而，本結果亦發現同步線上同儕互評產生一些缺點，例如同學在進行線上討論時會不專心，並因考慮同儕自尊問題而保留該給的意見。另外，打字過於麻煩會使學生不想深入討論過於複雜的問題。最後，在同步線上同儕互評中會發生同儕失約的問題。

本研究結果提供四個在英語教學實務上的應用。首先，MSN 對話紀錄可幫助老師了解同學的評語，也幫助學生複習同步線上同儕互評時所提及之問題以方便修改文章。第二，進行同步線上同儕互評時，老師可建議學生把同學的文章和評語列印下來，以方便進行討論。或可使用專業之線上寫作／互評系統，使得同步線上同儕互評的進行更加順暢。第三，老師應要求學生確實按照約定時間進行同步線上同儕互評。最後，老師可先示範同步線上同儕互評的活動，以教導學生如何有效地進行同步線上同儕互評。



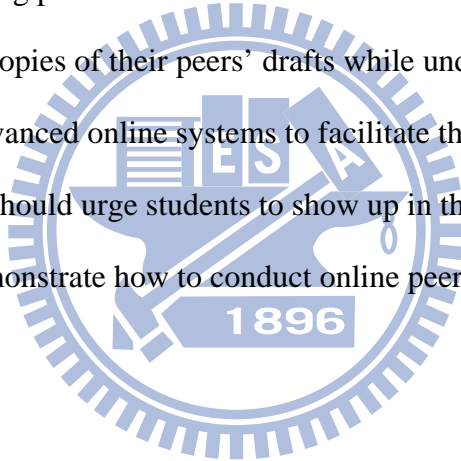
ABSTRACT

With the development of the process writing approach, peer revision has become an essential activity in second language (L2) writing. With the popularity of networked computers in education, peer revision via computer-mediated communication (CMC) may compensate for the disadvantage of insufficient time for instruction. A plethora of studies have examined peer revision via face-to-face and online modes. However, little research has explored students' perceptions of peer revision via CMC. Furthermore, previous studies have investigated the categories and functions of social cues in online communication, but few studies have been done to explore functions of social cues especially in online peer revision. The study was conducted in an 18-week EFL writing course at a public university in Northern Taiwan. The study attempted to investigate comment patterns generated from synchronous online peer revision, functions of social cues in online peer revision, and students' perceptions of online peer revision. Data were collected from a questionnaire, MSN logs, writing drafts, an interview, and course documents (a course syllabus, slides, and handouts). Online logs were first categorized into three types of episodes: on-, about, and off-task (de Guerrero & Villamil, 1994). On-task episodes were further analyzed based on Liu and Sadlers' (2003) analytical scheme by their nature (revision-oriented versus non-revision-oriented), areas (global versus local), and types (evaluation, clarification, suggestion, and alteration). Finally, functions of social cues in online peer revision were analyzed based on Henri's (1992) analytical scheme of social cues.

The results of the study revealed that the majority of the comments were local evaluations and alterations. Also, social cues were found to facilitate the students' online peer revision and invigorate the text-based communication. The students perceived that online peer revision helped them enhance their friendship with peers and acquire autonomous learning. In addition, because the students were familiar with the MSN

environment and MSN logs could be kept for revision reference, MSN was found to be beneficial to the process of online peer revision. The outcomes also uncovered some shortcomings of online peer revision. For example, the students were not concentrated on the discussions and may hesitate providing their comments due to consideration of peers' dignity. Moreover, laborious typing and time-consuming nature prevented the students from in-depth discussions. Finally, some students failed to show up in the online peer revision.

Based on the study results, four pedagogical implications were provided. First, MSN logs helps teachers to understand the comments provided by students. Students can also review their English writing problems and revise their drafts. Second, teachers may require students to prepare hard copies of their peers' drafts while undertaking online peer revision, or teachers may adopt advanced online systems to facilitate the process of online peer revision. Third, teachers should urge students to show up in their online peer revision. Finally, teachers may demonstrate how to conduct online peer revision effectively.



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TABLE OF CONTENTS

中文摘要	i
ABSTRACT	iii
ACKNOWLEDGEMENTS	v
TABLE OF CONTENTS	vi
List of Tables	ix
List of Figures.....	x
CHAPTER ONE INTRODUCTION	1
Research Questions	4
Organization of the Thesis.....	4
CHAPTER TWO LITERATURE REVIEW.....	6
Theoretical Framework of Peer Revision.....	6
<i>Process Writing Approach</i>	6
<i>Collaborative Learning Theory</i>	8
<i>Sociocultural Theory</i>	10
<i>Zone of proximal development</i>	11
<i>Scaffolding</i>	12
Merits of Peer Revision Activities	14
Demerits of Peer Revision Activities	17
Training in Peer Revision	18
Peer and Teacher Feedback	19
CMC in Second Language Learning	21
<i>Comparison between Face-to-face and CMC</i>	24
<i>Language Learning in CMC</i>	25
<i>Collaborative Learning in CMC</i>	27
<i>CMC and Online Peer Revision Activities</i>	29
CHAPTER THREE METHODOLOGY	35
Description of Course	35
Online System	37
Participants	39
Data Collection	40
<i>Questionnaire</i>	41
<i>MSN Logs and the Students' Writing Drafts</i>	41
<i>Interview</i>	42

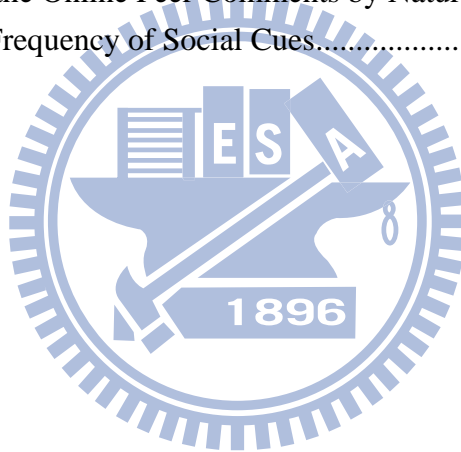
<i>Course Syllabus, Class Slides and Handouts</i>	42
Data Analysis.....	43
<i>Analysis of MSN Logs</i>	43
<i>Analysis of the Interview Transcripts</i>	53
Trustworthiness	55
CHAPTER FOUR RESULTS	56
Research Question 1: What Comments Emerge from Synchronous Online Peer Revision in terms of Nature (Revision-Oriented versus Non-Revision-Oriented), Areas (Global versus Local), and Types (Evaluation, Clarification, Suggestion, Alteration)?	56
<i>Revision-Oriented versus Non-Revision-Oriented Nature</i>	57
<i>Global versus Local Area</i>	58
<i>Four Types—Evaluation, Clarification, Suggestion, and Alteration</i>	59
<i>Online Peer Comments by Nature, Areas, and Types</i>	60
Research Question 2: What Roles Do Social Cues Play in the Process of Peer Revision in a Synchronous Online Mode?	61
<i>The Use of Symbolic Icons</i>	61
<i>Thanks and Compliments to Peers Closure</i>	63
<i>Self-Introduction and Greeting</i>	64
<i>Closure</i>	64
Research Question 3: How Do College Students Perceive Peer Revision via a Synchronous Online Mode?	65
<i>Perceptions of Peer Revision</i>	65
<i>Perceptions of Online Peer Revision</i>	67
<i>Positive perceptions</i>	67
<i>Negative perceptions</i>	70
CHAPTER FIVE DISCUSSION AND CONCLUSION	74
Discussion.....	74
<i>Comment Patterns of Online Peer Revision in the Synchronous CMC</i> Context.....	74
<i>Different Roles of Social Cues in Online Peer Revision</i>	76
<i>Social cues as a positive role</i>	76
<i>Social cues as a negative role</i>	77
<i>Students' Perceptions of Online Peer Revision</i>	77
<i>Physical distance</i>	77
<i>Laborious typing and time-consuming nature</i>	79

Conclusion.....	80
Limitations of the Study	81
Suggestions for Future Research	82
Pedagogical Implications.....	82
 REFERENCES	 84
 APPENDIXES.....	 97
Appendix A Consent Form.....	97
Appendix B Questionnaire	98
Appendix C The Interview Questions	100
Appendix D Peer revision checklist	102
Appendix E Examples and Explanations of On-task Episode.....	103



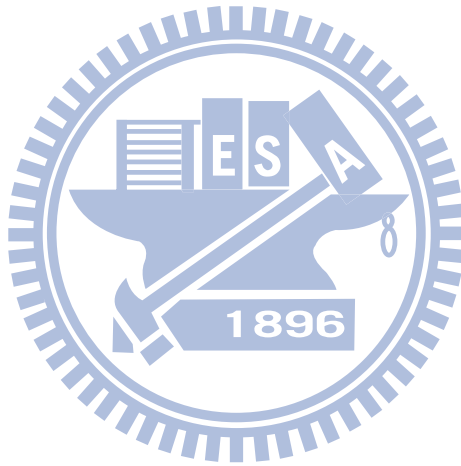
LIST OF TABLES

Table 2.1 Types and Examples of Social Cues	23
Table 3.1 Demographic Information of the Participants	40
Table 3.2 Data Recourses and Collection Time	41
Table 3.3 Types of Episodes	43
Table 3.4 Grid for Analyzing Data	52
Table 3.5 Comparison of Henri’s (1992) and Modified Version of Social Cues	53
Table 3.6 Types, Definition, and Examples of Social Cues.....	54
Table 4.1 Percentages of Online Peer Comments by On-task, About-task, and Off-task Comments.....	56
Table 4.2 Distribution of Peer Comments by Nature	57
Table 4.3 Distribution of Online Peer Comments by Areas	59
Table 4.4 Distribution of Online Peer Comments by Types.....	60
Table 4.5 Distribution of the Online Peer Comments by Nature, Areas, and Types...	60
Table 4.6 Examples and Frequency of Social Cues.....	61



LIST OF FIGURES

Figure 3.1 The writing cycles of the course	36
Figure 3.2 MSN system	38
Figure 3.3 Blackboard Academic Suite	38



CHAPTER ONE

INTRODUCTION

In the last two decades, there has been a paradigm shift in English writing pedagogy. Traditionally, English writing teachers are interested in product writing which focuses on form over meaning and on the final products (e.g., Elbow, 1973; Emig, 1971). However, evaluation of the final products often ignores the importance and benefits of the writing process. Therefore, with the development of learner-centered approaches to writing instruction, writing teachers have become more interested in the process of writing, which does not view writing as a product-oriented activity but as a dynamic and recursive process. Process writing not only emphasizes the importance of teacher-student conferencing, but also encourages students to go through different stages of composing—prewriting, drafting, and revision—and adopt strategies for better outcomes (Liu & Hansen, 2002; Villamil & de Guerrero, 1996).

To help students improve their writing in the process, one frequently used technique is peer revision. Many second language (L2) writing instructors have begun to use peer revision and viewed it as an essential component of L2 writing (Leki, 1990; Mangelsdorf, 1989; Zamel, 1985). A large body of research has examined peer revision in face-to-face mode in various aspects such as effects of peer revision (Berg, 1999; Mangelsdorf, 1992; Nelson & Murphy, 1993; Tsui & Ng, 2000), types of negotiations during peer revision (Mendonça & Johnson, 1994; Storch, 2002), effects of training peer revision (Faigley & Witte, 1981; Mendonça & Johnson, 1994; Min, 2005, 2006), and comparison of peer and teacher feedback (Connor & Asenavage, 1994; Hedgcock & Lefkowitz, 1992; Miao, Badger, & Zhen, 2006; Tsui & Ng, 2000; Zhang, 1995). From the results of these studies, some pedagogical implications of peer revision have been discovered. For example, it was found that peer revision can foster a sense of ownership of the text (Tsui & Ng, 2000),

generate more positive attitudes toward writing (Min, 2005), enhance audience awareness (Mendonça & Johnson, 1994), and facilitate their L2 acquisition (Lockhart & Ng, 1995) and oral fluency development (Mangelsdorf, 1989).

Despite the advantages of peer revision found in face-to-face mode, one common problem of implementing peer revision lies in the limited time in in-class sessions. With the integration of computer-mediated communication (CMC), peer revision can be more efficient in some ways. First, writing instructors can carry out peer revision out of class sessions, thus increasing time and opportunities for students to offer feedback to their peers (Sullivan & Pratt, 1996). Second, another advantage of CMC is the provision of a less threatening and anxiety-provoking environment than face-to-face communication, which can encourage more silent and less capable students to offer their advice to their peers (Belcher, 1999). Finally, some researchers (e.g., Anton, 1999; Pellettieri, 2000) have identified synchronous CMC (SCMC), a real-time online communication, as one of the important factors to offer learners a fertile learning environment for language acquisition (Sotillo, 2000). For example, Breuch (2004) found that synchronous technologies may be more useful for brainstorming or quick feedback to specific queries. Freiermuth (2002) suggested that SCMC provides an ideal medium for language learners to benefit from collaboration. The evidence was corroborated by DiGiovanni and Nagaswami (2001). They found that students in pre-college ESL writing classes participated comfortably in online peer revision sessions. Accordingly, with the benefits of time flexibility, less anxiety-provoking means of learner-to-learner communication, and collaboration, peer revision via CMC may serve as an alternative to face-to-face peer revision.

As Breuch (2004) indicated, “virtual peer revision has appeared only haphazardly in writing studies and has not been discussed in any substantial way” (p. 16). Most of these studies have been concerned with the comparison of peer revision in face-to-face and online modes. For example, DiGiovanni and Nagaswami (2001) analyzed types of

negotiations by 32 ESL students in peer review through online and face-to-face modes, and examined students' perceptions in both modes of peer revision. Moreover, Liu and Sadler (2003) examined whether comments and interaction via online and face-to-face triggered different comments in terms of areas (global and local), types (evaluation, clarification, suggestion, and alteration), and nature of feedback (revision-oriented and non-revision-oriented) generated from peer reviewers in L2 writing. Although Liu and Sadler found some essential results with respect to peer revision via face-to-face and CMC modes, an in-depth understanding of the distributions of peers' comments in terms of global and local areas merits further attention.

An interesting issue that is revealed from studies on peer revision through CMC lies in the lack of paralinguistic cues in online peer revision. Paralinguistic cues, such as fundamental voice frequency, vocal intensity, speech duration, speech rate, pauses, and response latency, are usually used to declare a speaker's intention in face-to-face communication (Street, 1990). However, peer revision in CMC mode, as result of a lack of paralinguistic cues, may fail to transfer speakers' emotional intentions and then cause some problems during their communication. For example, students' feedback may be considered to be overly critical, hostile, and unkind to their peers' writing (Nelson & Murphy, 1992). Thus, students need to be more sensitive to the peers' intentions and offer a clear, concise, and informative turns to facilitate their communication. Henri (1992) found that the social cues, which can be defined as a "statement or part of a statement not related to formal content of subject matter" (p.126), can facilitate learners' communication not only in face-to-face interactions via verbal or nonverbal messages (Kaiser & Wehrle, 2001) but also in online contexts with words or special symbols in text messages (Walther & D'Addario, 2001). Reading social cues not only facilitates the understanding of the transmitted message, but also helps define the message style from which receivers may infer certain impressions about the communicator's intentions (Lea & Spears, 1992).

Hence, it seems that further investigation is needed to examine how students engage in the online peer revision with the help of social cues.

Given the rapid increase of networked computers in language classrooms, peer revision via CMC has become a new tactic for EFL writing. However, to answer the question of whether online peer revision can be an alternative to face-to-face peer revision, most of the studies have focused on the effects of peer revision in face-to-face and online modes (DiGiovanni & Nagaswami, 2001; Liu and Sadler, 2003; Schultz, 2000; Wang, 2004). As Leki (2001) indicated, it is of importance to understand students' voices about the problems students have in online peer revision, students' acceptance of online peer feedback, and their experiences of online peer revision. Therefore, studies concerning students' perceptions of peer revision via CMC merit more attention.

To explore an in-depth understanding of online peer revision, this present study aims to explore how college students engage in peer revision in a synchronous online environment, how social cues function in the process of online peer revision, and how they perceive online peer revision. Three research questions are generated as follows.

1. What comments emerge from synchronous online peer revision in terms of nature (revision-oriented versus non-revision-oriented), areas (global versus local), and types (evaluation, clarification, suggestion, and alteration)?
2. What roles do social cues play in the process of peer revision via a synchronous online mode?
3. How do college students perceive peer revision via a synchronous online mode?

Organization of the Thesis

In addition to Chapter 1, which contains the background, purpose and research questions, this thesis is organized based on the following structure. In Chapter 2, I review existing literature related to peer revision and CMC in detail. In Chapter 3, I propose the

method of the study, including setting, participants, online system, and the means for data collection and analysis. In Chapter 4, I display the results in response to the research questions. The thesis ends with Chapter 5 where I discuss and summarize the study findings as well as mention implications derived from the findings.



CHAPTER TWO

LITERATURE REVIEW

This chapter introduces the theories and studies for implementing peer revision activities in L2 education. Two major themes—peer revision and CMC—will be reviewed and discussed in this chapter. Each theme comprises several subthemes and is discussed based on language learning and teaching. A combination of the two themes is presented at the end of the review as a gap statement for the present study.

Theoretical Framework of Peer Revision

Research based on theoretical stances of peer revision activities has offered substantial evidence that peer revision activities facilitate L2 learners to develop not only their L2 writing skills but also their overall L2 language abilities through the negotiation of meaning during peer revision activities (Liu & Hansen, 2002). There are some theoretical stances that support the use of peer revision in writing classrooms—process writing approach, collaborative learning theory, and sociocultural theory.

Process Writing Approach

Process approach to writing, or process writing, has gained considerable attention from writing educators worldwide. The approach stems from “the snowballing recognition that recursiveness is a major characteristic of the natural process of composing and that, in the process, the writer repeatedly revises his/her drafts” (Li, 1992, cited in Cheong, 1994, p. 63). This process approach does not view writing as a product-oriented activity but it regards writing a dynamic and recursive process leading to the end product. Hence, the emphasis of writing pedagogy has shifted to the process of writing in which students are highly encouraged to go through different stages of composing and adopted strategies for

better outcomes (Liu & Hansen, 2002; Villamil & de Guerrero, 1996). According to Tompkins (1990), the emphasis of the process writing focuses on the process of creating writing rather than the final product. The initial focus is on creating quality content and learning the genres of writing. When writing, students work through the stages of the writing process. The creation of writing occurs in basically five stages: prewriting, drafting, revising, editing, and publishing. Prewriting is the planning and idea-gathering stage. Drafting refers to the process of composing a rough draft. Revising is the process of improving the draft. Students reread their work and share it with a partner or small group; they then make changes in the writing based on the feedback from their peers. Editing is the process of correcting mechanical errors. Publishing, or sharing, is accomplished in a wide variety of ways when the work is in final form. Student of all ages move back and forth among these stages while writing (Gardner & Johnson, 1997).

The process approach to teaching writing has been the object of substantive research within second and foreign language contexts (Cumming, 1989; Krapels, 1990). Taylor (1981) described writing as “a discovery procedure which relies heavily on the power of revision to clarify and refine that discovery” (p. 8). As such, on the basis of process writing theory, revision or editing processes of text through multiple drafts is regarded as a crucial factor that helps learners achieve higher quality in their final written work. Hence, over the past decades, peer revision has been employed as an effective strategy to develop skills in self-expressing and writing composition in both L1 (Nystrand, 1986) and L2 (Mangeldorf & Schlumberger, 1992; Witbeck, 1976).

In higher education, the use of peer feedback currently forms a significant part of the pedagogical practice. One of the reasons for this is the increasing attention for the development of complex competencies that ask for more, and more differentiated feedback to support the learning process of students. Peer revision can be defined as “the use of learners as sources of information and interactants for each other in such a way that

learners assume roles and responsibilities normally taken on by a formally trained teacher, tutor, or editor in commenting on and critiquing each other's drafts in both written and oral formats in the process of writing" (Liu & Hansen, 2002, p. 1). According to Caulk (1994), writing instructors are to help students develop the skills to stimulate ideas, explore ways of expressing them, and examine and refine their writing during the process of composing. Thus, many ESL writing teachers have incorporated peer revision activities, in which students read each other's drafts and make suggestions for revision, into their process-oriented curriculum in recent years. Peers engage in a process over multiple drafts during which learners work together to offer feedback on one another's texts in both written and oral fashions. Accordingly, it has generally been assumed that students, when working together, are able to help one another and provide input for each other on the issue under discussion (Amores, 1997).

