Multimedia-Assisted Language Learning

The Journal of the Korea Association of Multimedia-Assisted Language Learning

Vol. 13, No. 2
Summer 2010

This journal was published with the support of the National Research Foundation of Korea (NRF).
This journal is enlisted on the National Research Foundation of Korea (NRF).
The Korea Association of Multimedia-Assisted Language Learning (KAMALL)

Founded in 1997 for promoting the teaching/learning of foreign languages through multimedia

Board Executives

President Chung-Hyun Lee (Hankuk University of Foreign Studies)
Vice Presidents
Kiwan Sung (Kyung Hee University)
Jae Kyung Kim (Pai Chai University)
Kyutaee Jung (Hannam University)
Jong-Bae Hwang (Konkuk University)
Kyoug-Ae Jin (Korea Institute for Curriculum and Evaluation)
Haedong Kim (Hankuk University of Foreign Studies)
Secretary Generals Sangmin Lee (Kyung Hee University)
Secretary Generals Jungtae Kim (Pai Chai University)
Information Technology
Ho Lee (Chung-Ang University)
Dan Craig (Sangmyung University)
Treasurer Namhee Kim (Hanyang Cyber University)
Sujung Park (Hanyang Cyber University)
Auditor Ji Young Nam (Korea Polytechnic University)
Chang-In Lee (Pai Chai University)
Managing Editor Heyoung Kim (Chung-Ang University)
Editorial Board Sung-Yeon Kim (Hanyang University)
Members
Taek-geun Kim (Soongsil University)
Hong Min (Sejong University)
Jae-Hee Park (Korea Institute for Curriculum and Evaluation)
Seo Young Yoon (Hankuk University of Foreign Studies)
Sun-Young Lee (Cyber Hankuk University of Foreign Studies)
Eunhee Lee (Seoul Women’s University)
Jeong A Lee (Hankuk University of Foreign Studies)
Young Woo Cho (Pai Chai University)
Rod Pedersen (Woosong University)
Editorial Committee Daejin Kim (Seoul National University of Technology)
Members
Dongkyoo Kim (Busan National University of Education)
( Domestic)
Shin-Hye Kim (Keimyung University)
Youngwoo Kim (International Graduate School of English)
Jie-Young Kim (Chung-Ang University)
Jin Seock Kim (Seoul National University of Education)
Duck-Gi Min (Cheongju National University of Education)
Eunkyung Sung (Cyber Hankuk University of Foreign Studies)
Dongkwang Shin (Korea Institute for Curriculum and Evaluation)
Maria Oh (Jeonju National University of Education)
Beom Yoo (Chunguk National University)
Wonho Yoo (Sogang University)
Hee-Jeong Ihm (Seoul National University of Education)
Yang-soo Jung (Chungnam National University)
Kyung-Whan Cha (Chung-Ang University)
Seonghee Choi (Kyonggi Institute of Technology)
Soojung Choi (Hallym University)
Hosung Choi (Hankuk University of Foreign Studies)
Heekyong Choi (Gyeongin National University of Education)
Kyong-Hyun Pyo (Dankook University)
Jong-Im Han (Ewha Womans University)

Editorial Committee
Dan Douglas (Iowa State University)

Members
David Jonassen (University of Missouri)
Jamie Myers (Penn State University)

Elementary Education
Seon-Ho Park (Gyeongin National University of Education)

Division Committee
Jinkyu Park (Kyung Hee University)
Keun Huh (Hannam University)
Sun Ju Park (Sinmook Elementary School)
Hye Ryong Park (Sungmi Elementary School)
Jeonglai Lee (Jungpyong Elementary School)
Hye Rim Choi (Seokgwan Elementary School)
Youngsoo Ha (Saneung Elementary School)

Secondary Education
Hyun-Woo Lim (Hankuk University of Foreign Studies)

Division Committee
Inho Shin (Chungbuk National University)
Dong Joo Lee(Korea Institute for Curriculum and Evaluation)
Yang-A Kang (Daejeon Science High School)
Rakhun Kim (Seoul Technical High School)
Young-kyu Park (Donghwa High School)
Hyun Yong Sohn (Sunduck High School)
Hyungho Song (Myeonmok High School)
Kyung-yeon Yoo (Daerim Middle School)
Youngjin Lee (Whimoon Middle School)

University Division
Hyang-ki Jung (Gimcheon College)