Therefore, on the basis of process writing theory, peer revision activities which enable students to get multiple sources of feedback across various drafts strongly underpin process writing with a focus on drafting and revision.

Collaborative Learning Theory

Another theoretical framework that promotes the use of peer revision is collaborative learning theory. Bruffe (1984) defined collaborative learning as "the type of learning that takes place through communication with peers and stated that there are certain kinds of knowledge that are best acquired in this manner (p. 642)." Based on the collaborative learning theory, knowledge is socially constructed (Liu & Hansen, 2002; Lantolf, 2000; Warschauer, 1997).

Collaborative learning theories have begun to impact on L2 writing. For example, in writing groups, students negotiate meaning when they help each other revise their papers (Gere, 1987). Learning in writing groups is reciprocal and improves students work

(Bruffee, 1984). Moreover, L2 writing researchers have found a number of linguistic gains from collaborative writing and revising. For example, collaborative writing groups can lead to decision making, “allow learners to compare notes on what they have learned and how to use it effectively and offer learners increased opportunities to review and apply their knowledge of L2 writing through dialogue and interaction with their peers in the writing group” (Hirvela, 1999, p. 8).

L2 research has shown that in the process of co-authoring, L2 learners consider not only grammatical accuracy but also discourse (e.g., Donato, 1988; DiCamilla & Antón, 1997; Storch, 2002; Swain & Lapkin, 1998). Furthermore, depending on the kind of group/pair dynamics formed (Donato, 1988; Storch, 2002, 2003), collaborative writing may encourage a pooling of knowledge about language, a process Donato termed collective scaffolding (Donato, 1988, 1994), which refers to the way the environment may be structured in order to facilitate learning. These results are not surprising since peer revision activities are one kind of collaborative group work which may result in more opportunities for learners to negotiate meaning when they work with peers. Additionally, in the field of L2 acquisition, researchers have found that negotiations of meaning occurring during peer revision of writing shape L2 learners’ revising strategies, increase their responsibility for the learning process and allow them to develop audience awareness (de Guerrero & Villamil, 1994; Mangelsdorf, 1992; Mendonça & Johnson, 1994). Therefore, due to the advantages mentioned above, peer revision has become a common writing activity.

Through collaborative learning, students create a discourse community in which they negotiate with one another so as to assist their peers to better express their thought in writing. It has been shown that, as a form of collaborative learning, peer revision groups contribute to critical thinking (Hyland, 2003; Nelson & Murphy, 1992), to better quality of written products (Nelson & Carson, 1998), to an enhancement in writing confidence (Fox,

1980), and to an increase in overall language proficiency (Liu & Hansen, 2002). Students practice the target language in authentic and meaningful communicative contexts as they interact with each other while accomplishing collaborative tasks.

To sum up, through collaborative peer revision activities, language learners are learning and using the target language at the same time. They can develop not only their writing ability but also other language skills, for example, communicative competence (Lee, 2004) and critical reading ability (Hyland, 2003; Nelson & Murphy, 1992).

Sociocultural Theory

Sociocultural theory, according to Vygotsky (1978), is characterized by the belief that human cognitive functions, such as voluntary memory, reasoning, and language learning are mediated mental activities (Donato, 2000). Vygotsky argued that “these mental functions could not study properly through controlled experiments or through introspective methods; instead, he believed that mental activities could only be fully understood when observed either in its formation over time, or when it is disturbed” (Lantolf & Pavlenko, 1995, p. 108).

Social interaction is believed to be a fundamental issue of a learner’s everyday life and thus the most basic locus where learning takes place. In this view, learning is not something an individual does alone but is a collective endeavor which necessarily involves other individuals (Aljaafreh & Lantolf, 1994; Swain, 2000). One key factor of social interaction is the context in which it is situated as what Wertsch (1998) explained that “human mental functioning is inherently situated in social, interactional, cultural, institutional, and historical contexts” (p.3). Therefore, human cognitive functioning cannot be separated from the given larger context (Oxford, 1997). In this sense, some researchers who are interested in the field of peer revision hope to test the hypothesis. For example, Villamil and de Guerrero (1996) described the social behaviors during the peer revision

process. They concluded that collaborative writing groups are a complex process that fosters a myriad of communication activities, including collaboration, taking and relinquishing authority and providing scaffolding. Students in their study tried to establish an environment full of camaraderie and compromise. Hence, peer responses can be a catalyst to L2 development (Mittan, 1989).

Sociocultural theory, as an encompassing paradigm, consists of various concepts, of which two related to peer revision activities will be further discussed in the following: a) zone of proximal development and b) scaffolding.

Zone of proximal development

First theoretical stance supporting the use of peer revision in writing courses is based on Vygotsky's (1978) Zone of Proximal Development (ZPD). According to Vygotsky, ZPD refers to the difference between one learner's actual and potential levels of development. To verify the relationship between ZPD and language learning, Vygotsky (1978) contended that "learners benefit most from social interactions concerning tasks that they cannot do alone but can do in collaboration with more knowledgeable or more experienced individuals" (p. 86). Also, ZPD is conceived of as "the collaborative construction of opportunities for individuals to develop their mental ability" (Lantolf, 2000, p. 17). Central to the definition is the appearance of expert-novice interaction, which was identified as the most effective among four interactive patterns in creating conditions conducive to learning (Storch, 2002).

In addition, from Vygotsky's viewpoint, human learning and development result from social interaction where an individual learns to expand his or her current competence through the guidance of an expert or a more experienced individual. In other words, to encourage ZPD for learning, negotiation between an expert and a novice is required so that learners may engage in cognitive restructuring or elaboration for cognitive growth. There

are also various interpretations of ZPD with its application to different teaching and learning settings. For example, Antón (1999) investigated devices the teacher used to foster negotiated collaboration with students of French and to help the students advance through their own linguistic ZPDs. Ohta (2000) examined interactive process between adult L2 Japanese dyads in form-focused tasks and found that the learner's sensitivity to subtle interactional cues plays a crucial role in assisting the other to reach the potential level of development. Moreover, Donato (1994) uncovered that via analysis of the expert/novice dialogue, they show how the learner was able to assume responsibility (self-regulation) for her L2 performance by appropriating the assistance negotiated between herself and the expert.

Although individuals can often come together in a collaborative posture and jointly construct a ZPD where everyone contributes something to the interaction, however, some researchers argue that ZPD does not require the presence of expertise. Assistance should be provided only when needed, and withdrawn as soon as the learner shows signs of self-control or ability to function independently. Thus, Aljaafreh and Lantolf (1994) contended that optimal assistance is the one which is both graduated and contingent. That is, help should start at a highly strategic, implicit level and gradually become more specific until the appropriate level is accomplished.

Scaffolding

The concept of scaffolding was developed along with ZPD, which was first used by Vygotsky and Luria in reference to how adults introduce children to cultural means (de Guerrero & Villamil, 2000). Scaffolding can be defined as a process in which “a knowledgeable participant creates, by means of speech, supportive conditions in which the novice can participate and extend current skill and knowledge to higher levels of competence” (Donato, 1994, p. 40). In this sense, learners at a certain level of development

are drawn by scaffolded help from more capable others into another more advanced space where they are able to solve problems or perform tasks independently (Storch, 2002). For Aljaafreh and Lantolf (1994), it is “the idea to offer just enough assistance” (p. 469) that constitutes the key to the occurrence of scaffolding.

Employing the concept of scaffolding, many L2 writing researchers have investigated the influence of interaction of group work in writing classrooms (e.g., de Guerrero & Villamil, 1994; Donato, 1994; Villamil & de Guerrero, 1996). These research results indicate that collective scaffolding takes place in collaborative work (Donato, 1994; Guerrero & Villamil, 1994; Villamil & de Guerrero, 1996) and would lead to long-term language development of both expert and novice learners (Donato, 1994). Therefore, peer revision activities which emphasize the necessity of interaction and communication among students for mental processing may benefit all members of a group.

The way the expert establishes scaffolding has been explicitly shown in studies of language teaching and learning. For example, de Guerrero and Villamil (2000) corroborated mutual scaffolding by bringing together two novice ESL learners in a revision task. Although the reader played a dominant role at the very beginning, the writer gradually developed his own revising strategies and ended up coming to make a reciprocal endeavor with the reader.

These theoretical foundations, process writing, collaborative learning theory, and sociocultural theory, underpin the value of peer revision activities for the writing instruction since it offers opportunities for learners to test their knowledge and learn from peers through negotiation of meaning. In the following, we will focus on four main areas of the literature review on a) benefits of peer revision activities, b) drawbacks of peer revision activities, c) training in peer revision, and d) studies of peer and teacher feedback.

Merits of Peer Revision Activities

Some studies addressed the effectiveness of peer response groups regarding writing improvement and students' perceptions. Proponents of peer revision have made a number of claims about its cognitive, social, and linguistic benefits, most of which have been substantiated by extant empirical evidence.

On the cognitive level, Mendonça and Johnson (1994) found that the students tended to actively initial negotiations during the process of peer revision and helped the writers become more aware of their audience and encouraged them to change their written text in light of peers' responses. The suggestions and explanations provided during the peer revision activities enable the students to show what they know about writing and to use that information in their following revision. In addition, peer revision activities allow the students to develop audience awareness (Zamel, 1982) and allow them to modify their written texts to meet the needs of their audience.

In terms of social benefits, the students constantly receive "reactions, questions, and responses from authentic readers during the process of peer revision" (Mittan, 1989, p. 209), and therefore they can understand what has been done well and what remains puzzled. Peer revision enhances the students' communicative power by encouraging learners to express and negotiate their ideas (Mendonça & Johnson, 1994). Peer revision activities also result in the enhancement of confidence and abatement of apprehension by allowing students in this study to see peers' strengths and weaknesses in writing (Leki, 1990). Mendonça and Johnson (1994) found that all students in this study perceived peer revision helpful because it helped the writers become more aware of their audience and provide more ideas with the writer. During the process of peer revision, the students may obtain opportunities to establish collegial ties with one another and thus they may cement their friendship via students' collaboration (Hirvela, 1999).

On the linguistic level, Hirvela (1999) discovered that the learners can obtain

invaluable opportunities to sharpen their reading and writing abilities by drawing on peers' strengths and resources since peer revision activities entail recursive processes. Students can also practice their target language in authentic and meaningful communicative contexts during the process of collaborative discussions. For example, Mangelsdorf (1989) argued that the students can gain a chance to discuss issues such as appropriate word choice and grammatical structures. In addition, to accomplish the task of peer revision, the learners have to go beyond sentential levels and engage in unplanned conversations in discursal levels and even practice turn-taking strategies to facilitate the peer revision activities. Accordingly, the L2 learners can negotiate their ideas and contribute to their development of L2 learning through peer interactions.

In Taiwan context, Chou (2003) found that the English-major students were able to utilize different language functions, such as *informing*, *eliciting*, *directing* and *restating*, to engage in various topics about the coherence of the essays, the content and the organization, grammar, and so on. Moreover, the most often discussed topics were those regarding the content of the essays and grammatical problems, which showed that the students were concerned much about both the ideas and form in writing. The results also reflected that the students actually could be well-informed peers to help others solve problems in writing. They informed each other not only knowledge of the language and writing but world knowledge which they acquired from their own particular experiences as well and therefore improved and better their essays after the peer revision.

In addition, some other studies have been launched to investigate students' perceptions of the peer revision and its impact on the enhancement of English writing quality (Mangelsdorf, 1992; Mendonça & Johnson, 1994; Zhang, 1995) but generated mixed results. Mangelsdorf (1992) reported on a study to investigate advanced ESL students' attitudes toward peer revision and found that 69% of the learners had positive reactions to peer revision. Finally, the students appeared to be working harder to impress

their classmates, possibly because they had a lot of respect for their classmates. The students did better work when they knew their work would be made public. Reciprocally, the poorer performing students seemed to accept the feedback from their peers even if it was sometimes harsh, and to view their teacher as a resource who could help them. This makes for a much nicer teacher-student relationship with more teaching, and less judging (Wolfe, 2004).

Similarly, Mendonça and Johnson (1994) interviewed 12 ESL college students participating in peer reviews in a writing course. All of the 12 students in the study reported that they found the peer review activity beneficial. Having another reader to examine their drafts helped them see the advantages in their essays and the points which needed revision. Likewise, in Jacobs, Curtis, Braine, and Huang's paper (1998), 111 first-and second-year undergraduate ESL students (44 Hong Kong and 7 from Taiwan) were enrolled in writing courses in which peer, self, and teacher feedback was employed. To analyze students' preference to different types of feedback, a questionnaire was administrated. The results indicated that 93% of the participants preferred to have peer feedback on their writing.

In summary, peer comments has been found to be beneficial to both college (de Guerrero & Villamil, 1994; Mendonça & Johnson, 1994; Villamil & de Guerrero, 1996) and secondary (Tsui & Ng, 2000) learners in terms of their writing and revision processes. In addition, peer revision enhances a sense of audience (Mendonça & Johnson, 1994; Tsui & Ng, 2000; Zamel, 1982), helps develop students' critical reading and analysis skills (Chaudron, 1984), raises learners' awareness of their own strengths and weaknesses, encourages collaborative learning, and fosters ownership of text (Tsui & Ng, 2000), even oral fluency development (Mangelsdorf, 1989), and possesses positive perceptions of peer revision (Jacobs et al., 1998; Mangelsdorf, 1992; Mendonça & Johnson, 1994).

Demerits of Peer Revision Activities

Although there benefits put forth in the literature, there are also a number of criticisms against peer revision being used in L2 writing. For example, some researchers have indicated that peer revision may cause some problems among many L2 writers in two major aspects—linguistic, affective domains, and practical problems in the classrooms (Amores, 1997; Leki, 1990; Nelson & Murphy, 1992, 1993; Wolfe, 2004).

First of all, in terms of linguistic constraints, the students sometimes focus only on “surface concerns” instead of semantic or textual ones and tend to offer vague and even unhelpful comments (Leki, 1990). Second, some researchers contended that the most recurring concern among practitioners is the belief that the students are not capable of detecting and correcting errors in the L2 (Leki, 1990; Nelson & Murphy, 1992, 1993) and are unable to offer concrete and useful feedback. Some researchers claimed that the learners tended to offer rubber stamp advice when revising peers’ works (Mendonça & Johnson, 1994; Tsui & Ng, 2000). Third, a serious question that has been posed is whether peer revision yields the type of quality product that the teacher-guided revision might produce and whether it leads to enough quality revisions to warrant the class time that is required (Berger, 1990). Finally, due to a lack of formal L2 rhetorical schemata, the students may misunderstand the content and structure of peers’ texts, leading to counterproductive feedback (Liu & Hansen, 2002).

On the affective level, Nelson & Murphy (1992) found that if the students are too overtly critical to their classmates’ writing while doing peer revision, they may become antagonistic and thus interactions of the group are at times unpleasant. In fact, “the nature of responding to peers’ drafts sometimes generates a sense of discomfort and uneasiness among the participants. The students can become rather defensive when their work is criticized, especially by their peers” (Amores, 1997, p. 519). Furthermore, while doing peer revision, some students may be uncertain about the value and validity of their

classmates' responses (Leki, 1990). The students may not feel their classmates, who are still learning the language, are qualified to critique their works and may doubt their recommendations (Allel & Connor, 1990; Mangelsdorf, 1992; Nelson & Murphy, 1993). In this sense, the students may prefer teacher feedback to peer feedback, which does not mean that peer revision refers to a waste of time (Nelson & Carson, 1998; Zhang, 1995).

The final problem is that the students may be late or missing their homework. One way to motivate the student to be on time is to threaten a reduced grade, but this puts the teacher in the role of "enforcer", which can lead to a very negative student-teacher relationship (Wolfe, 2004).

Training in Peer Revision

A fundamental question all L2 writing researchers and teachers have concerning peer revision is the extent to which peer revision is incorporated into students' following revision (Connor & Asenavage, 1994; Mendonça & Johnson, 1994; Tsui & Ng, 2000). Connor and Asenavage (1994) indicated that the students employ only a small percentage of their peers' feedback into their subsequent revision. One of the possible reasons lies in students' inability to furnish concrete and helpful feedback (Mendonça & Johnson, 1994; Tsui & Ng, 2000). Inexperienced writers and readers often get caught in the subject of an essay and end up spending too much time discussing ideas rather than how their ideas are presented and expressed in writing.

Another very important aspect of peer revision to writing and its implementation in the ESL/EFL classroom lies in the role of training, which could be defined as "the preparation of students for participation in the peer revision activity" (Berg, 1999, p. 216). Hence, some researchers have found that students, especially those who have been trained in peer revision, are able to make useful suggestions about their peers' drafts since they are able to give specific comments and advice on their peers' writing and to pinpoint their

problems with content and rhetoric by responding to larger issues of clarity of ideas, organization, and development (e.g., Berg, 1999; Min, 2005, 2006; Paulus, 1999; Stanley, 1992; Villamil & de Guerrero, 1998).

Furthermore, Min (2005) found that “students were able to generate significantly more comments containing two or three characteristics—clarifying writers’ intentions, identifying problems, explaining the nature of problems, and making specific suggestions—and were able to produce more relevant and specific comments on global issues” (p. 293). In Faigley and Witte’s study (1981), it was found that the experienced writers made meaning changes more frequently, while most of the inexperienced writers only made surface revision. Consequently, detailed information and guidelines in instructing students to become effective peer responders are needed since instructed students tend to make more revision and instruction also results in a greater level of student engagement in the task of evaluation, in more productive communication about writing, and in clearer guidelines for the revision of drafts (Stanley, 1992).



Peer and Teacher Feedback

Apart from studies on merits and demerits of peer comments, a number of comparative studies on the relative effectiveness of teacher and peer feedback in facilitating revision have been conducted. Research comparing peer and teacher feedback has yielded mixed findings.

Some studies in L2 writing research, although scant and inconclusive, seemed to cast doubt on the value of peers’ comments. For example, Tusi and Ng’s study (2000) found that learners incorporated significantly more teacher comments than peer comments in their revisions and that teacher comments were considered significantly more effective than peer comments since students perceived the teacher as more experienced and more authoritative. Furthermore, teacher comments were considered to be of better quality and

they were more specific to students because the teacher was capable of explaining what the problems were and making concrete suggestions for revisions. Connor and Asenavage (1994) found that only 5 percent of revisions done were based on peer group collaboration and that most of the revisions incorporated were prompted by the teacher and tutors. Zhang's study (1995) showed that ESL learners unequivocally prefer teacher feedback over peer feedback when they are asked to make a choice between teacher feedback and non-teacher feedback. Miao, Badger, and Zhen (2006) argued that learners employed both teacher and peer comments into their writing, with the teacher feedback being favored since it brought about greater improvement. For these reasons, students prefer teacher feedback to peer feedback, but this does not mean students perceive peer revision as a waste of time (Nelson & Carson, 1998).

Other studies, on the contrary, have presented opposing results. For example, Mangelsdorf (1992), in her study of advanced ESL students' attitudes toward peer revision, discovered 69% positive reactions to peer revision. Hedgcock and Lefkowitz's (1992) conducted a comparative study of teacher and peer feedback in two intact FL groups: the experimental group—peer revision—performed on an equal level as that of the control group—teacher feedback. It was found that “peer revision can help student writers to separate the meaning expressed by their written words from the supplemental knowledge they bring to their writing and discover the gulf between intended and understood meaning of their text” (Berg, 1999, p. 231). Similar results were obtained in Mendonça and Johnson's study (1994). They found that all the students, through interviews, considered peer revision helpful in terms of audience perspective and idea development. Caulk (1994) also found that intermediate and advanced ESL learners seemed to offer as many comments as their instructor did and that even when students made the point as the teacher, they phrased it differently or from a different perspective, giving the writer an alternative way to think about the suggestion (p. 186). Teachers' comments were often aimed at the

whole piece, whereas the students' comments were more specific and rarely contained suggestions for the whole piece of the writing. Miao et al. (2006) also found that while peer feedback seemed to result in more meaning-change revision, teacher feedback focused on surface changes. Furthermore, although peer feedback had less influence than teacher feedback, it seemed to increase students' autonomy. Over-reliance on teacher feedback may reduce self-correction partly because students considered the teacher to be more authoritative than peers in terms of giving feedback.

This section mainly centers on the discussion of peer revision in a face-to-face environment and accounts for the popularity of peer revision in composition courses. In the following, we will focus on research of CMC in language education.

CMC in Second Language Learning

With the advances of Internet technology and widespread of students' electronic literacy in their daily activities, and the rapid increase in computerized classrooms at universities, new communication tools that stimulate new writing pedagogies have been advocated. Computer-mediated communication (CMC), which has appeared in primitive form since the 1960s and has been widely used since the late 80s, is probably one of the most influential and momentous CALL applications to date on language teaching and learning (Warschauer, 1996). CMC can be defined as "the process by which people create, exchange, and perceive information using networked telecommunication systems (or non-networked computers) that facilitate encoding, transmitting, and decoding messages" (Murray, 1997, p. 1) or more specifically as "use of computer systems and networks for the transfer, storage, and retrieval of information among humans" (Santoro, cited in Salaberry, 1996, p. 17). Unlike many individual CALL applications, CMC promotes meaningful human interaction that fosters the language learning process. This advantage may result in collaborative, meaningful, and cross-cultural human interactions among members of a

discourse community created in cyberspace (Salaberry, 1996; Warschauer, 1997).

Warschauer (1997) found that CMC encompasses such five features as text and computer-based interaction, many-to-many communication, time- and space- independent communication, long distance exchanges, and hypermedia links. In addition to affording individualized practice, network-based computers also provide learners with opportunities for interpersonal contacts and communicative engagement and then changes the way learners use language in interaction with one another (Kern, 1995). In addition, Kamhi-Stein (2000) also summarized advantages common to CMC over face-to-face oral exchanges as follows: “a) a text-based medium that amplifies students’ attention to linguistic form, b) a stimulus for increased written L2 production, c) a less stressful environment for L2 practice, and d) a more equitable and non-threatening forum for L2 discussion, especially those involving minorities” (p. 428).

Accordingly, as revealed the benefits of CMC, more and more writing teachers have begun conducting networked labs or combined writing activities with the use of computers (Warschauer, 1996). An amount of research has proved to be useful for language learning since CMC offers enhanced motivation for learners (Kern, 1995), a student-centered classroom (Beauvois, 1998; Gonzalez-Bueno, 1998), authentic audience and tasks (Gonzalez-Bueno, 1998, Zeiss & Isabelli-Gracia, 2005), balanced participation (Warschauer, 1996), reduce of anxiety (Kern, 1992), and improvement of proficiency and increase of self-confidence (Beauvois & Eledge, 1996).

To analyze the interaction during CMC, many studies have attempted to analyze the social effects of conferencing exchange because social cues are important in this form of analysis (Henri, 1992; Walther, 1996). The social cues of a message differ from the formal content of subject matter (Henri, 1992). According to Henri (1992), social cues could be defined as “those comments which are not related to formal content of subject matter” (p. 126). They reflect a person’s feeling and involvement when responding. In face-to-face

discussions, social cues occur via verbal or nonverbal messages (Kaiser & Wehrle, 2001). In online discussions, words or special symbols (Walther & D'Addario, 2001) in text messages can express social cues. Table 2.1 shows types and examples of Henri's (1992) social cues (p. 126).

Table 2.1
Types and Examples of Social Cues (Henri, 1992, p. 126)

Social cues	Example
A self-introduction and Greeting	Hi, I am Brian.
Closure	That's it for now.
Expressions of positive feedback	I'm feeling great...
Thanks	Thanks for your answer!
Compliments to others	You are so smart!
Anger	My solution is not wrong!!!
Regret	I should have learned it before.
Shyness	=^_^= (blushing)
Apologies	I'm sorry for having given you the wrong answer.
Condescension	Your answer is ridiculous.
The use of symbolic icons	:) or :-)

The effects of social cues on messages in face-to-face and online discussions are similar. Social cues expressing positive feelings often trigger reciprocation of positive social cues. This positive reciprocation pattern can help build friendships between group members and facilitate cooperation. Likewise, negative social cues tend to produce reciprocation of negative social cues, which can obstruct cooperation among group members. In addition, negative social cues may cause some members to withhold important contributions (or withdraw entirely) rather than possibly receive a rude disagreement, and thereby losing face (Chiu & Khoo, 2003).

Both positive and negative social cues can be harmful. In both face-to-face and online

discussions, if participants use too many social cues, they might focus on their social interaction rather than the discussion of the task (Walther, 1996). While excessive social cues might distract from attention on the task and reduce the number of subsequent contributions, negative social cues might show a stronger negative effect than positive social cues.

Comparison between Face-to-face and CMC

Earlier CMC research is to compare learning outcomes obtained respectively in CMC and face-to-face classrooms. The resemblance between CMC and face-to-face conversation in terms of spontaneity and discourse functions has convinced some researchers that certain communicative competence demonstrated in CMC would be gradually transferred to learners' spoken discourse (Chun, 1994). Felix & Lawson (1996) also found that students scored higher on the logical linking of ideas when using networked writing environments as opposed to face-to-face instruction. Moreover, both quantitative and qualitative studies of synchronous writing environments in the foreign language classroom have shown the positive impact of CMC (Warschauer, 1997). To test the claim, Payne and Whitney (2002) engaged university students of Spanish in either electronic or face-to-face discussions and compared their speaking performances in pre- and post speaking tests. The finding showed a significant improvement in speaking ability of the students involved in electronic discussions.

Comparing to face-to-face environment, L2 speakers have been found to participate more actively and with greater motivation when provided the chance to share their writing through online discussions (Sullivan & Pratt, 1996; Warschauer, 1996). For example, Warschauer (1996) found that 16 advanced ESL students in a composition course demonstrated a tendency toward more equal participation in computer mode than in face-to-face discussion. Moreover, the reasons to cause greater quality are that “CMC (a)

reduces social context clues related to race, gender, handicap, accent, and status; (b) reduces nonverbal cues, such as frowning and hesitating, which can intimate people, especially those with less power and authority; and (c) allows individuals to contribute at their own time and pace” (Finholt, Kiesler, & Sproull; Sproull & Kiesler, cited in Warschauer, 1997, p. 473).

CMC also presents a number of advantages over traditional writing environments. For example, Eisenberg and Ely (1993) state that the “interaction through networks helps break down communication barriers and inhibitions that often stifle the open exchange of ideas in traditional classrooms” (p. 2). A study by Kelm (1996), for example, showed that in computer-networked writing environments, the L2 students can participate anonymously in on-line discussions and, to some extent, overcome inhibitions encountered in face-to-face settings.

Language Learning in CMC

Research on CMC for improving FL performance have sparked some researchers to compare learning results in terms of discourse functions and syntactic complexity (Sotillo, 2000), quantity of generated discourse (Abrams, 2003; Pérez, 2003; Warschauer, 1997), and quality of discourse (Chun, 1994; Kelm, 1992; Kern, 1995; Stockwell, 1998; Warschauer, 1996). For example, Sotillo (2000) found real-time *NetMeeting* greatly facilitated graduate students’ thesis composing since the less skilled students were acquiring the skills and rhetoric of academic writing by imitating the format and style of the more experienced writers in the group and then gradually learning to solve problems independently.

As for quantity of generated discourse, Abrams (2003) investigated whether CMC can help learners improve their oral proficiency in intermediate German courses. More specifically, Abrams tried to uncover whether or not CMC triggers increase language

output in terms of fluency and general proficiency, a richer lexicon and syntactically more sophisticated language. The results showed that students in synchronous CMC (SCMC) eclipsed those in the face-to-face group in terms of amount of output.

In addition, online results have also been found to be positive with regard to quality of discourse. Investigating whether computer-assisted class discussion (CACD) can be effectively for beginning learners to increase their spoken and written communicative language proficiency (CLP), Chun (1994) found that over two semesters from first- and second-semester German classes through the use of a synchronous CACD, *InterChange*, class discussions on a computer network, more specifically the CACD, offered excellent opportunities for foreign language learners to cultivate discourse skills and interactive competence because students asked more questions, gave feedback to others, and used leave-taking expressions and farewells to end conversations.

Moreover, in a comparison of discourse produced by two groups of university-level French learners, Kern (1995) found an increase in both the number of turns and length of utterances in the group using real-time *InterChange*. He also found that students in *InterChange* sessions produced more sophisticated language output than in oral discussions in terms of morphosyntactic features and discourse functions and more equal student participation was observed in the electronic discussion. Warschauer (1996) compared electronic discussions with the face-to-face discussions on two measure of complexity—lexical and syntactic complexity. The results showed that the electronic discussions involved significantly more complex language than the face-to-face ones, with more salient differences in syntactic area. Stockwell (1998) reported that the length of text produced by L2 students of Japanese increased considerably, from an average of approximately two lines of text in the first week to about nine to ten lines by the fifth week.

In spite of advantages, disadvantages of CMC were also found in the studies of

Sproull and Kiesler (1991), Belcher (1999), and Liu and Sadler (2003). Sproull and Kiesler (1991) found that electronic discussion tended to reduce conformity and convergence rather than enhancement of collaboration and the prevalence of hostile language known as “flaming,” which occurs due to the same features that encourage free expression and can have negative effects on classroom interaction, could hinder cooperative learning. Belcher (1999) cautioned that a lack of face-to-face communication and the time pressure may also have a negative effect on the quality of peer interaction in the CMC mode. Liu and Sadler (2003) pointed out the limitations of synchronous technologies: frequent problematic turn-taking or chaotic multiple comments might impede comprehension or revision.

Nevertheless, despite its disadvantages, CMC still carves out its niche in language education as an innovative and popular device. Many language practitioners and researchers are enthusiastically and approvingly embracing the networked technology and utilizing it in various ways. In the following, we will center on four different kinds of empirical studies of CMC in foreign/second language teaching and learning settings: collaborative learning in CMC and CMC versus online peer revision.

Collaborative Learning in CMC

As Internet technologies become widely used today, CMC has been reinvigorated with the enhancement of electronic communication recently and has changed the role of the computer in the classroom by enabling collaborative learning. Thus, Warschauer (1997) provided a review of computer-mediated collaborative language learning based on a sociocultural perspective. Freiermuth (2002) discussed merits and demerits of computer-mediated collaborative language learning and suggested proper ways to employ collaborative tasks via Internet chat.

The application to computer-mediated collaborative learning has been widely made to enhance learners’ writing performance. For example, Sotillo (2002) engaged five graduate

students of applied linguistics in a task of composing and revising their thesis collaboratively in a wireless university campus. With the use of real-time software of *NetMeeting*, the students were able to receive critical feedback, provide corrective input, and negotiate meaning while reading the same document on their computers at the same time. Sotillo discovered that the teacher decreasingly dominated the classroom talk and processes and the students made more inquiry, received more critical input, and collaboratively work to construct their products. In addition, a wireless community formed a set of supportive relationships which facilitated the provision of corrective peer and instructor feedback, and its incorporation into the revised texts. During the writing processes, the more experienced writers, by coaching novice student writers, helped them apply new knowledge about writing conventions to the process of writing and revising. Finally, students developed learner autonomy and controlled after a period of intense collaboration and they all made great strides on their thesis work after 16 weeks' collaboration.

Furthermore, comparing effects on writing performance by electronic and face-to-face discussions, Schultz (2000) pointed out that the collaborative task of peer revision was better enhanced by real-time *InterChange*. The *InterChange* discussion increased the students' feedback by allowing them to exchange messages at the same time whereas they had to wait for their turns in face-to-face mode. The generated scripts also offered them a better opportunity to pay attention to and reflect on discussion points and further to act on the suggestions in the following compositions.

However, although CMC was reported to be a beneficial medium for collaborative learning, Freiermuth (2002) argued that task design played a crucial role in determining the type and quality of the resulting collaboration. Hence, she proposed two questions as a reminder to better ensure the occurrence of sound computer-mediated collaborative tasks: "a) did the tasks offer the students sufficient opportunities to learn language, or were they

merely an opportunity for the learners to enhance their technological savvy? and b) did the tasks offer the students interaction with other students” (p. 36)? In addition, some aspects of electronic discussion could possibly mitigate against collaboration. Weisband (1992) indicated that it was more difficult to achieve consensus in online discussion than in face-to-face interaction. This suggested that electronic discussion reduced conformity and convergence (Sproull & Kiesler, 1991). Moreover, another main obstacle to a collaborative classroom was “the teacher-dominated nature of discussion, with classroom discourse dominated by the ubiquitous *IRF* sequence of an *initiating* move by the teacher, a *responding* move by a student, and a *follow-up* move by the teacher” (Mehan, cited in Warschauer, 1997, p. 474).

Accordingly, CMC environment appears to be a double-edged blade because of its facilitative and debilitating features attributed to collaboration. Research on how to achieve collaboration with the help of online tools in the classroom still merits some attention.

CMC and Peer Revision Activities

In recent years, the process of providing peer feedback is increasingly facilitated by using electronic learning environments. Exchanging peer feedback online also makes it easier for teachers to monitor the process and to intervene. Thus, a new form of feedback is emerging with the expansion of the Internet, electronic feedback (e-feedback). It refers to feedback in digital, written form and transmitted via the web, which transfers the concepts of oral response into the electronic arena (Tuzi, 2004). More specifically, electronic feedback, according to Ware and Warschauer (2006), means that human feedback, particularly peer revision, can be offered via technology.

Additionally, although research on oral peer feedback for L2 writers indicated benefits and drawbacks, it did not consider the electronic environment as a locale for communicating. Accordingly, differences between oral (face-to-face) and written (online)

feedback cast doubt on whether electronic feedback retains the benefits from oral feedback. Oral feedback is filled with non-verbal and intonational information transmitted during a conversation, which assist learners in deciphering, understanding, and negotiating meanings. E-feedback, on the contrary, does not transmit these beneficial elements. Moreover, L2 writers using e-feedback may not be able to participate in the communication activities in traditional oral response because the non-verbal elements and visual aids are missing, because there is a time delay involved in the dialogue, and because communicating via writing in e-feedback makes encoding and deciphering messages more difficult (Tuzi, 2001). Hence, Guardado and Shi (2007) tried to prove whether e-feedback can trigger similar effects from the face-to-face mode and they found that e-feedback retains some of the best features of traditional written feedback, including a text-only environment that pushes students to write balanced comments with an awareness of the audience's needs and with an anonymity that allows peers to make critical comments on each others' writings.

With similar advantages of conventional face-to-face peer revision, virtual peer revision adopts additional strengths of computer technology by allowing students working at any time and at any location with record-keeping of all comments from online discussion and text changes. The record-keeping function facilitates student reflection and (teacher- or self-) monitoring of the idea exchanges and revising actions (Tzui, 2004). Thus, online peer feedback has become common in university writing classes and a growing body of research has compared traditional face-to-face peer revision groups versus computer-mediated peer conferences in the context of university or pre-college writing classes (Braine, 2001; DiGiovanni & Nagaswami, 2001; Hewett, 2000; Liu & Sadler, 2003; Schultz, 2000; Tuzi, 2004). Most of the studies examined how well peer revision can be transferred to computer-mediated interaction. For example, Hewett (2000) compared group talk for peer revision in face-to-face and synchronous chat modes. Oral

talk focused contextually on abstract, global idea development, whereas online chat facilitated group management and the writing tasks. Revision from the synchronous chat included more frequent direct use of peer ideas, whereas revision from oral talk consisted of more frequent imitative or indirect borrowing of peer ideas, and self-generated idea use. Hewett suggests that different media may influence types of talk and shape the follow-up revision.

Heift and Caw (2000) explored interaction patterns of 12 students of a French foreign language class in a synchronous writing environment on a Local Area Network (LAN). The students spent 1 hour of class instruction using *Aspects*, a synchronous writing environment for the Macintosh for one semester. The results revealed that students do provide more on peer feedback, either in the form of social or cognitive acknowledgement, than about-task and off-topic combined.

Schultz (2000) compared face-to-face with computer-mediated peer feedback by examining the revisions that intermediate and upper-intermediate French students made in a writing classroom. She found that the students made more specific, local changes in the online mode because writers were able to save time and follow the detailed suggestions made in writing. The students in the face-to-face mode, on the other hand, made more global changes, which seemed to facilitate more rapid interaction and thus a better exploration of the writers' intentions and goals. Moreover, the students who received feedback in both modes made the most productive use of feedback, which implies the combination of face-to-face and online peer revision activities in the writing course for the most effective writing instruction.

In the studies of exploring the peer feedback interactions, DiGiovanni and Nagaswami (2001) analyzed types of negotiations by 32 ESL students in online peer review (OLPR) and face-to-face peer review (FFPR), and examined students' perceptions in both modes of peer revision. The results indicated that the students employed the same

types of negotiations for both modes of peer revision but almost all of the students were in favor of OLPR due to several benefits. First, the students were focused on the task in the OLPR mode. Second, the students' interaction could be closely monitored by the teacher in OLPR situations. Finally, with the help of the printouts, the students did not have to hinge on their memory to revise drafts according to peers' oral comments. To surmount problem of time restraint when engaging in OLPR, the researcher suggested first using online peer revision synchronously and later having peer dyads interact asynchronously.

To understand the effect of peer comments in the face-to-face and online modes respectively, Liu and Sadler (2003) conducted research to examine whether offering comments and interaction via different modes (i.e. technology-enhanced versus traditional) trigger differences in areas (global versus local), types (evaluation, clarification, suggestion, and alteration), and nature (revision-oriented versus non-revision-oriented) of feedback generated from peer reviewers in L2 writing, and the impact caused by different comments on students' revisions. The results revealed that the technology-enhanced group offered more number of comments and higher percentage of revision-oriented comments, and results in more number of revisions incorporated. While participants in the technology-enhanced group perceived multi-user domains object-oriented (MOO¹) interaction more attractive, face-to-face communication was more effective than MOO due to the nonverbal communication features. In light of different modes of comments (Microsoft Word editing versus pen and paper) and interaction (MOO versus face-to-face), the findings suggested that a combination of the use of Word editing and face-to-face interaction might be more effective for peer revision in L2 writing classrooms.

Tuzi (2004) compared how twenty ESL writers revised, given oral feedback from teachers, writing centers, and friends, as well as asynchronous electronic feedback from

¹ A MOO is an online chatroom that allows users to hold virtual real-time conversations with other users connected to the same MOO via the Internet.

their peers. He found that although the students preferred oral feedback, they actually made more revisions in response to electronic feedback at the clause, sentence, and paragraph levels, rather than at overall global organization. He suggested that the students' preference for oral feedback might result from the familiarity of oral feedback as a classroom practice.

In Taiwan, Wang (2004) observed the effects of online peer feedback gained from 30 college students in a process-oriented writing program (OPWP). In OPWP, the students were required to write their first drafts and post them on the discussion board. Then, they were encouraged to provide their classmates with comments on the writing drafts. Based on the data-mining technology and attitude questionnaires, the results of the study revealed that the students spent much time after class both on English writing and on providing feedback to peers during the OPWP. They considered the OPWP program to be beneficial to their writing.

On the other hand, using online peer revision is not always without flaws. For example, Braine (2001) revealed negative features of using technology for peer revision groups. He found that the students in the face-to-face classroom produced better quality essays by the end of the semester than those in the Local-Area Network (LAN)-mediated classroom. This finding was attributed to the difficulty students faced in navigating the multiple, simultaneous discussion threads of a large quantity of online writing. As a result, online feedback in L2 contexts was described as either an obstacle (Braine, 2001), a help (DiGiovanni & Nagaswami, 2001; Tuzi, 2004) or a mixture. Therefore, it was suggested to combine online feedback with traditional face-to-face sessions (Liu & Sadler, 2003; Tuzi, 2004).