Committee 1
Myung Jae Kang (Yeoju Institute of Technology)
Kyoung Ae Kwon (Hankuk University of Foreign Studies)
Kyunghhee Kim (Hankuk University of Foreign Studies)
Jung Woo Kim (Ewha Womans University)
Eun-young Park (Methodist Theological University)
Soo-Jeong Shin (Korea Baptist Theological University/Seminary)
Han-ki Jung (Korea Army Academy at Yeong-cheon)
Keesook Cho (Cyber Hankuk University of Foreign Studies)
Young Hyun Cho (Seoul Women’s University)
Jongbum Ha (Kumoh National Institute of Technology)
Christ Surridge (KAIST)

University Division
Yoonjung Cha (Hanshin University)

Committee 2
Bong Kyu Kim (Sungshin Women’s University)
Young Mi Kim (Korea University)
Hea-Suk Kim (Seoul Women’s University)
Eunsook Shim (Sangji University)
Hyun Sook Yoon (Hankuk University of Foreign Studies)
Jin Ah Lee (Sangmyung University)
Hee-Kyung Lee (Yonsei University)
Yunkyung Lim (Wonkwang University)
Jeongwan Lim (Daegu University)
Sook-Kyung Jung (Daejeon University)
Kwanghee Hong (Yeungnam University)

Educational Technology
June Lee (Hankuk University of Foreign Studies)
Yongshin Kim (Kwang-ju Metropolitan City office of Education)
Hee-Jeon Suh (Tongmyong University)
Jae-myong Yang (KERIS)
Byung Ro Lim (Kyung Hee University)
Junghoon Leem (University of Incheon)

Public Relations
Dongwook Lee (Bucheon University)
Heejin Kim (Cyber Hankuk University of Foreign Studies)

The Journal of KAMALL is published three times a year in April, August, and December. For a membership application and other information, write to:

KAMALL
Prof. Sangmin Lee, Secretary General
School of English Language & Culture
1 Seocheon-dong Giheung-gu Yongin-si Gyeonggi-do 446-701, Korea
Email: kamallinfo@gmail.com
Tel: 031-201-3632
C.P: 010-3455-7537

Annual membership fees are ₩20,000 for individuals and ₩100,000 for the library and institution with the postage included. The fee for admission to KAMALL is ₩20,000 for individual membership. The life-time membership fee is ₩300,000.

Copyright © The Korea Association of Multimedia-Assisted Language Learning
### 한국멀티미디어언어교육학회 임원진

(2010. 1 ~ 2011. 12)