The findings of the aforementioned studies indicated that online peer revision has become one of the activities utilized to enhance L2 learners' writing and thus has gained more importance in language teaching, especially in the writing instruction. However, they

also suggest further research on the effect of online peer feedback in L2 contexts because some L2 students were observed to participate more in non-threatening online environments than in traditional settings (Liu & Sadler, 2003; Sullivan & Pratt, 1996).

Based on the literature reviewed, this research aimed to explore comment patterns of peer revision via synchronous CMC, functions of social cues, and students' perceptions of online peer revision.

In the next chapter, methods to address the present study are presented in detail.



CHAPTER THREE

METHODOLOGY

The present study attempted to investigate college students' comments on others' writing drafts in online peer revision sessions, the functions of social cues, and their perceptions of online peer revision. In this chapter, the research method was described in detail, including the description of the course, online system, participants, data collection, and data analysis.

Description of the Course

The present study was undertaken in a regular 18-week English writing course at a public university in Northern Taiwan. The class met once a week for two hours. According to the language policy of this university, each student was required to take at least 6 credits of foreign language courses. Four of the six credits were Freshman English (4 credits) and another 2 credits of language course were from either an advanced English course or a language course other than English. Hence, this course, one of the elective advanced courses, was offered for non-English major students who had already completed Freshman English courses. According to the course syllabus, the purpose of the course was to help students become familiar with English composition structures and basic writing skills.

This course adopted a process writing approach, in which the students were required to work through three stages in the writing process: prewriting, drafting, and revising. In the prewriting stage, the students planned and brainstormed some ideas. Then, they composed their first drafts. Finally, they revised their drafts based on the feedback given by their peers and the instructor and completed their final drafts.

During the data collection semester, the students were required to write three assignments. Each writing task involved a writing cycle. Each writing cycle consisted of

pre-writing tasks, first draft, peer revision in face-to-face and online modes, second draft based on the revision, teacher's comments, a final draft, and a portfolio. Figure 3.1 shows the procedure of a writing cycle. As Figure 3.1 demonstrates, the first stage was the pre-writing task in which the students planned and brainstormed some ideas before composing their first drafts. The instructor taught the students common writing problems which were composed of minor and major writing problems. Minor problems included grammatical problems such as tenses, verb forms, word choice; major problems included sentence structure such as simple and compound sentences, paragraph structure and essay structure, and content. The instructor also taught the students how to compose a paragraph such as brainstorming, listing, outlining, drafting, revising and editing. After the

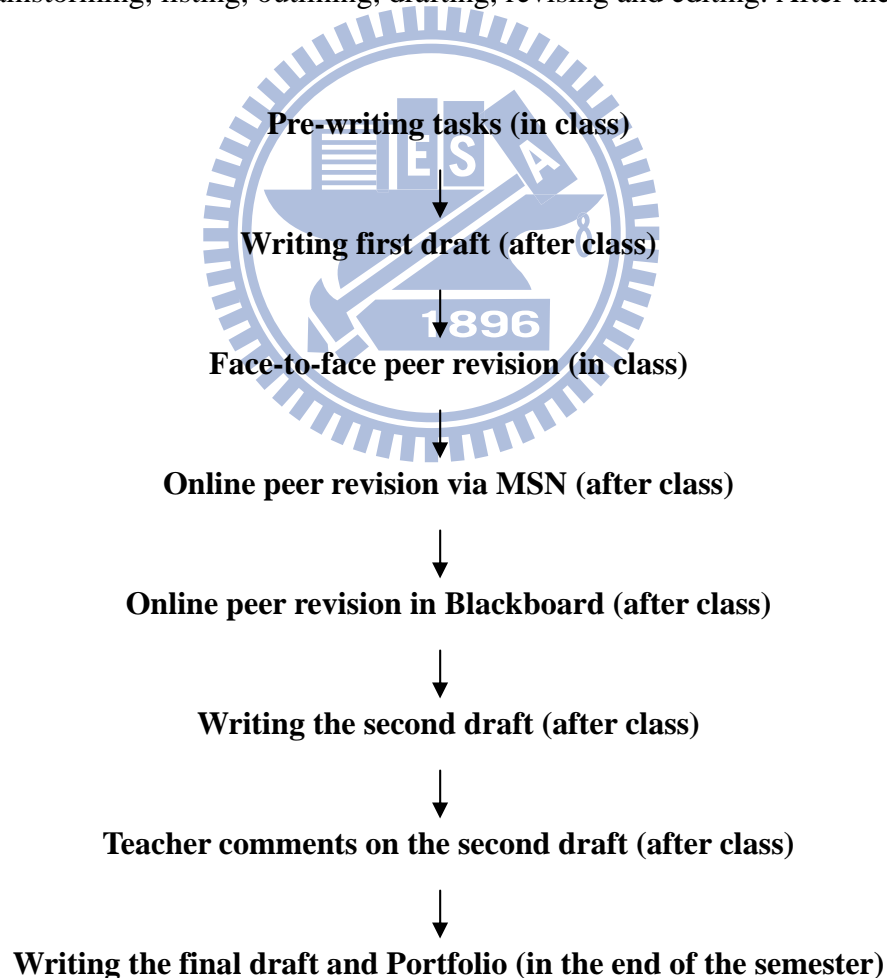


Figure 3.1 The writing cycles of the course

pre-writing task, students wrote their first drafts. A face-to-face peer revision was undertaken in the following class in which students paired up to read and give comments to the draft of each others' composition based on the peer revision checklist given by the instructor (see Appendix D). After class, the students were required to do online peer revision via MSN and Blackboard. Then, the students were required to write their second drafts based on the comments given by their peers from the face-to-face and online peer revision. The second drafts were graded by the teacher. In response to the teacher's comments, students were required to revise their second drafts and write the final drafts. The final product was collected in individuals' portfolios at the end of the semester.

Online System

The online systems used in this present study were MSN¹ and Blackboard². First, MSN, an acronym of Microsoft Network, was one of the popular instant messaging (IM) programs offered by Microsoft® and was especially designed with the functions of text and voice conversation, web-cameras, and transferring files. MSN presented users with a window interface entailing two major frames—conversation window and message typing area, as shown in Figure 3.2. The conversation window displayed the writer and the readers' ongoing communicative messages types earlier in their individual lower frame. Their messages in the message typing area could not be seen by the other peers until they were sent. Moreover, MSN could record conversation discourse and the attempts of transferring files, which could be retrieved from the computers; it is instrumental for subsequent data analysis.

¹ MSN is a free software utility which can be used to chat with others over the internet. MSN is a collection of Internet services provided by Microsoft. MSN Messenger can be acquired with great ease from the Microsoft Network MSN Webpage. For further information, please refer to its webpage <http://www.msn.com/>.

² Blackboard is a class delivery system designed to enhance teaching detailed information. Please refer to its webpage <http://www.blackboard.com>.

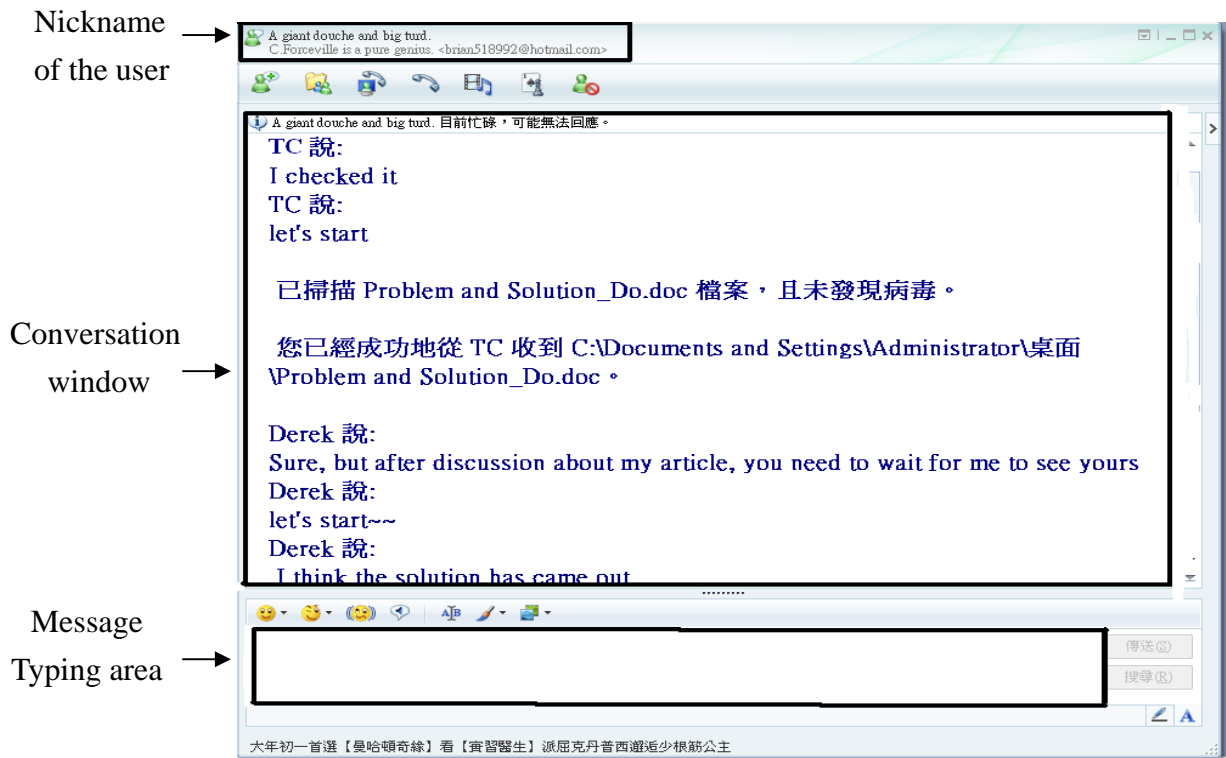


Figure 3.2 MSN system

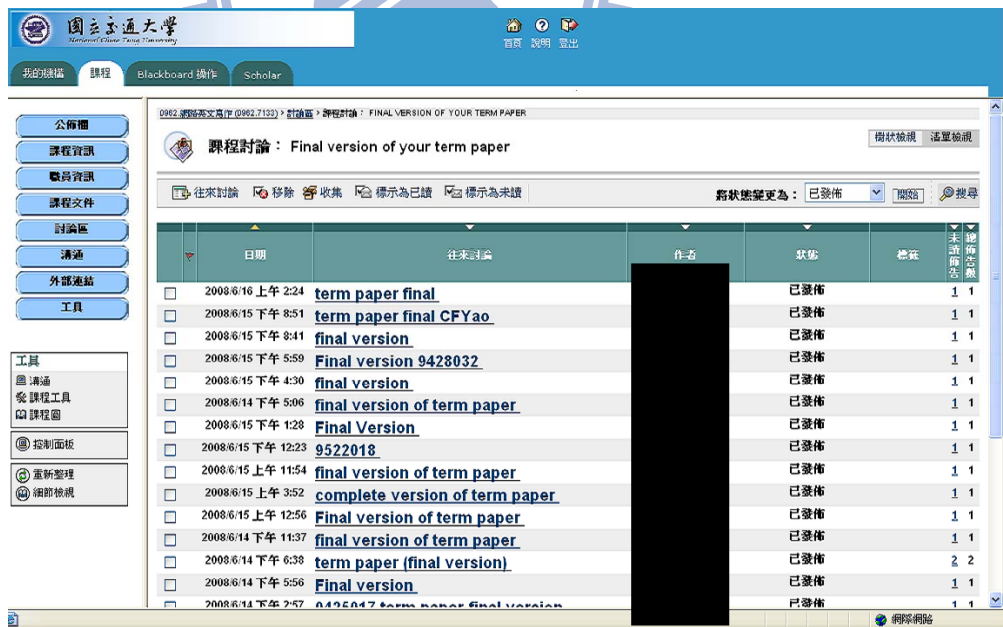


Figure 3.3 Blackboard Academic Suite

Blackboard, a widely-adopted class delivery platform offered by the university, was used as a venue to post the students' comments to their peers, as shown in Figure 3.3. Blackboard Learning System was accessed from the internet anytime and anywhere and thus students could retrieve all of their course materials, including a course syllabus assignments, lecture notes, slides, internet hyperlinks, and audio/visual aides, and submit their assignments, their writing drafts, and MSN logs. In addition to these functions, Blackboard was also used for students to do online peer revision, where they could read peers' assignments and offer comments.

Participants

Thirty students enrolled in this writing course in the spring semester of 2008. At the beginning of the semester, 22 students, 11 females and 11 males, volunteered to take part in the study and signed a consent form (see Appendix A). Their ages ranged from 20 to 23 years. They studied English for an average of 9.5 years. They were all non-English majors from different academic backgrounds. Then, twelve of the 22 students, 7 females and 5 males, volunteered to receive a follow-up interview at the end of the semester. Table 3.1 shows the participants' demographic information. They were given the code of X and Y. X refers to males and Y refers to females.

In the middle of the semester, a background questionnaire was employed to explore students' background and demographic information with respect to their experiences of English learning, online communication, writing, and their use of technology in the writing course (see in Appendix B). All of them had English writing experiences in high school and cram school. Eight of them, X6, X7, X9, X10, X11, Y8, Y10, Y11, took English writing courses in college. Most of them had no peer revision experiences except one student, X5, who experienced face-to-face peer revision in a previous writing course. Five of the twenty-two participants, X2, X5, X9, Y5, and Y11, experienced drafting, discussing,

Table 3.1

Demographic Information of the Participants

Participants	Age	Gender	Academic status	Major
*X1	21	Male	sophomore	Communications Engineering
*X2	21	Male	sophomore	Civil Engineering
X3	21	Male	sophomore	Biological Science and Technology
*X4	20	Male	sophomore	Information and Finance Management
*X5	20	Male	sophomore	Management Science
X6	22	Male	junior	Mechanic Engineering
*X7	22	Male	junior	Biological Science and Technology
X8	22	Male	junior	Industrial Engineering and Management
X9	22	Male	junior	Biological Science and Technology
X10	23	Male	senior	Information and Finance Management
X11	23	Male	senior	Management Science
Y1	21	Female	sophomore	Mechanic Engineering
*Y2	21	Female	sophomore	Civil Engineering
*Y3	21	Female	sophomore	Civil Engineering
Y4	20	Female	sophomore	Computer Science
*Y5	20	Female	sophomore	Biological Science and Technology
*Y6	20	Female	sophomore	Information and Finance Management
Y7	22	Female	junior	Information and Finance Management
*Y8	22	Female	junior	Management Science
*Y9	22	Female	junior	Industrial Engineering and Management
Y10	23	Female	senior	Electrical and Control Engineering
*Y11	23	Female	senior	Industrial Engineering and Management

* refers to those who were interviewed at the end of the semester.

and revising their writing products in their previous writing courses. As for using MSN for online communication, every student had the experience of chatting with others in Chinese or English through synchronous systems such as MSN, Yahoo Messenger, or asynchronous systems such as Bulletin Board System (BBS). They communicated online mainly for the purposes of chatting, discussing, and asking for help with their friends and classmates.

Data Collection

The data of the present study were collected from multiple sources, including a questionnaire, MSN logs, writing drafts, an interview, and course documents, such as a course syllabus, class slides, and handouts. Table 3.2 shows data resources and collection time. At the beginning of the semester, 22 questionnaires were administered in class. At the end of the third writing cycle, 58 MSN logs and 46 students' writing drafts were collected. Before the students' final exam, 12 interviews were conducted. Course documents were collected throughout the data collection semester.

Table 3.2

Data Resources and Collection Time

Data resources	Collection time
A Questionnaire	Beginning of the semester
MSN Logs	At the end of third writing cycle
Students' Writing Drafts	
An Interview	Before final exam
Course documents	Throughout the data collection semester

Questionnaire

Twenty-two Background Questionnaires written in Chinese (see Appendix B) were administered as a survey for the participants' background information. The Background questionnaire included 7 questions about the students' demographic information with respect to their, gender, age, major, and years of English learning (Q 1), their experiences of online communication (Q 2 and 3), the participants' past experiences in writing (Q 4 through Q 6), and experiences in the use of technology in the writing course (Q 7).

MSN Logs and the Students' Writing Drafts

After each peer revision session, the students were required to save their interaction

of online peer revision and uploaded their MSN logs to Blackboard. Since the students were allowed to use both English and Chinese in the online peer revision sessions, MSN logs written in English and Chinese were collected. Fifty-eight participants' MSN logs were collected after each writing cycle in order to examine the whole picture of how students offered peer comments and the functions of the social cues in their MSN communication. Moreover, 46 students' writing drafts were collected to verify the interaction content of their MSN logs.

Interview

A semi-structured interview, with 17 open-ended questions, was conducted in Chinese and audio-taped after the participants completed the three online peer revision sessions at the end of the semester (see Appendix C). Twelve out of 22 participants volunteered to participate in the interview. The interview for each participant lasted from 20 to 30 minutes. The interview served three functions. First, it explored the reasons why the students offered certain peer comments in the online peer revision based on the interview questions (Q 1 to 3). Second, it gained information of students' perceptions of peer revision in the online synchronous mode based on the interview questions (Q 4 to 10). Third, it investigated the functions of the social cues during the online peer revision sessions based on a preliminary analysis of the students' MSN logs and the interview questions (Q 11 to 17). To realize the functions of the social cues, I pointed to social cues and symbolic icons in the participants' MSN logs and asked the them to describe and elucidate their intentions and reasons of the social cues and symbolic icons.

Course Syllabus, Class Slides, and Handouts

A course syllabus, class slides, and handouts were collected from Blackboard. The course syllabus provided information on objectives, content, and schedule of the course.

Class slides and handouts demonstrated how the course proceeded and how the instructor adopted a variety of methods to teach L2 writing, such as face-to-face peer revision, class discussions, and instructions on writing for the students' assignments.

Data Analysis

The data analysis consisted of two parts—analysis of MSN logs and interview transcripts.

Analysis of MSN Logs

To address RQ 1 “what comments emerge from synchronous online peer revision in terms of different nature, areas, and types,” the MSN logs were analyzed to examine different kinds of peer comments from the online peer revision. In this study, content analysis was adopted to analyze the MSN logs. Krippendorff (2004) defined content analysis as “a research technique for making replicable and valid inferences from texts to

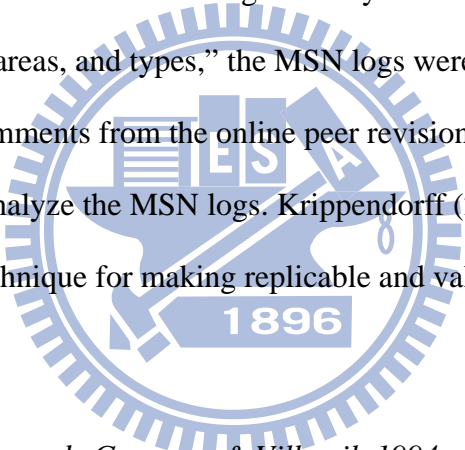


Table 3.3

Types of Episodes (cited from de Guerrero & Villamil, 1994, p. 486)

ON-TASK EPISODE:	An utterance or a group of utterances semantically related in topic or purpose to one discrete troublesource or a series of connected troublesources (as in the case if several errors within one sentence). An on-task episode may be interrupted and continued later in the course of the interaction.
ABOUT-TASK EPISODE:	A segment of conversation in which the participants talk about task procedures, for example, interpreting task instructions, rather than about specific troublesources.
OFF-TASK EPISODE:	A unit of discourse in which the participants are not engaged in revising a troublesource and are talking about issues or aspects of their lives unrelated to the content of the composition.

the context of their use” (p. 18). To conduct a content analysis, MSN logs were broken down into analytical episodes, which were defined as exchanges between a writer and his peer reviewer which were related to a specific topic. That is, an episode could be negotiation of idea arrangement, correction of the use of word choices, or simply chitchat on something off the writing essays (de Guerrero & Villamil, 1994, p. 486). Thus, MSN logs of each online peer session were coded into three different categories: on-task, about-task, and off-task episodes, as shown in Table 3.3. Excerpt 3.1 shows an example of on-task, about-task, and off-task episodes. As demonstrated in Excerpt 3.1, Y1 pointed out an error in X3’s topic sentence (line 2 through 4) and simplified X3’s supporting sentence (line 6 through 10), which were coded as on-task episodes because the messages were related to peer revision per se. Moreover, the students started their online peer revision at the very beginning by discussion of transferring files (line 1), which was coded as an about-task episode because it was not directly related to peer revision, but about the task procedure (i.e. transferring of files). Finally, they expressed their appreciation for the partners’ help and conversation (line 35 through 40), which were coded as an off-task episode, which was unrelated to peer revision per se.

Excerpt 3.1 (Y1 is the reviewer and X3 is the writer.)

- | | | |
|--|---|-------------------------|
| <p>1. X3: “哈囉。傳給我你的檔案。那我們開始囉！”</p> | } | <i>Off-task episode</i> |
| <p>2. Y1: “我先說吧。你的topic sentence很明確。可是最後
3. 一個字aspect應該要加，因為你舉了不只有一個
4. 例子，是吧！”</p> <p>5. X3: “對吼！XD，嗯嗯！”</p> <p>6. Y1: “然後你的第一個supporting sentence就是在說
7. ‘網路可以縮短人與人之間的距離’(In the past, the
8. only way to meet with someone who lives far away
9. from us is to travel far away there. It takes a lot of
10. time and energy.)這是你寫的。”</p> | } | <i>On-task episode</i> |

Liu and Sadler (2003). The coding scheme included comments in terms of nature (revision-oriented and non-revision-oriented), areas (global and local), and types (evaluation, clarification, suggestion, and alteration). Liu and Sadler (2003) defined each coding category as follows.

Global areas refer to the feedback concerning idea development, audience and purpose, and organization of writing, whereas local areas refer to feedback with regard to copy-editing, such as wording, grammar, and punctuation. Evaluation denotes comments on either good or bad features of writing; clarification signifies probing for explanations and justifications; suggestion stands for pointing out the directions for changes; alteration refers to providing specific changes (p. 202).

In terms of nature, Excerpt 3.2 shows an example of revision-oriented and non-revision-oriented comments. As shown in Excerpt 4.2, Y5 offered a non-revision-oriented comment (line 1 through 9), which did not intend Y6 to revise her original sentence. Y5 also offered a number of revision-oriented comments to Y6 (line 10 through 25), which suggested Y6 revising her original sentences.

Excerpt 4.2 (Y5 is the reviewer and Y6 is the writer.)

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Y5: “看這個句子<i>There is one thing most</i> 2. <i>unforgettable about my grandmother.</i>” 3. Y6: “我是想說省略一個關代(<i>that is</i>)在<i>most</i>後 4. 面。請問這樣有錯嗎?” 5. Y5: “最高級要有冠詞。這樣是沒錯，但是接起 6. 來就變得有點奇怪。” 7. Y6: “所以改成你說的那樣比較好吧!” 8. Y5: “應該可以不用改，不過有點奇怪。” 9. Y6: “嗯嗯!” | <div style="border-left: 1px solid black; border-right: 1px solid black; border-bottom: 1px solid black; width: 200px; height: 150px; margin-left: 10px;"></div> <p style="text-align: center;"><i>Non-revision-oriented
comment</i></p> |
| <ol style="list-style-type: none"> 10. Y5: “換這一句‘<i>Until today, I still remember that</i> 11. <i>what he said.</i>’，好像怪怪的。” 12. Y6: “喔?” 13. Y5: “<i>I (can) still remember what he said.</i> 會不會 | <div style="border-left: 1px solid black; border-right: 1px solid black; border-bottom: 1px solid black; width: 200px; height: 100px; margin-left: 10px;"></div> <p style="text-align: center;"><i>Revision-oriented
comment</i></p> |

14. 比較好?”
15. Y6: “應該是都可以。”
16. Y5: “重點是後面的that what。多用了一個。”
17. Y6: “嗯嗯，對，這裡多用了！”
18. Y5: “另外until的話，好像會變成‘我一直記得，
19. 直到今天就不記得了’的意思。不過我不太確定就是了。”
- 20.
21. Y6: “嗯嗯。也許後面用現在完成式會比較好。
22. 用現在式的確會有你說的問題。完成式應該
23. 可以。”
24. Y5: “嗯嗯！”
25. Y6: “謝謝囉！”

1. Y5: (*Look at the sentence ‘There is one thing most*
2. *unforgettable about my grandmother.’)*
3. Y6: (*I think I omit a relative pronoun ‘that is’*
4. *following the ‘most.’ Is there any mistake?)*
5. Y5: (*There should be a definite article in the*
6. *superlative sentence. The sentence is fine, but*
7. *it seems to be weird if you connect it.)*
7. Y6: (*Hence, it will be better if I follow your*
8. *suggestion.)*
8. Y5: (***You should not change it, but it will be a***
9. ***little weird.)***
9. Y6: (*Hmm.*)

**Non-revision-oriented
comment**


10. Y5: (***Look at the sentence ‘Until today, I still***
11. ***remember that what he said.’ It is weird.)***
12. Y6: (*Really?)*
13. Y5: (***Will it be better if you change into ‘I (can)***
14. ***still remember what he said’?)***
15. Y6: (*I think both are fine.*)
16. Y5: (***The main point is the ‘that what.’ You***
17. ***shouldn’t use both of them.)***
17. Y6: (*Hmm. You are right. I should not use both of*
18. *them.)*
18. Y5: (***Besides, if you ‘until,’ it seems to become ‘I***
19. ***remember all the time, but I cannot remember***

**Revision-oriented
comment**

20. *it today.' But I'm not sure.)*
21. Y6: *(Hmm. Maybe it will be better if I use 'present*
22. *perfect tense.' There will be one problem if I*
23. *use 'present tense.' Present perfect tense will*
be okay.)
24. Y5: *(Hmm.)*
25. Y6: *(Thank you.)*

In terms of areas, Excerpt 3.3 shows an example of global and local comments. As revealed in Excerpt 3.3, X3 offered Y7 comments such as subject-verb agreement (line 1 through 8) and the meanings of phrases (line 9 through 11), which were local comments. In addition, X3 also offered a comment concerning content and organization (line 20 through 24), which was a global comment.

Excerpt 3.3 (X3 is the reviewer and Y7 is the writer.)

- | | | |
|--|---|------------------------------|
| <ol style="list-style-type: none"> 1. X3: “這句裡面的動詞有錯誤。“<i>She gain greater power to solve problems.</i>” 2. 3. Y7: “有嗎?” 4. X3: “看清楚一點!” 5. Y7: “喔!看到了!” 6. X3: “要改成‘gains’, 因為是第三人稱單數, 所以動詞要加上s。” 7. 8. Y3: “嗯嗯!” |  | <p>Local comment</p> |
| <ol style="list-style-type: none"> 9. X3: “還有, 我不知道這個片語‘<i>came across</i>’和‘<i>have ups and downs</i>’是什麼意思?” 10. 11. Y7: “是「偶遇」和「人生起起伏伏」的意思。” . . . | | <p>Local comment</p> |
| <ol style="list-style-type: none"> 20. X3: “然後最後一個問題是全文的內容。如果你只針對高中生活, 不知道會不會不合題目。還有, 你花了一半的篇幅在講認識的經過, 感覺有點太多, 反而他對你的影響只有佔一半。就醬。” 21. 22. 23. | | <p>Global comment</p> |

24. Y7: “好的，我想一下。”
1. X3: *(There is one mistake in the usage of verb in this*
 2. *sentence.)*
 3. Y7: *(Is there any mistake?)*
 4. X3: *(You should read it more carefully.)*
 5. Y7: *(Oh, I see it.)*
 6. X3: *(You should change the verb into ‘gains’ because*
 7. *the verb is third-person and singular. Hence, the*
 8. *verb should be added a ‘s.)*
 8. Y3: *(Hmm!)*
9. X3: *(Besides, I do not know the meanings of these two*
 10. *phrases ‘came across’ and ‘have ups and*
 11. *downs.’)*
 11. Y7: *(They refer to ‘meeting someone accidentally’ and*
 12. *‘life full of good and bad things.’)*
 . . .
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 . . .
20. X3: *(Then, the last question is your content. If you*
 21. *only focus on your life in high school, I am not*
 22. *sure whether it is suitable for the topic.*
 23. *Moreover, you talk about the procedure of your*
 24. *knowing each other, which occupies half of your*
 25. *content; however, his influence on you only*
 26. *occupies a half of your article. That’s it.)*
 24. Y7: *(OK. I’ll think about it.)*
- Local comment**
- Local comment**
- Global comment**

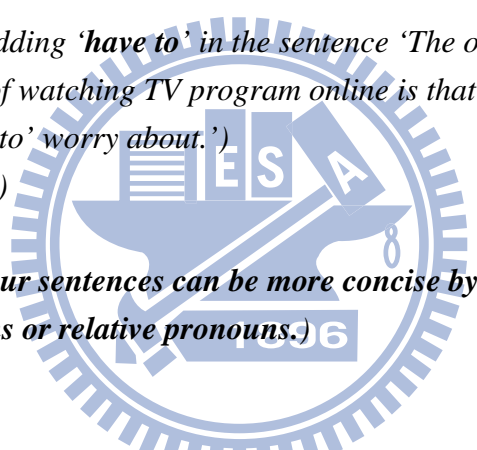
In terms of types, Excerpt 3.4 shows an example of the four types of comments—evaluation, clarification, suggestion, and alteration. As illustrated in Excerpt 3.4, X2 employed a great number of comments to evaluate Y8’s examples (line 1 through 7), two alteration comments regarding sentence structure (line 8 through 12) and the use of the auxiliary (line 15 through 17), and one suggestion comment regarding the use of the conjunction (line 18 through 19). Also, X2 used one clarification comment to explain some

unclear sentences in this Excerpt (line 13 through 14).

Excerpt 4.4 (X2 is the reviewer and Y8 is the writer.)

- | | |
|---|---|
| 1. X2: “topic 還算明確。第一個例子舉的不太順的感覺。
2. <i>First, we can get news rapidly. For example, we always
3. watch TV for news.”</i>
4. Y8: “嗯...”
5. X2: “我是覺得你開始舉例了，可是接了一句「我們總是在看電視」，有點看不懂。看後面才知道你的意思。”
6.
7. Y8: “我知道了，就是把後面接到前面比較明確。” | Evaluation |
| 8. X2: “對對！第二個例子有點冗長。你可以直接說。
9. <i>Second, with the progress of Internet, we can watch
10. TV program online.”</i>
11. Y8: “大概跟前面一樣，就是要看到後面才比較明瞭。直接接在後面比較有力吧！”
12.
13. X2: “嗯嗯！ <i>stand on the flip side</i> 是什麼意思？”
14. Y8: “對立。” | Alteration

Clarification |
| 15. X2: “The other advantage of watching TV program online is that you don't ‘have to’ worry about. 建議加這個語氣比較強。”
16.
17. Y8: “好主意。” | Alteration |
| 18. X2: “後面有些句子建議可以用連接詞或是關代讓他們更簡潔。”
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| 1. X2: (Your topic is clear, but your first example in the sentence ‘First, we can get news rapidly. For example, we always watch TV for news.’ is not smooth.)
2.
3.
4. Y8: (Hm...)
5. X2: (I think that when you offer the example of ‘we always watch TV’, it confuses me. I understand your meaning only after I read through the sentence.)
6.
7. Y8: (I see. I have to put the following sentence to the front. It will be clearer.) | Evaluation |

<p>8. X2: (<i>Yes. Your second example is a little long. You can</i></p> <p>9. <i>write ‘Second, with the progress of Internet, we can</i></p> <p>10. <i>watch TV program online.’)</i></p>		<p>Alteration</p>
<p>11. Y8: (<i>Probably the problem is the same as the former. You</i></p> <p>12. <i>will be clearer about the sentence when you read</i></p> <p><i>through the sentence. It will be more powerful if you put</i></p> <p><i>the sentence following the previous one.)</i></p>		
<p>13. X2: (<i>Hmm. What does the phrase ‘stand on the flip side’</i></p> <p><i>mean?)</i></p> <p>14. Y8: (<i>It means you stand in opposing position.</i>)</p>	<p>Clarification</p>	
<p>15. X2: (<i>I suggest adding ‘have to’ in the sentence ‘The other</i></p> <p>16. <i>advantage of watching TV program online is that you</i></p> <p><i>don’t ‘have to’ worry about.’)</i></p> <p>17. Y8: (<i>Good idea.</i>)</p>	<p>Alteration</p>	
<p>18. X2: (<i>Some of your sentences can be more concise by using</i></p> <p>19. <i>conjunctions or relative pronouns.</i>)</p>	<p>Suggestion</p>	

Students’ comments were synthesized by their nature, areas, and types and thus the comments were coded as the 16 categories in Liu and Sadler’s (2003) coding scheme, as shown in Table 3.4. For example, if students offered peers a comment concerning the usage of SV agreement, the comment was coded as local revision-oriented alteration (LRA). Except 4.5 shows an example of a LRA. In this example, X5 offered X3 a specific answer to a problematic sentence concerning SV agreement (line 1 through 5). More examples can be referred in Appendix E.

Excerpt 4.5 (X5 is the reviewer and X3 is the writer.)

<p>1. X5: “這句話 <i>His teaching make me face failure rather than</i></p> <p>2. <i>telling lies</i> 少了一個 <i>s</i>。Word 裡面有畫綠色底線。”</p>	<p>LRA</p>
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<ol style="list-style-type: none"> 3. X3: “哪裡少了一個 s ?” 4. X5: “動詞。應該要改成 <i>His teaching makes me face failure rather than telling lies.</i>” 		<ol style="list-style-type: none"> 1. X5: (<i>The sentence “His teaching make me face failure rather than telling lies” lacks one ‘s.’ Word underlines the word with a green line.</i>) 2. X5: (<i>Where ?</i>) 3. X3: (<i>Where ?</i>) 4. X5: (<i>Verb. The sentence should be changed into “His teaching makes me face failure rather than telling lies.”</i>) 	LRA
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Table 3.4

Grid for Analyzing Data (adopted from Liu and Sadler, 2003, p. 202)

<i>Area</i>	Global		Local	
	Revision -oriented	Non-revision -oriented	Revision -oriented	Non-revision -oriented
<i>Nature</i>				
<i>Type</i>				
Evaluation	^a GRE	GNE	LRE	LNE
Clarification	GRC	GNC	LRC	LNC
Suggestion	GRS	GNS	LRS	LNS
Alteration	GRA	GNA	LRA	LNA

^a Examples in each cell were offered in the Appendix E.

In sum, MSN logs were first coded into on-task, about-task, and off-task episodes (de Guerrero and Villamil, 1994). On-task comments were further coded into comments by their nature, areas, and types, respectively. Finally, on-task comments were also classified into the 16 categories (Liu and Sadler, 2003). The MSN logs were coded by two coders, the researcher and a graduate student from the TESOL program of the university. The coding disagreements were discussed and resolved by a third coder, an English teacher. The inter-rater reliability yielded to 89%.

To address RQ 2 “what roles do social cues play in the process of peer revision via a synchronous online mode,” about-task and off-task episodes were analyzed to discover the

functions of social cues in the process of online peer revision. According to Henri (1992), social cues were defined as “those comments which are not related to formal content of subject matter” (p 126). Table 3.5 shows the comparison of Henri’s (1992) social cues and a modified version of social cues. Shyness was expressed by using emoticons, such as =^_^=, and hence comments concerning shyness were combined with the use of symbolic icons. Expressions of positive feedback were similar to evaluation comments and thus they were not categorized into our analysis of the social cues. Comments with regard to apologies, anger, regret, and condescension were deleted because they were not found in this current study. Consequently, social cues consisted of self-introduction and greeting, closure, thanks, compliments to others, and the use of symbolic icons. Table 3.6 demonstrates types, definition, and examples of social cues of this current study.

Table 3.5
Comparison of Henri’s (1992) and Modified Version of Social Cues

Henri’s (1992) Social cues	Modified Social cues
Self-introduction and greeting	Self-introduction and greeting
Closure	Closure
Thanks	Thanks
Compliments to others	Compliments to others
The use of symbolic icons	→ The use of symbolic icons
Shyness	→ This social cue was deleted because it was coded as on-task episode.
Expressions of positive feedback	
Apologies	
Anger	→ Deleted
Regret	
Condescension	

Analysis of the Interview Transcripts

The researcher first read through all of the interview transcripts carefully and jotted

Table 3.6

Types, Definition, and Examples of the modified social cues

Modified Social cues	Definition	^a Example
Self-introduction and greeting	They meant that students introduced themselves and greeted their peers.	A: 你好，你是我英文寫作的同伴嗎？ ^b (Hi, are you my partner in the English writing course?) B: 嗯嗯。我是 Karen。(Yes, I'm Karen) A: Hi, 我是 Alllen。那我們快點來弄一弄吧！(Hi, I'm Allen. Let's get started.) B: 好的！(Sure.)
Closure	It meant that students ended the online discussion.	A: 就醬囉！(That's it.) B: 好的！(OK.)
Thanks	It meant that students expressed their appreciation of their peers' comments.	A: 謝謝你給我的評語。(Thanks for your comments.) B: 不會。(You're welcome.)
Compliments to others	They meant that students expressed praise or admiration of the peers.	A: 你很細心，幫我找出很多錯誤，以後要向你多多學習。(You are cautious and help me find many mistakes. I'll learn from you in the future.) B: 還好啦！不客氣！(It's just fine. You're welcome.)
The use of symbolic icons	It meant that students employed a variety of emoticons to demonstrate their feelings and emotions.	A: 順便問一下上次上什麼？XD。我上次沒去。(By the way, what did you do last week? XD I did not go to the class.) B: 上次有做 MSN 分組討論。(We did group discussions via MSN.) A: HW3? == (HW3? ==) B: HW3 要在 MSN 討論。(We have to discuss HW3 via MSN.)

^a Examples were retrieved from the data of the study.^b Inside the parentheses () is the English translation of the participants' Chinese messages.

down some ideas as they came to mind. Then, the researcher made a list of all topics, clustered together similar topics, and formed these topics into columns that might be

arrayed as major topics, unique topics, and leftovers. Next, the researcher took this list and went back to the transcripts. The researcher tried to abbreviate the topics as themes and wrote the themes next to the appropriate segments of the text and tried out this preliminary scheme to see whether new themes emerged. After reducing the interview transcripts into certain themes, the researcher interpreted the MSN logs and transcripts by using these themes (Tesch, 1990). Accordingly, reasons for the patterns of online peer comments, functions of the social cues, and students' perceptions of online peer revision were demonstrated based on the aforementioned themes.

Trustworthiness

Three techniques were used to ensure the trustworthiness of the study. First, research data were collected from multiple sources, including MSN logs, students' writing essays, one questionnaire, and interviews. Different types of data triangulated each other and eliminated possible biases inherent in a particular type of data. Second, in order to evaluate the validity of the coding categories, the MSN logs were coded by two coders. The coding discrepancies were discussed and resolved by the third coder. Third, member checking technique was used by sending the interview transcripts to the participants to ask them to verify the authenticity of the interview data.

In this chapter, I displayed the methods of the study. In Chapter 4, the results of the study are presented.

CHAPTER FOUR

RESULTS

In this chapter, the results are presented based on the three research questions.

Research Question 1: What Comments Emerge from Synchronous Online Peer Revision in terms of Nature (Revision-Oriented versus Non-Revision-Oriented), Areas (Global versus Local), and Types (Evaluation, Clarification, Suggestion, Alteration)?

Table 4.1 displays the percentages of online peer comments by on-task, about-task, and off-task comments. As shown in Table 4.1, the majority of the comments (56%) were made in the form of on-task comments, while only 26% about-task comments and 18% off-task comments were found in the three writing cycles of the online peer revision. The results indicated that over half of the online peer comments were provided in the form of on-task comments. This phenomenon meant that the students engaged themselves in discussing some problematic sentences or paragraphs, such as topic sentences and supporting sentences, and exchanging some ideas for their content. In other words, they only offered a few peer comments which were unrelated to revision per se, such as chatting, or discussion about rules and procedures.

Table 4.1

Percentages of the Online Peer Comments by On-task, About-task, and Off-task Comments

Online peer comments	Frequency	Percentages
On-task comments	623	56%
About-task comments	284	26%
Off-task comments	198	18%
Total unit	1105	100%

To be more specific, the results were demonstrated in terms of different nature, areas, and types of comments; namely, revision vs. non-revision, global vs. local, and combination of nature, areas, and four types—evaluation, clarification, suggestion, and alteration.

Revision-Oriented versus Non-Revision-Oriented Nature

Table 4.2 displays the comparison of peer comments by revision-oriented and non-revision-oriented nature. Revision-oriented comments were much more than non-revision-oriented ones. As illustrated in Table 4.2, the total number of online peer revision is 623. Eighty-three percent of the comments were revision-oriented, whereas only 17% of the comments were non-revision-oriented. This phenomenon indicated that the students utilized more revision-oriented comments in the online peer revision.

“因為線上同儕互評是我們的作業之一，所以我們會努力去發現同學們的錯誤並且給予有用的評語。如此一來，老師才會因為這些熱烈的線上討論而覺得我們很用功。” (X7, Interview, June 8, 2008)

(Because online peer revision is one of our assignments, we try hard to find peers' mistakes and offer them useful comments. By so doing, the teacher may consider us as hard-working by these heated online discussions.)

“我希望同學能夠根據我的評語來修改他們的錯誤，這樣我才不會覺得我的評語白給了。” (Y11, Interview, June 10, 2008)

(I hope peers can revise their mistakes based on my comments; therefore, I won't feel that what I offer is useless.)

Table 4.2
Distribution of the Online Peer Comments by Nature

Nature	Frequency	Percentage
Revision-oriented comments	519	83%
Non-revision-oriented comments	104	17%
Total	623	100%

As revealed, the students tended to offer more revision-oriented comments in order to accomplish their homework and obtain the teacher's credit. Moreover, they also hoped that their comments could be adopted by the peers because they expected that their comments were regarded as useful ones.

Global versus Local Area

Table 4.3 demonstrates peer comments by areas. Local comments were much more than global comments. As shown in Table 4.3, the students offered much more local comments (84%) (feedback concerning wording, grammar, and punctuation) than global comments (16%) (feedback concerning idea development, audience and purpose, and organization of writing) to their peers in online peer revision. The distribution of online peer comments demonstrated that the students focused mostly on the grammatical errors, such as SV agreement or usage of phrases. This phenomenon can be explained by the students' interviews shown in the following.

“因為我的能力只能看出文法或是拼字方面的問題，有關於整體的架構或是文章的脈絡我看不出來，所以只好留給比較厲害的同學或是老師來糾正了。” (X5, Interview, June 7, 2008)

(Since my ability can only find grammatical and spelling problems, I cannot find problems concerning structure or sequence of ideas of the article. Hence, I have no alternative but to leave the problems to more advanced peers or the teacher.)

Note: Inside the square bracket () is the English translation of Chinese interview transcripts.

“因為老師在上課時有教我們英文寫作的架構，所以我想每個人寫出來的架構應該都一樣，因此不用去看這方面的問題。而且我尊重同學本身的意見，所以不會去看有關內容方面的問題。” (Y2, Interview, June 7, 2008)

(Because the teacher taught us how to write an English article based on the established writing structure in class, I think everyone writes his/her article with the same structure. Thus, it is not necessary for me to focus on this problem. Besides, I

Table 4.3

Distribution of the Online Peer Comments by Areas

Areas	Frequency	Percentage
Global area	99	16%
Local area	524	84%
Total	623	100%

respect the peers' opinions and hence I won't focus on the problem with regard to content.)

“因為我個人的習慣，我比較喜歡挑別人的文法問題。” (X1, Interview, June 9, 2008)

(Because of my personal habits, I prefer to pick up others' grammatical problems.)

“我不知道原來我可以在同儕互評的時候，焦點可以放在這方面的建議。” (Y8, Interview, June 7, 2008)

(I don't know I can focus my attention on such comments [global comments] while doing peer revision.)

Accordingly, the reasons for more local comments were attributed to factors such as insufficient English proficiency, personal habits, and a lack of knowledge of peer revision.

Four Types—Evaluation, Clarification, Suggestion, and Alteration

Table 4.4 displays distribution of the online peer revision in terms of four types, evaluation, clarification, suggestion, and alteration. As shown in Table 4.4, the most frequently used comments were evaluation and alteration, with 34% and 32%, respectively, but only 12% clarification comments were made. The results revealed that most of the time the students tended to evaluate their peers' articles and give comments, either alteration or suggestion, to their peers, but they only used a few clarification comments.

Table 4.4

Distribution of the Online Peer Comments by Types

Types	Frequency	Percentage
Evaluation	210	34%
Clarification	73	12%
Suggestion	137	22%
Alteration	203	32%
Total	623	100%

Online Peer Comments by Nature, Areas, and Types

Table 4.5 demonstrates distributions of the on-task comments in terms of nature (revision-oriented versus non revision-oriented), areas (global versus local), and types (evaluation, clarification, suggestion, and alteration). As illustrated in Table 4.5, local revision-oriented alteration (LRA) (32%) was the most frequently occurring comments, accounting for 32%; local revision-oriented suggestion (LRS) and evaluation (LRE) were second to LRA, with 16% and 15%, respectively. Global revision-oriented alteration (GRA) and local non-revision-oriented clarification (LNC) seemed to occur the least, with 1% and 2%, respectively.

Table 4.5

Distribution of the Online Peer Comments by Nature, Areas, and Types

On-task comments (n = 623)				
<i>Area</i>	Global		Local	
	Revision	Non-revision	Revision	Non-revision
<i>Nature</i>				
<i>Type</i>				
Evaluation	23 (4%)	33 (5%)	95 (15%)	59 (9%)
Clarification	0 (0%)	0 (0%)	61 (10%)	12 (2%)
Suggestion	39 (6%)	0 (0%)	98 (16%)	0 (0%)
Alteration	4 (1%)	0 (0%)	199 (32%)	0 (0%)

Also, as illustrated in Table 4.5, global revision-oriented clarification (GRC), global

non-revision-oriented clarification (GNC), global non-revision-oriented suggestion (GNS), global non-revision-oriented alteration (GNA), local non-revision-oriented suggestion (LNS), and local non-revision-oriented alteration (LNA), were not found in the data. The results also confirmed that in the online peer revision the students tended to focus on the local area because four out of the six non-found comments were global comments.

Research Question 2: What Roles Do Social Cues Play in the Process of Peer Revision in a Synchronous Online Mode?

Table 4.6 shows frequencies of the social cues. As revealed in Table 4.6, the total number of the occurrence of social cues is 670 times. Of all the comments, the majority of the social cues were made in the form of symbolic icons (35%). Thanks (27%) were the second to the use of symbolic icons, while the least social cues were made in the form of compliments to others and closure (12%). In the following, functions of each social cue in the online peer revision were demonstrated based on the participants' interviews.

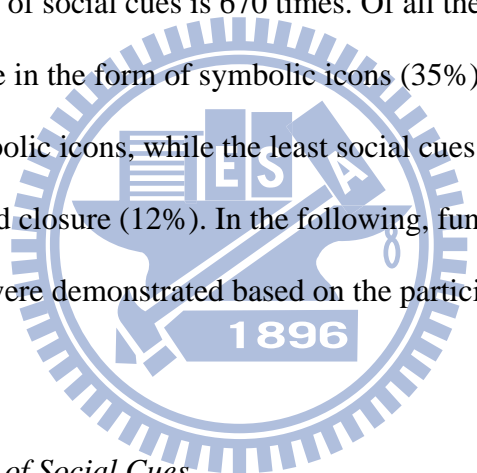


Table 4.6
Examples and Frequency of Social Cues

Social cues	Frequency	Percentage
A self-introduction and Greeting	96	14%
Closure	78	12%
Thanks	182	27%
Compliments to others	79	12%
The use of symbolic icons	235	35%
Total	670	100%

The Use of Symbolic Icons

According to the participants' interviews, eleven out of the 12 students claimed that symbolic icons played a crucial role in the process of online peer revision since they

utilized symbolic icons to alleviate the serious atmosphere, convey their emotions on the “cold” screen, and invigorate the online peer revision. The point was made explicit as presented in the following four interview extracts because they provided circumstantial reasons to account for the use of symbolic icons:

“如果沒有表情符號，我會認為同學很冷漠。因此我通常會使用表情符號來代替我的「謝謝」。” (X1, Interview, June 7, 2008)

(If there are no symbolic icons, I will consider the peer to be aloof. Therefore, I usually use symbolic icons to replace my ‘thanks.’)

“如果沒有表情符號，線上同儕互評會變的很嚴肅且無聊。然後，我就會盡快結束此活動。” (X4, Interview, June 8, 2008)

(If there are no symbolic icons, the online peer revision will become too serious and boring. Then, I will end it as soon as possible.)

“我會用表情符號來緩和氣氛，讓我的評語比較不挑剔也比較柔和。尤其是當我給同學很多評語之後，這樣看起來有點嚴肅，或是我的話的語調有點嚴肅，我就會用一些表情符號來緩和嚴肅的氣氛。” (Y5, Interview, June 11, 2008)

(I tend to use symbolic icons to mitigate the ambience, to be less critical, and to be softer. Especially after I give the peer a number of comments, which seems to be serious, or when the tones of my words seem solemn, I must add some icons to abate the strict ambience.)

“線上互評是個嚴肅的任務。為了要活絡這個活動，我會盡量使用表情符號來表達我的真正感覺。” (Y8, Interview, June 12, 2008)

(Online peer revision is a serious task. To activate this activity, I will use as many symbolic icons as possible to express my real feelings to the peers.)

However, only one student argued that it was not necessary to employ icons since she regarded the peer revision as a serious task and too many icons might affect and confuse her comprehension of the peers’ attempts, as Y6 described in the interview.

“我不喜歡使用表情符號因為線上同儕互評是個正式的功課。如果我使用它們，我會擔心老師會認為我們不認真。此外，使用太多表情符號也會影響我的理解力。” (Y6, Interview, June 10, 2008)

(I don't like to use symbolic icons because online peer revision is a formal homework. If I use them, I am afraid that the teacher will consider us as playful. Besides, using too many icons will also affect my comprehension.)

Thanks and Compliments to Others

Comments regarding thanks and compliments to others were employed in order to express appreciation. Almost everyone (11 out of 12 interviewees) claimed that it was essential for the students to use thanks and compliments to promote their communication since it played a crucial role in the process of the online peer revision, as Y9 said in the interview.

“如果沒有謝謝或是如果他們都只回答「嗯嗯」、「對阿」等等之類的話，我會認為他／她沒有專心或是不認真。因此，我不會給他／她太多評語，因此此活動就會很快結束。相反地，如果對方是很認真在進行同儕互評，我也會很努力找更多資訊讓他／她參考。” (Y9, Interview, June 10, 2008)

(If there are not thanks or if they only reply with “yup”, “sure”, and so on, I will think that he/she does not pay their attention to or even makes a perfunctory effort on the peer revision. Thus, I won't offer him or her too many comments and hence the activity will be ended soon. On the contrary, if the peer is enthusiastic about the peer revision, I will strive to find more extra information for his or her reference.)

However, one student, Y6, did not consider thanks and compliments as necessary since she contended that the online peer revision was one of the assignments and thus she still had to finish it even though there was no appreciation and gratitude in the process of the activity, as shown in the following interview.

“我認為如果沒有謝謝也可以因為線上互評是個很嚴肅的功課。然而，我在意的對方的態度。如果他／她從頭到尾都沒有專心的話，我就不會和他／她討論很

久，就算他／她給很多謝謝也一樣。” (Y6, Interview, June 10, 2008)
(I think that it will be okay if there are no thanks since online peer revision is a serious homework. However, what I care is the peers' attitudes. If he/she does not concentrate on the task from beginning to the end, I will not to discuss with him/her for a long time even though he/she offers many thanks.)

Self-Introduction and Greeting

In this current study, at the beginning of an online peer revision, the students usually greeted and introduced themselves to their peers. Right after the self-introduction and greeting, they initiated the peer revision without chatting. As illustrated in the interview, X2 indicated that before starting the online discussion, he greeted and introduced himself to his peers due to politeness. Additionally, he commenced the peer revision right after the self-introduction and greeting since he wanted to save time and complete the activity as quickly as possible.

“我認為在同儕互評開始前先打招呼是比較有禮貌。在打完招呼後，我就會開始線上討論因為我想要盡快結束這個活動。” (X2, Interview, June 7, 2008)
(I think it is polite to greet each other before beginning the peer revision. After greeting, I will start the online discussion because I want to finish the activity as soon as possible.)

Closure

Most of the students who did the online peer revision with intimate classmates ended the peer revision directly with a closure—goodbye—in order to finish this activity as soon as possible. Furthermore, mostly in the first writing cycle, due to unfamiliarity with the activity, some of the students who engaged in the online peer revision with unfamiliar peers employed a different way to close the activity. This might be attributed to the fact that students felt more comfortable with each other as the semester continued (Kang, 1998). As shown in the interview, Y2 pointed out that it was strange and impolite to end the

discussion right after they finished their online discussion.

“如果我在線上同儕互評結束後就馬上離開，這樣會有點尷尬，因為我會擔心同學，尤其是比較不熟的同學，會覺得是被利用。因此，我會問對方是否要存檔案或是上傳檔案來結束此活動。” (Y2, Interview, June 10, 2008)

(If I leave right after the online peer revision ends, it will be a little bit embarrassing because I may be afraid that peers, especially the unfamiliar ones, will have the feeling of being used. Thus, I will end this activity by asking the peer whether to save our record or upload the file.)

In sum, there was a pervasive use of social cues in different forms in the online peer revision. They not only facilitated the students' communication via MSN, but enlivened the text-based communication as well.

Research Question 3: How Do College Students Perceive Peer Revision via a Synchronous Online Mode?

To better understand learners' perceptions of online peer revision, students were interviewed to explore two subjects: (1) students' perceptions of peer revision and (2) students' perceptions of online peer revision.

Perceptions of Peer Revision

Emerged from the interview data, four positive roles of peer revision were reported to contribute to their writing. First, some students claimed that peer revision helped the students diagnose peers' writing problems because the students expressed insufficient proficiency to spot their own weaknesses in their writing. By detecting others' mistakes, the students became conscious that they may make the same mistakes, as Y6 said in the interview.

“同儕互評不僅能夠找出同學的問題，也能夠幫助我找到自己的問題，以及從同

學的角度來閱讀自己的文章。當同學閱讀我的文章時，我會發現自己寫的和想寫的內容有差距。此外，找到別人的錯誤也會幫助自己去思考我是否也有犯同樣的錯誤。因此，由於同儕互評，我發現我常犯的錯誤，例如用中文思考來寫作、不良的文章結構、選字、內容等等問題。” (Y6, Interview, June 12, 2008)

(Peer revision can not only detect peers' problems but also help me spot my problems and read my own article from the peer's angle. When the peer read my article, I find that there is a gap between what I wrote and what I thought. Moreover, detecting others' errors also helps me think whether I will make the same mistake or not. Accordingly, because of peer revision, I find the mistakes I often make such as writing and thinking in a Chinese way, poor article structures, choices of words, content, and so forth.)

Second, some students claimed that peer revision enhanced a sense of audience since it helped the students to take readers into consideration. The students pointed out that because they knew the peers would become their readers, they became more conscious of their audience during the process of writing. As X4 expressed his opinions in the interview, before sending his writing products to his peers, he examined what he wrote in more detail in order not to confuse his readers.

“同儕互評幫助我更細心因為我知道有人會來閱讀我的文章。因此，為了讓同學了解我寫的文章以及不要被找出太多錯誤，寫作時我會把同學考慮進來因為我的文章曾經被批評過不連貫。因此，為了要讓同學理解，我會在寫完文章後再三思考以及檢查。” (X4, Interview, June 7, 2008)

(Peer revision helps me be more careful since I know someone is going to read my article. Thus, in order for the peers to understand what I wrote and not to be found too many mistakes, I will take the peers into account while writing because my article was criticized to be incoherent. Therefore, in order to be comprehensible to the peers, I will think twice and recheck after finishing my article.)

Third, writers' confidence was enhanced after peer revision. For instance, some students stated that they were willing to allow peers to read their articles due to a positive influence of peer revision on their writing quality, as Y3 said in the interview.

“因為同儕互評這個活動使得我的英文寫作的進步，因此我更願意把我的文章給同學看。” (Y3, Interview, June 11, 2008)

(Because peer revision allows me to improve my English writing, I am willing to show my articles to others.)

Fourth, compared to the teacher's feedback, the students gained different types of feedback via peer revision because these two kinds of comments focused on different aspects. Some students argued that peers tended to offer comments concerning wording (e.g. “You can replace ‘shopping vehicle’ with ‘shopping cart’”), whereas the teacher tended to give comments with regard to organization (e.g. topic sentences). In addition, peer revision also provided the students with opportunities to discuss with their peers, but they would not discuss with the teacher because they regarded the teacher's comments to be accurate all the time, as X2 described in the interview.

“同學跟老師發現的地方不一樣。例如，同學的意見比較注重在文法也比較日常生活一點，但是老師的評語比較注重在結構上以及比較學術。此外，我可以跟同學討論並且從同儕互評中學到很多。但是，如果讀者是老師的話，我就沒有太多機會可以跟老師討論因為我會認為老師給的意見當是對的。” (X2, Interview, June 7, 2008)

(What the peer discovers differs from the teacher. For example, peers' opinions tend to focus on grammar and topics which are related to daily life, while the teacher's comments tend to focus on structure and to be more academic. Additionally, I can discuss with the peer and learn more via peer revision. However, if the reader is the teacher, I do not have the chance to discuss since I think what the teacher offers is right.)

Perceptions of Online Peer Revision

Positive perceptions

In addition to perceptions of peer revision, five positive perceptions of online peer revision were demonstrated. First, some students indicated that the online peer revision allowed them to consult online resources and even study autonomously. For example, without the teacher's help and counsel, the students, when facing difficulties and

challenges, had to solve the problems by resorting to online resources such as Yahoo Dictionary, electronic translators, Wikipedia, Google, Dr. Eye, Yahoo! Answers³, and TOTALrecall⁴. With the help of dictionaries, they overcame their writing problems by themselves during the process of writing, as Y11 said in the interview.

“有時候當同學給不確定的答案時，我自己會試著查字典來找到正確答案，也因此讓我學到更多並且提升寫作的正確率，例如動詞的用法。” (Y11, Interview, June 9, 2008)

(Sometimes when the peer offers a doubtful answer, I will try to find a correct answer myself by looking up the word in the dictionary and thus that allows me to gain more and increase the correctness of what I wrote, such as the usage of a certain verb.)

Second, some students stated that friendship in online peer revision was an unexpected bonus because they obtained additional chances to make friends by adding them into their MSN. This benefit also resulted in the facilitation of the process of the online peer revision since some of them claimed that the more familiar they became with the peers, the more feedback they would offer, as Y5 noted in the interview.

“由於線上同儕互評這個活動，我很快就認識很多新朋友。此外，跟比較熟的同學討論時，我會給予他們比較多的建議；然而，我卻給予比較不熟的同學比較少的評語。” (Y5, Interview, June 10, 2008)

(Because of this activity of online peer revision, I can meet many new friends quickly. Additionally, while discussing with more familiar classmates, I will offer them more suggestions; however, I will offer less familiar classmates fewer opinions.)

Third, some students expressed that the online mode, MSN, had a positive influence on the process of online peer revision. Most of the students considered MSN as a helpful

³ Yahoo! Answers is a community-driven knowledge market website launched by Yahoo! that allows users to both submit questions to be answered and answer questions asked by other users.

⁴ TOTALrecall is a search engine created by National Tsing Hua University for English learners to look up word usage and collocations.

tool to do online peer revision. Because of the familiarity with the functions and interface of MSN, it was easy and convenient for them to discuss writing works via MSN, as X1 and Y6 said in the following interviews.

“由於對 MSN 的功能以及介面很熟悉，用 MSN 來做線上同儕互評很適合。” (X1, Interview, June 7, 2008)

(Due to the familiarity of the functions and interface of MSN, it is suitable to do online peer revision with MSN.)

“我常常和我朋友用 MSN 聊天。因此，使用 MSN 來做線上互評很方便因為我不再用學習新的系統。” (Y6, Interview, June 12, 2008)

(I often chat with my friends with MSN. Hence, it is convenient for me to use MSN to do online peer revision since I do not have to learn another new system.)

Fourth, some students claimed that the conversation records of the online peer revision could be retained for future reference. For example, in the interview, Y8 said that she could revert back to the previous conversation when she was confused about the peer's opinions during the process of online peer revision, which could not be achieved by face-to-face peer revision.

“使用 MSN 的好處是對話紀錄可以顯示在螢幕上，所以我可以在線上同儕互評結束後還可以閱讀，這是面對面同儕互評無法做到的。” (Y8, Interview, June 9, 2008)

(The benefit of using MSN is that the conversation records can be shown on the screen and thus I can still read it after the online peer revision, which cannot be done by face-to-face peer revision.)

Finally, while discussing via MSN, some students indicated that they felt less embarrassed and hostile to offer comments because peers could not feel their real emotions on the screen. For example, as X1 expressed his opinions in the interview, he was more

willing to offer his peers more comments via MSN because it helped to reserve his emotions.

“有時候使用MSN讓我們表達會比較不嚴肅且不尷尬因為同學只能看到我的文字而感受不到我真正的語氣。” (X1, Interview, June 7, 2008)

(Sometimes, it is less severe and embarrassing for me to use MSN since the peers can only see my words without feeling my tones.)

Negative perceptions

Five negative perceptions of the online peer revision were found as well. First, some students complained that their communication, without the instructor's monitor, was not successful because some of the peers did not fully concentrate on the peer revision, as X7 noted in the interview.

“因為有些同學認為老師不在線上同儕互評，所以他們會討論時比較不認真或是比較不專心。例如，有時候我會認為同學的評語像「應該可以」很沒有用。因此，如果我認為他沒有給予足夠的評語，那麼我就不會給他太多意見。有時候我們會因為溝通不良而無法達成共識。” (X7, Interview, June 11, 2008)

(Because some peers think that the teacher is not present in the online peer revision, they will be not earnest about or does not concentrate on the discussion, communication will break down. For example, sometimes I will consider the peer's online feedback—it should be okay—to be useless. Hence, if I think he does not offer enough comments, then I will not give him too many opinions. Sometimes we cannot reach an agreement due to poor communication.)

Second, taking the peers' dignity into account, some students claimed that they might not dare to indicate too many errors and thus they tended to offer positive or indirect feedback to their peers. Therefore, as shown in the interview, Y9 suggested doing online peer revision anonymously to facilitate the online peer revision.

“考慮到同學的自尊，有時候我不會批評的太嚴重，所以就給比較少的評語。如

果線上同儕互評可以匿名來進行的話，可能同學會更敢給更多的評語。” (Y9, Interview, June 9, 2008)

(Taking peers' dignity into account, sometimes I cannot criticize too much; this results in giving fewer comments. If online peer revision can be done anonymously, maybe peers will dare to offer more comments.)

Third, some students indicated that online discussions via MSN were not efficient because when the students cast doubt on the correctness of their peers' feedback, they might give up the discussions easily due to laborious typing and leave the question to the teacher, as Y2 said in the interview.

“在MSN上面討論時，如果讀者不能確定意見的正確性且需要進一步的討論時，我們就會放棄討論此問題因為我們不想要花太多時間用打字來討論。我們就會把問題留給老師，因為有時候我們花了一個小時只討論幾個句子而已。” (Y2, Interview, June 12, 2008)

(While discussing via MSN, if the reviewer cannot guarantee the accuracy of the feedback and need further discussions, we will give up discussing the problem because we don't want to spend too much time discussing by typing. We may leave the problem to the teacher because sometimes we spend one hour discussing only a few sentences.)

Fourth, some students stated that communication by MSN might be time-consuming because they, while discussing, had to go back to the peer's article and post problematic sentences to the peer simultaneously. Hence, X5 indicated it was not efficient to discuss peers' articles via MSN.

“在螢幕上閱讀文字是相當耗時間的。此外，同時找同學有問題的句子並且把它貼在螢幕上是很麻煩的。如果我們雙方能夠在螢幕上閱讀對方的文章且同時進行糾正的話，那麼做線上同儕互評會比較方便。” (X5, Interview, June 8, 2008)

(It is time-consuming for us to read words on the screen. Besides, it is also troublesome for us to find the sentence in the peer's article and post it on the screen. If both of us can read each others' articles and correct their mistakes on the screen at

the same time, it will be more convenient for us to do online peer revision.)

Finally, online peer revision triggered an unexpected problem—partners' failure of keeping an appointment with peers. Some students complained that they might be stood up by their partners in the online peer revision. For example, Y9 complaint that classmates were from different academic departments and hence it was difficult for us to reach an agreement on discussion time. Even though she made an appointment with peers, sometimes some of them might not show up in the online peer revision. This unpleasant experience affected their friendship and even had a negative influence on the online peer revision.

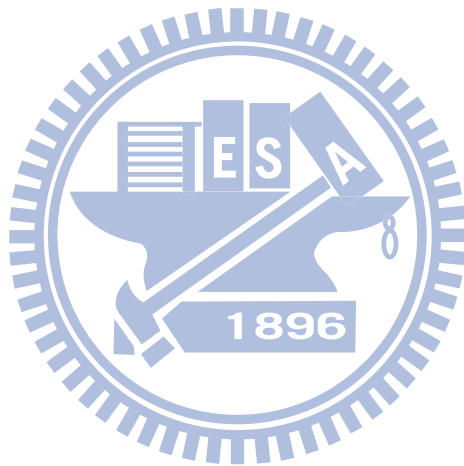
“和同學約時間來進行線上同儕互評會有風險，因為我曾經被同學放鴿子，感覺很不好。如果下次遇到他／她的話，就會很不要和他／她進行線上同儕互評。”
(Y9, Interview, June 9, 2008)

(It will be risky to make an appointment with peers to do online peer revision because I was stood up by peers. I do not feel comfortable about that. If I have chances to do online peer revision with him/her, I will be unwilling to do online peer revision with him/her.)

To conclude, the findings indicated that the students tried to provide effective feedback in order to enhance each other's writing through a virtual environment, MSN. Moreover, as a result of the advantages from online peer revision and the use of MSN, it was found that most of the students had positive perceptions toward online peer revision, albeit with some drawbacks generated from the online peer revision.

This chapter addresses the three research questions based on the quantitative and qualitative results. In Chapter 5, I further discuss the findings of the study, and summarize the study, indicate the limitation of the study, make suggestions for future research, and

offer pedagogical implication.



CHAPTER FIVE

DISCUSSION AND CONCLUSION

In this chapter, I first discuss the findings of the study. Then, I will summarize the findings and point out study limitations, suggestions for future study, and pedagogical implications.

Discussion

The findings are further discussed under three perspectives: comment patterns of online peer revision in the synchronous CMC context, the functions of social cues, and students' perceptions of online peer revision.

Comment Patterns of Online Peer Revision in the Synchronous CMC Context

Research has found that in synchronous contexts, students concentrated on the review task rather than on discussions of task procedure or chitchat on issues unrelated to the writing drafts (Heift & Caws, 2000). Similar to the study, the results demonstrated that in the online peer revision the participants mostly stayed on-task comments (56%) to negotiate, discuss, and convey their ideas and comments, with 26% about-task comments dedicated to transferring files to the peers, discussing turn-taking order and task rules, and taking part in social interactions, and 18% off-task comments devoted to unrelated topic (see Table 4.1). The results suggest that in the online peer revision the students stayed on task and talked much about the writing in their groups, dealt with a variety of topics, and applied different language functions to negotiate meaning with their peers.

With the increasing use of CMC tools, peer revision in a synchronous CMC context has become a new method for EFL writing instruction. A large body of research has compared peer revision in face-to-face and online contexts in order to answer to question

of whether students pay attention to the same area; that is, comments with regard to global or local area (Braine, 2001; DiGiovanni & Nagaswami, 2001; Schultz, 2000). Their results found that in the online mode students made more *local* changes because writers followed the detailed suggestions made in writing, whereas in the face-to-face mode they made more *global* changes, which seemed to facilitate more rapid interaction and thus a better exploration of the writers' intentions and goals. Similar to previous studies, our results revealed that local comments (84%), such as subject-verb agreement, wording, grammar, and punctuation, was more than global ones (16%), such as idea development, audience and purpose, and organization of writing (see Table 4.3); this result implies that the online peer revision may be more useful to deal with linguistic forms but ineffective in discussing macro-level writing concepts because the learners in the current study showed more concern for grammatical accuracy, as the participants argued that their English proficiency was not good enough to furnish their peers with global comments, such as organization and content of the article, and it was easier for them to detect peers' grammatical errors, such as grammar, wording, and punctuation. Moreover, this phenomenon can also be explained by the fact that the automatic grammar and spelling check functions in Microsoft Word helped the students discover problematic areas via underlines, which signified spelling errors and grammatical errors. These errors focused on sentence-level problems. With the help of these functions by the system, the students may easily notice a sentence-level problem and then only have to right-click on the mouse to see options for alternative spellings, SV agreement, punctuation, and word choices. Without the aid of word processing, the students would have to rely on their English proficiency to detect errors and search for online resources, such as online dictionaries, to provide their partners with correct answers. Accordingly, the students chose to provide more local comments than global ones.

Different roles of Social cues

Due to the absence of nonverbal cues, electronic communication may require more messages and more time to bring the same effects in CMC as those in comparable face-to-face relationships. To surmount these limitations, social cues play some roles for CMC users to compensate for the lack of paralinguistic cues, reduce the impact of critical comments on the peers' drafts, and have efficient online communication.

Social cues as a positive role

Research has found that social cues expressing positive feelings often trigger reciprocation of positive social cues and help to build friendship among group members and facilitate cooperation in the peer revision (Henri, 1992), and that more social cues make the interaction more convivial, decreasing the psychological distance among communicators (Walther, 1992). Similar to Henri (1992) and Walther (1992), the results demonstrated that while criticizing peers' writing drafts, the students employed a large number of social cues to mitigate serious atmosphere in online peer revision. To avoid a negative affection on peers' self-esteem and confidence, social cues, especially in the form of symbolic icons, were often employed to function as a buffer between writers and readers. Users integrated their messages with social meaning through the creation and use of "emoticons," which were created with typographic symbols that appear sideways as resembling facial expressions (Walther & D'Addario, 2001). In this current study, the language learners utilized a variety of emoticons, such as ^_^, @@, XD, ORZ, and 囧, in the online peer revision for the purpose of compensating for the lack of paralinguistic cues. Symbolic icons functioned as the role of conveying the students' emotions on the "cold" screen in the online peer revision. For example, the results found that after the students gave the peer a number of comments, which seemed to be serious and critical, they tended to add some emoticons to express their real emotion and assuage the tone. The results are

consistent with Rezabek and Cochenour's (1998) findings that "because the use of e-mail eliminates visual cues such as head nodding, facial expressions, posture, and eye contact found in face-to-face communication, CMC users often incorporated emoticons as visual cues to augment the meaning of textual electronic messages" (pp. 201-202).

Social cues as a negative role

Social cues can also be detrimental to communication. According to Henri (1992), negative social cues might hamper cooperation among group members and cause some members to withhold, or withdraw entirely, important contributions. The study found that the students did not use any negative social cues but offered indirect feedback to their peers. This may be due to the fact that the students did not want to criticize their peers too much because they hoped to maintain group harmony.

Interestingly, excessive positive social cues were not always function positively. As revealed, Y6 indicated that too many symbolic icons may disturb her comprehension in the online peer revision. Similar to Walther's (1996), if participants used too many social cues in online discussions, they might focus on their social interaction rather than the discussion of the task.

Students' Perceptions of Online Peer Revision

To further understand students' perceptions of *online* peer revision in synchronous CMC contexts, different roles of online peer revision—physical distancing and nature of time-consuming and tiring typing—were discussed.

Physical distance

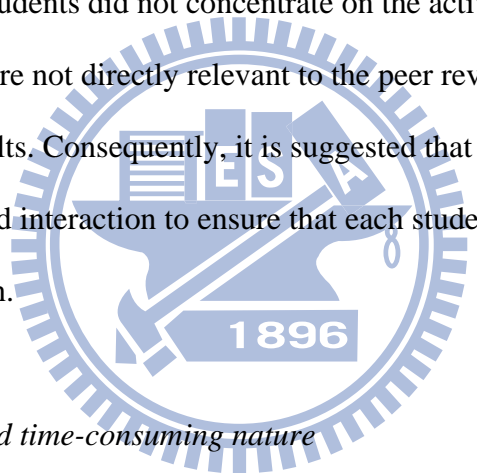
Physical distance caused by online peer revision via synchronous CMC was found to have a positive influence on the peers' independence and autonomy. Specifically, online

resources promoted learner independence and autonomy by allowing the peers, without the teacher's assistance and guidance, to search for information and to solve particular problems on their own in cyberspace. For example, the students claimed that they used other resources provided by their instructor, such as Yahoo Dictionary, electronic translators, Wikipedia, Google, Dr. Eye, Yahoo! Answers, and TOTALrecall, to resolve their grammatical problems by themselves. When the students had difficulty offering a correct usage or reaching consensus on the problematic sentences in the peer revision, they took advantage of these online resources to find some possible answers to the problems. By means of online discussions, the students, beyond physical confinement, successfully grappled with their problem and promoted peer cooperation. Hence, the use of online discussion via CMC offers a relatively new avenue through which the learner can take an active role in the learning process and make autonomous learning and the assistance from the peers accessible.

Furthermore, it is believed that physical distancing in CMC is commonly considered as an advantage because it relieves learners' pressure of facing authority and creates a non-threatening learning atmosphere. Learners, therefore, tend to become active about self-expression (Kern, 1995; Schultz, 2000). However, in this current study, such distant idea exchange via CMC did not benefit the student. Taking peers' dignity into account, some students still found it embarrassing to point out their peers' mistakes in the online process. They might not dare to indicate too many errors because they were concerned that they could not use adequate tone in the text-based communication. The results are similar to those in face-to-face revision environments, such as Carson and Nelson's (1996) conclusion that Chinese speaking students, who would not take the risk of face losing, were more likely to maintain group harmony and mutual face-saving, show reluctance to initiate comments, and dislike criticizing peers' work. Therefore, some students even suggested doing online peer revision anonymously to contribute to process of the online

peer revision, which echoes Gonzales-Bueno's (1998) results that anonymity in CMC encouraged opener, more personal and honest self-expressions among students. Accordingly, the findings imply that physical distance does not function as an aid for the learners to solve the problem of embarrassment.

It is believed that online peer revision creates a way of potentially increasing student-student interaction (Schultz, 2000). Yet, the results found that physical distance had an adverse effect on the online peer revision since online learning may make it difficult for the teacher to control participation of the students. Without the teacher's monitor and instruction, learner distraction was found to affect the progress of online peer revision as some of the students did not concentrate on the activity and engage themselves in the discussions that were not directly relevant to the peer revision, which is consistent with Taylor's (2002) results. Consequently, it is suggested that the instructor should check students' participation and interaction to ensure that each student is actively participating in the online peer revision.



Laborious typing and time-consuming nature

When the students have trouble reaching an agreement on the problematic sentences, laborious typing made online peer revision hard and non-tempting for the peers to delve into in-depth discussions that require a large number of keystrokes. As many students mentioned, it was more troublesome to communicate by typing than face-to-face communication. The results are analogous to Sullivan and Pratt's (1996) conclusion that the number of turns in per group was fewer for the online peer response group because it took longer and more efforts to produce typed comments.

In addition, another concern about using a synchronous CMC mode was the time-consuming nature because the students were unable to keep up with the often fast-paced discussion while referencing the text and giving comments simultaneously. As

the results revealed, it required a great deal of time and efforts for the students to give comments and reference peers' original sentences on the screen at the same time, which was one of MSN's disadvantages. Hence, they generally produced short, simple comments in preference to long, complex ones and sometimes relinquished their discussion if they diverged on their opinions. The results are correspondent with previous research that typing speed inhibits the amount of commenting and interaction of students in CMC groups (e.g., Sullivan & Pratt, 1996) and that students in synchronous discussion had difficulty keeping up with the discussion due to their slow typing speed (e.g., Liu & Sadler, 2003).

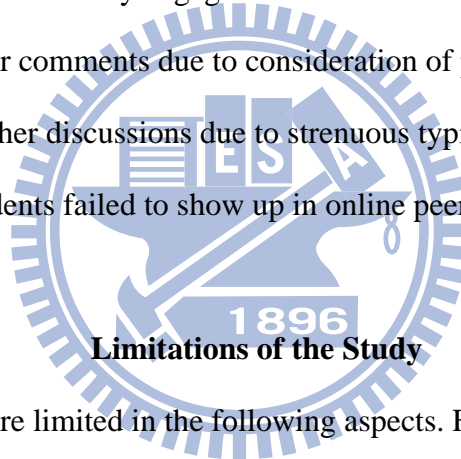
Indeed, CMC context overcomes several constraints that can never be removed from regular classrooms (e.g., limitation of place-dependence and physical distance); however, it also generates several drawbacks that are hardly perceived in regular classrooms (e.g., incoherent communication and technological problems). Consequently, it is significant to know that CMC is not a panacea for language learning and that its function is not to supersede regular classroom-based practices.

Conclusion

In this section, the major issues emerging from the findings are summarized and followed by limitations of the study, directions for future research, and pedagogical implications.

The study examined synchronous CMC practices in three cycles of online peer revision sessions in an 18-week EFL writing course. Twenty two students in a elective composition course participated by completing three cycles of drafting, peer revision, and revising in pairs on an online chatting platform—MSN. The results of the present study revealed that the majority of the comments were local comments; that is, sentential errors. These comments were in the form of evaluation and alteration. Furthermore, social cues

were found to play a vital role of mitigating serious atmosphere and softening students' comments in the process of online peer revision. As for perceptions of peer revision, the results also demonstrated that after three cycles of peer revision sessions, peer revision raised learners' awareness of their own weaknesses in writing, enhanced a sense of audience, and offered comments different from the teacher's. Moreover, the students perceived that online peer revision helped them promote friendship with their partners and study autonomously. Also, owing to their familiarity with the MSN environment and MSN logs for revision reference, MSN was found to be constructive to the process of online peer revision. The upshots also uncovered some disadvantages of online peer revision. For example, the students were not fully engaged themselves in the online peer revision and may hesitate offering their comments due to consideration of peers' dignity. Moreover, the students relinquished further discussions due to strenuous typing and time-consuming nature. Finally, some students failed to show up in online peer revision.



Limitations of the Study

The study results were limited in the following aspects. First, since the course design included both online peer revision and face-to-face peer revision, this current study only collected data from the online peer revision. This study overlooked some significant findings from the face-to-face peer revision. While collecting data in the interview, the students may have trouble differentiating the benefits of peer revision in general from the benefits of online peer revision. Second, without carrying out classroom observation, the researcher only collected the participants' MSN logs and writing products. This might also overlook some crucial data that cannot be observed simply from written products, such as in-class interactions among classmates. Finally, only one interview was held after the final online peer revision. This might not well capture the students' perceptions of the online peer revision and functions of social cues throughout the semester. The interviewees often

had problems clearly recalling what they were doing and thinking about during the last tutoring. Instead, we should have held interviews right after each online peer revision to compensate for the drawback.

Suggestions for Future Research

With the above limitations being stated, future studies can be conducted to improve and even extend the present study. First, to better understand the benefits of online peer revision, it is suggested to collect data both from face-to-face and online peer revision. This may help us distinguish the benefits and perceptions of peer revision in general from those of online peer revision. Second, to overcome the shortcoming resulting from the lack of classroom observation, it is suggested that future researchers conduct classroom observations to see the process of the writing course among students in the classroom. Third, the results found that comment patterns were ascribed to students' personality and language proficiency. Hence, individuals' factors, such as personality and language proficiency, may be taken into account in order to understand how they influence online peer revision. Finally, with the rapid development of cutting-edge CMC tools, researchers may try to examine online peer revision via videoconferencing tools such as Skype, which may inform teachers of how to compensate for the drawbacks from written-based CMC, such as laborious typing.

Pedagogical Implications

Four implications for language pedagogy can be drawn from the study findings. First, the findings of the present study demonstrate that MSN logs can be beneficial for both teachers and students. Writing instructors can understand students' comment patterns and students can also review their English writing problems indicated by peers and revise their drafts. Accordingly, with complete preparation and conscientious instructional design,

online peer revision may be an ancillary method in L2 writing classrooms.

Second, even with the benefit of MSN logs mentioned above, online discussions via MSN are still subjected to one technical problem as the students have trouble referring to and discussing the current topic at the same time. It is suggested to ask students to prepare hard copies of the drafts and have them readily available next to the computer, which may help students do online peer revision more efficiently. Another suggestion to solve the problem is to use another online system, such as *POWER*⁵, to make the synchronous discussion easier for the peers to follow as *Power* allows students to refer to and discuss the current topic simultaneously (Chien & Liou, 2005).

Third, students' unpleasant experiences—partners' failure of keeping an appointment in the online peer revision—may negatively impact their affection because the students may be angry with their partners and unwilling to do online peer revision with the same partner after being stood up by him/her. This negative affection further influenced the process of online peer revision. Therefore, teachers should urge students to keep the appointment of online peer revision.

Finally, some short MSN logs only included one or two pages. This may be due to the fact that the students lacked the knowledge of how to engage themselves in the online peer revision or they were not concentrated on online peer revision. Accordingly, teachers may demonstrate how to offer their partners comments and how to respond to these comments effectively in online peer revision.

⁵ *POWER* is an acronym for Peer Online Writing & Editing Room. *POWER* enables document sharing, co-editing, and online chat. The main feature of *Power* lies in that its screen shows both chat area for learners' negotiation and discussion and writing drafts written by users. For further information, please refer to its webpage <http://formosa.fl.nthu.edu.tw/power/>.

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APPENDIXES

Appendix A

Consent Form

交通大學

研究同意書

大學英語寫作課中透過MSN進行的同儕互評

您好，我是蕭志億，是交通大學英語教學研究所二年級的學生。我目前正在撰寫碩士論文。研究的內容是探討同儕互評在網路即時溝通工具(MSN)的使用下，學生如何給予同儕回饋來幫助彼此學習英文寫作，並且了解學生對此教學方法的感受。因為研究對象是使用網路進行同儕互評的同學，因此我想要邀請你們成為我的研究對象。我會收集而且分析你們在這堂課中在網路上進行同儕互評的對話紀錄以及你們上傳的作業。此外，還需要麻煩你們填寫一份問卷。根據資料分析結果以及問卷結果，我會針對幾個參與者進行一次的訪談，每次訪談時間不超過30分鐘，而且訪談的內容將會錄音以及謄寫。

參與這項研究沒有任何風險。除了研究者之外，沒有其他人會接觸問卷以及訪談內容，資料也會在研究分析後立即銷毀。對於您提供的各項資料只提供本研究使用，不做其他用途，也不會公佈上您的真實姓名，敬請放心。

如果您有任何問題，現在可以隨時發問。如果您之後有任何問題，您也可以透過電話0912961138或email: ce700223@yahoo.com.tw，跟我聯繫。

我誠摯地邀请您參與這次的研究，因為您的參與能幫助英語教學工作者進一步了解網路即時溝通對於英文寫作的影響。您可以決定是否參與這項研究。選則不參與也不會對您有任何影響。研究期間，如果您不願意繼續參與，您可以隨時退出，而您的資料將會歸還或是銷毀。

如果您已閱讀以上說明，而且同意參與本研究，請在下列**參加者**的欄位簽名。

參加者簽名：_____ 日期：_____

研究者簽名：_____ 日期：_____

非常感謝您的幫忙！

Appendix B

Questionnaire

您好：

這份問卷是用來瞭解您的背景以及您對網路溝通系統的使用及學習英文寫作方面的經驗。問卷結果僅供研究參考，絕不私自對外公佈，亦不影響課堂上學期成績考查。請依據自己實際的學習經驗來作答。謝謝您的參與和合作！（共7題）

I. 個人背景

1. 姓名： _____

性別： 男 女

年齡：

科系：

你目前在交大(或清大)修了幾學分的英文課： _____ 學分

到目前為止學習英文的時間： _____ 年

2. 在上這堂課之前，你有任何的網路即時(同步)溝通經驗嗎 (如：使用MSN或Yahoo Messenger與他人聊天)？

有 沒有 其他： _____

如果有溝通經驗，請問是用何種語言溝通？

中文 英文 其他： _____

3. 你上網溝通的目的是：

聊天 討論事情 有事情需要幫忙

其他 _____

II. 寫作經驗

4. 在上這堂課之前，你有任何的英文寫作經驗嗎？

有 沒有

若有，請描述一下是在何時以及何種情況下寫的(如：高中英文課)：

5. 你之前的寫作經驗是否會先擬草稿、和同學評論寫作的問題以及修訂寫作的過程？

有 沒有

若有，請描述一下你對於這樣的寫作經驗感覺如何：

6. 你之前的寫作經驗中是否參與同儕互評？

有 沒有

若有，請描述一下你對於這樣的寫作經驗感覺如何：

7. 在上這堂課之前，你曾經在E3, Blackboard或是其他網路系統(如：MSN, e-mail)用英文寫作嗎？

有 沒有 其他：_____

若有，請描述一下是在何時(如：英文課)以及用何種系統寫的(如：MSN)：



非常感謝您寶貴的意見！

Appendix C

The interview questions

您好：

本學期線上同儕互評的活動(MSN)已經暫告一段落，非常感謝各位對本活動的參與。請依照您參與此線上同儕互評的經驗回答下列的問題，結果僅供研究參考，絕不私自對外公佈，亦不影響課堂上學期成績的考查。請學弟妹根據自己實際的學習經驗。謝謝您的參與及合作。

Interview questions	
使用同儕互評後，我對此活動以及英文寫作的感覺。	
1.	使用 <u>線上同步同儕互評</u> 對你最大的幫助是什麼？ <input type="checkbox"/> 寫作能力 <input type="checkbox"/> 批判思考 <input type="checkbox"/> 閱讀能力 <input type="checkbox"/> 單字以及文法上的進步 <input type="checkbox"/> 其他
2.	使用 <u>線上同步同儕互評</u> 時，你大部分都提供什麼種類的回饋(feedback)？(可複選) <input type="checkbox"/> 文法 (時態、主詞動詞一致性、介係詞、名詞) <input type="checkbox"/> 單字 <input type="checkbox"/> 標點符號 <input type="checkbox"/> 拼字 <input type="checkbox"/> 組織架構 <input type="checkbox"/> 內容
3.	承上題，如果你沒有選擇最後兩個選項(組織架構、內容)，請問為什麼？
4.	你覺得 <u>線上同步同儕互評(MSN)</u> 能提升你的這幾篇文章的寫作品質嗎？ 如果有的話，為什麼？如果沒有的話，為什麼？
5.	你覺得使用 <u>線上同步同儕互評</u> 後，對你之後的英文寫作能力有提昇嗎？ 如果有的話，為什麼？如果沒有的話，為什麼？
6.	你覺得 <u>線上同步同儕互評</u> 可以幫助了解你的寫作問題嗎？ 如果有的話，為什麼？如果沒有的話，為什麼？
7.	參與 <u>線上同步同儕互評</u> 的活動後，之後寫作時，我會對文章進行修改？ 如果會的話，為什麼？如果不會的話，為什麼？
8.	透過 <u>線上同步同儕互評</u> 進行文章修改後，你之後對英文寫作會更有信心嗎？ 如果會的話，為什麼？如果不會的話，為什麼？
9.	在進行 <u>線上同步同儕互評</u> 來進行文章修改時，你是否還會使用其他資源 (如:字典、翻譯機等等)？ 會 _____，例如 _____ 不會 _____

10.	<p>你在線上同步同儕互評時，曾遇到哪些問題？</p> <p>MSN所提供的功能不容易使用_____</p> <p>和對方很難配合時間_____</p> <p>網路連線太慢_____</p> <p>與同儕間互動不良，溝通沒有效率_____</p> <p>同儕給的回饋沒有幫助_____</p> <p>打字速度太慢_____</p>
-----	--

11. 進行**線上同步同儕互評**的時候，為什麼一開始都要先打招呼或是自我介紹呢？是基於禮貌，還是有其他的功用嗎？打完招呼後，您通常會用什麼方式來開始進行**線上同步同儕互評**呢？
12. 進行**線上同步同儕互評**的時候，如果沒有打招呼的話，而直接進行互評的原因是什麼？是為了節省時間嗎？還是因為不熟的緣故嗎？
13. 為什麼在**線上同步同儕互評**結束時，您會問一些有關存檔或是是否寄信給老師的問題來結束**線上同步同儕互評**呢？是因為不知道怎麼結束話題嗎？
14. 在進行**線上同步同儕互評**的過程中，您會提及過去英文學習的經驗或是笑話嗎？為什麼？
15. 在進行**線上同步同儕互評**的過程中，您會使用表情符號的目的或是它們的功能是什麼？
16. 您覺得如果少了這些打招呼，開玩笑，正面的回饋(謝謝)或是表情符號，在進行**線上同步同儕互評**的過程中，會不會造成溝通上的困擾呢？
17. 您覺得上述的那些情況(打招呼，開玩笑，正面的回饋(謝謝)或是表情符號)在進行**線上同步同儕互評**的過程中，扮演很重要的角色嗎？

非常感謝您寶貴的意見！

Appendix D

Peer revision checklist

Writer: _____

Reviewer: _____

Evaluation items	Needs work	Good	Outstanding
Content and organization			
1. They essay contains a topic sentence.			
2. Writing is logically organized, with appropriate transition.			
3. All ideas are well developed and clearly explained.			
4. The report includes a concluding sentence.			
Language use			
1. Grammar is correct <ul style="list-style-type: none"> ■ Subject-verb agreement ■ Fragments ■ Run-ons (sentences joined incorrectly) ■ Verb forms and tense ■ Pronoun ■ Articles ■ Others, please point out directly the problems _____ _____			
2. Spelling is correct.			
3. Word choice is appropriate.			
4. Connecting words are properly used.			
Mark the sentence you don't understand.			
Overall, which part of the writing you like most? Why?			
Which part needs to be improved?			

Appendix E

Examples and explanations of on-task episode

Except for those which were not found in the data, every on-task episode was explained with an excerpt. First, as illustrated in Excerpt 1 (line 1 through 4), global revision-oriented evaluation (GRE) meant that the students evaluated peers' articles on the paragraphic level and offered comments concerning organization, whereas non-revision-oriented evaluation (GNE) meant that at first the reviewer thought that he detected one problem, but agreed not to correct the "problem" after accepting the writer's explanation, as shown in Excerpt 2 (line 1 through 8). Moreover, local revision-oriented evaluation (LRE) as shown in Excerpt 3 (line 1 through 5) and local non-revision-oriented evaluation (LNE) as shown in Excerpt 4 (line 4) only required the students to focus their attention on the sentential level, such as wordings.

Excerpt 1 (GRE) (Y7 is the reviewer and Y10 is the writer.)

1. Y7: “其實不用分成兩段。雖然你的內容還蠻多的，但是這樣的話就會變成你在第一段就要有 *concluding* 了。但是在下一段你又繼續剛剛的話題。好像會有點怪。”
- 2.
- 3.
- 4.
5. Y10: “嗯嗯。就是一氣呵成就對了。”

GRE

1. Y7: (*Actually, you do not have to separate it into two paragraphs. Although you write a lot, it becomes that you need a conclusion in your first paragraph. However, you continue with the previous topic, which will be a little bit weird.*)
- 2.
- 3.
- 4.
5. Y10: (*Hm, I have to write in one paragraph, right?*)

GRE

Excerpt 2 (GNE) (Y9 is the writer and X1 is the reviewer.)

1. Y9: “至於下面的 *you can see that...* 我是參考課
2. 本裡面的 *concluding signal*。”
3. X1: “嗯嗯。”
4. Y9: “是太冗長?”
5. X1: “嗯嗯。除非你想要特別強調。”
6. Y9: “因為老師好像說要有 *concluding signal*，所
7. 以我就寫出來了。”
8. X1: “喔喔!”

GNE

1. Y9: (*As for the following “you can see that...”, I*
2. *refer to it in the section of concluding signal in*
3. *the textbook.*)
3. X1: (*Okay.*)
4. Y9: (*Is the sentence too long?*)
5. X1: (*Yes, unless you want to emphasize it.*)
6. Y9: (*Because the teacher says we need to write a*
7. *concluding signal, thus I write it out.*)
8. X1: (*I see.*)

GNE

Excerpt 3 (LRE) (X2 is the writer and X3 is the reviewer.)

1. X3: “在這個句子中*For example, whenever we got*
2. *lost on the street or could not find the way,*
3. *they were always willing to direct us to the*
4. *destination.* 那個 *they*，好像會讓人感覺不知
5. 道在說誰...”
6. X2: “喔喔”

LRE

1. X3: (*In this sentence “For example, whenever we*
2. *got lost on the street or could not find the way,*
3. *they were always willing to direct us to the*
4. *destination.” I do not know who the “they”*
5. *refers to whom.*)
6. X2: (*I see.*)

LRE

Excerpt 4 (LNE) (X1 is the writer and Y12 is the reviewer.)

1. Y12: “We used to play around at playing ground
 2. field in a nearby school. 把 around 拿掉。”
 3. X1: “around 不是介系詞。XD。play around 是片語。”
 4. Y12: “喔喔。”我以為你要表達「四處」” □ LNE
-
1. Y12: (Take the “around” in the sentence “We used
 2. to play around at playing ground field in a nearby school.”)
 3. X1: (“around” is not a preposition. “play around” is a verbal phrase.)
 4. Y12: (I see. I thought you want to write “everywhere.”) □ LNE

Second, local revision-oriented clarification (LRC) meant that when the readers spotted the writers’ local errors such as wording and tried to offer them comments in an indirect way—asking questions, as illustrated in excerpt 5 (line 1 and 7), whereas local non-revision-oriented clarification (LNC) could be explained that when the readers did not understand the writers’ intensions and just hoped them to give the readers a suitable justification, as illustrated in excerpt 6 (line 1 through 4).

Excerpt 5 (LRC) (X3 is the reviewer and Y11 is the writer.)

1. X3: “你可以講一下這個 but 的那句原意是什麼
 2. 嗎？因為如果是我的話，我可能會用 and。”
 3. Y11: “就是說他們在爭一件小事，但是完全沒辦法
 4. 達成共識。” □ LRC
 5. X3: “如果是吵了很久卻沒辦法達成共識的話，用
 6. but 會比較適合。”
 7. Y11: “那還真難拿捏。”
-
1. X3: (Can you explain the sentence including “but”?
 2. If I were you, I might use “and”.) □ LRC

3. Y11: *(It means they argue over a trivial matter, but they cannot achieve agreement.)*
- 4.
5. X3: *(If the sentence means that, it will be better to use “but.”)*
- 6.
7. Y11: *(It is hard to judge.)*

Excerpt 6 (LNC) (Y10 is the writer and Y2 is the reviewer.)

1. Y2: “這個「came across ups and downs」是什麼意思?XD”
- 2.
3. Y10: “就是遇到很多風波，起起伏伏”
4. Y2: “喔，好！”

LNC

1. Y2: *(What does the phrase “came across ups and downs” mean?)*
- 2.
3. Y10: *(It means you meet a lot of challenges.)*
4. Y2: *(Okay, I see.)*

LNC

Third, global revision-oriented suggestion (GRS) indicated that the readers spotted the writers' global errors such as organization and content of the article and tried to offer comments which were not specifically written out, as revealed in excerpt 7 (line 1 through 5). Local revision-oriented suggestion (LRS) meant that the students only focused their attention on the sentential level such as wording, as exemplified in excerpt 8 (line 1 through 3).

Excerpt 7 (GRS) (Y8 is the writer and X5 is the reviewer.)

1. Y8: “主題句會上下文不對嗎?”
2. X5: “我覺得把兩句融成一句，然後簡單一點，再提一下是NCTU的圖書館會讀起來比較順。”
- 3.
4. Y8: “嗯嗯，我改一下看看。”
5. X5: “好的。”

GRS

1. Y8: *(Will my topic sentence be coherent with my context?)*

GRS

2. X5: *(I think you can simplify the sentence by*
3. *combining the two sentences and mention*
- NCTU's library, which will be more fluent.)*
4. Y8: *(Okay, I will try to correct it.)*
5. X5: *(Okay.)*

Excerpt 8 (LRS) (X2 is the writer and Y12 is the reviewer.)

1. Y12: *"He is now a doctor today. 這有點怪。now之後*
2. *又一個 today。用其中一個應該就可以了。"*
3. X2: *"好!"*

LRS

1. Y12: *(The sentence "He is now a doctor today." is a*
2. *little bit strange since there is one "now" after*
- the "today." It will be okay to use one of them.)*
3. X2: *(Okay.)*

LRS

Finally, global revision-oriented alteration (GRA) signified that the reviewer detected a problem concerning the writer's global error such as development of the article and offered a clear comment, as illustrated in excerpt 9 (line 6 through 10). Local revision-oriented alteration (LRA) indicated that the reviewer clearly offered comments with regard to the writer's local error such as SV agreement, as illustrated in excerpt 10 (line 1 through 6).

Excerpt 9 (GRA) (David is the writer and Y9 is the reviewer.)

1. X4: *"看起來第一段談到兒時在房間裡面會做什*
2. *麼事。第二段寫房間的大概形容以及一些在*
3. *房間的生活。第三段又談起在房間很難專心*
4. *讀書。第五段則寫房間對自己的心靈上的感*
5. *受。"*
6. Y9: *"其實我覺得可以把所有會在房間做的事情*
7. *抽到第三段，把對房間的整體敘述(藍天清新*
8. *空氣)抽到第一段。最後寫她自己的心靈意*
9. *義，然後總結。這樣的架構可能會比較完整*

GRA

10. 一點。”

1. X4: *(It seems that the first paragraph discusses*
2. *what you did when you were a kid. The second*
3. *paragraph discusses the description of the*
4. *room and the lives in the room. The third*
5. *paragraph mentions it is hard to study in the*
room. The fifth paragraph writes your own
spiritual feelings toward the room.)

6. Y9: *(Actually, I think you can move the ideas of*
7. *what you do in the room to the third paragraph*
8. *and move the whole description of the room,*
9. *including blue sky and fresh air, to the first*
10. *paragraph. Finally, write her own spiritual*
meanings and then conclude the article.
Therefore, the whole structure of the article will
be more complete.)

GRA

Excerpt 10 (LRA) (X3 is the writer and X5 is the reviewer.)

1. X5: “這句話 *His teaching make me face failure*
2. *rather than telling lies* 少了一個 *s*。Word 裡面有
3. 畫綠色底線。”

4. X3: “哪裡少了一個 *s* ?”

5. X5: “動詞。應該要改成 *His teaching makes me face*
6. *failure rather than telling lies.*”

LRA

1. X5: *(The sentence “His teaching make me face*
2. *failure rather than telling lies” lacks one ‘s.’*
3. *Word underlines the word with a green line.)*

4. X3: *(Where ?)*

5. X5: *(Verb. The sentence should be changed into “His*
6. *teaching makes me face failure rather than*
telling lies.)

LRA