<table>
<thead>
<tr>
<th>고 문</th>
<th>김성익(한남대), 김인석(동덕여대), 김충배(고려대), 백두본(한국외대), 조세영(경희대), 최수영(한국교원대), 최인철(고려대)</th>
</tr>
</thead>
<tbody>
<tr>
<td>자문위원</td>
<td>김성수(임금리쉬무두), 김영기(오리엔트 AV), 김영이(EKLC), 박용(서일시스템), 이찬규(선학사)</td>
</tr>
<tr>
<td>회 장</td>
<td>이충현(한국외대)</td>
</tr>
<tr>
<td>부 회 장</td>
<td></td>
</tr>
<tr>
<td>수 석(편집 및 출판)</td>
<td>성기완(경희대)</td>
</tr>
<tr>
<td>기획・조정</td>
<td>김재형(배재대)</td>
</tr>
<tr>
<td>콘텐츠 연구・개발</td>
<td>정규태(한남대)</td>
</tr>
<tr>
<td>교육 및 연수</td>
<td>황종배(건국대)</td>
</tr>
<tr>
<td>교육평가</td>
<td>진경애(교육과정평가원)</td>
</tr>
<tr>
<td>국제협력・홍보</td>
<td>김해동(한국외대)</td>
</tr>
<tr>
<td>총무이사</td>
<td>이상민(경희대)</td>
</tr>
<tr>
<td>정보시스템이사</td>
<td>이호(중앙대), Dan Craig(상명대)</td>
</tr>
<tr>
<td>재무이사</td>
<td>김남희(한양사이버대), 박수정(한양사이버대)</td>
</tr>
<tr>
<td>감 사</td>
<td>남지영(한국산업기술대), 이창인(배재대)</td>
</tr>
<tr>
<td>편집 및 출판</td>
<td>상임이사: 김해영(중앙대)</td>
</tr>
<tr>
<td>편집이사 (10)</td>
<td>김성연(한양대), 김태은(숭실대), 박재은(고려대), 윤서영(한국외대), 이성영(사이버한국외대), 이은희(서울여대), 이정아(한국외대), 조영우(배재대), Rod Pedersen(우송대)</td>
</tr>
<tr>
<td>편집위원 (21)</td>
<td>김대진(서울산업대), 김동규(부산교대), 김신혜(계명대), 김영우(국제영어대학원), 김지영(중앙대), 김진석(서울교대), 민덕기(청주교대), 성은경(사이버한국외대), 신동광(교육과정평가원), 오마리아(전주교대), 유병춘(충북대), 유원호(서강대), 임희경(서울교대), 정상수(중앙대), 차경환(중앙대), 최성영(경기공업대), 최수정(한림대), 최희경(경인교대), 표경현(단국대), 한종임(이화여대)</td>
</tr>
<tr>
<td>해외 (3)</td>
<td>Dan Douglas(Iowa State University), David Jonassen(University of Missouri), Jamie Myers(Penn State University)</td>
</tr>
</tbody>
</table>
| 학술연구이사 | 초등 (8) | 상임이사: 박선호(경인교대)  
박선주(서울성목초), 박진규(경희대), 박혜령(서울미림초등),  
이정래(서울중국초등), 최혜림(서울석관초등), 하영수(사능초등),  
허근(한남대) |
| | 중등 (10) | 상임이사: 임현우(한국외대)  
강연아(대전과학고), 김나훈(서울공고), 박영규(동화고), 손현 وعدم(한남대),  
송성호(전북고), 신인호(충북대), 유경연(대림중), 이동주(교육과정평가원),  
이영진(휘문중) |
| | 대학 I (12) | 상임이사: 경향기(김천대)  
강명재(여주대), 권경애(한국외대), 김경희(한국외대), 김정우(이화여대),  
박은영(감신대), 신수정(천안대), 정화청(3사관학교),  
조기석(사이버한국외대), 조영현(서울여대), 하종범(금오공대),  
Christ Surridge (KAIST) |
| | 대학 II (12) | 상임이사: 차윤정(한신대)  
김봉규(성신여대), 김영미(고려대), 김혜숙(서울여대), 심은숙(상지대),  
윤현숙(한국외대), 이진아(상명대), 이희경(연세대), 임윤경(원광대),  
임정환(대구대), 정숙경(대전대), 홍광희(영남대) |
| | 교육공학 (6) | 상임이사: 이준(한국외대)  
김용선(광주교육청), 사회전(동명대), 양재명(KERIS), 임병노(경희대),  
임정훈(인천대) |
| 섭외·홍보 (2) | | 상임이사: 김희진(사이버한국외대), 이동욱(부천대) |
Multimedia-Assisted Language Learning

The Korea Association of Multimedia-Assisted Language Learning (KAMALL) Vol.13, No.2 Summer 2010

Yoonjung Cha · Laura Eunae Park
An Analysis of Synchronous Interaction and its Influence on EFL Writers’ Revisions 9

Young Woo Cho · Il-Hee Kim
The Feasibility of Using Text-Based Online Chat for Communicative Focus on Form 37

JungKyoung Huh
Internet-Based English Learning Activities of Infants and Preschoolers in Multimedia Labs 59

Eunmi Jeong
Comparison between the Effects of SCMC and SCMC with Peer Feedback on EFL Writing 81

Bong-Gyu Kim
Collaborative Discussion and Peer Review Activity in Computer-Mediated EFL Writing 105

Heyoung Kim
Three Teachers’ Initial Efforts to Use Twitter for Teaching English in Public Schools 129

Daehyeon Nam
The Effects of Corpus-Based Language Instruction on Productive Vocabulary Knowledge 155

Seo Young Yoon · Chung-Hyun Lee
The Perspectives and Effectiveness of Blended Learning in L2 Writing of Korean University Students 177

∙ 편집위원회 규정 ................................................................. 205
∙ 논문 투고 규정 ................................................................. 207
∙ Information for Contributors .............................................. 212
∙ 연구윤리에 관한 규정 ..................................................... 213
∙ 한국멀티미디어언어교육학회지 중요양식 안내 ...................................................... 216
∙ 회원 입회원서 ................................................................. 224
∙ Membership Application Form .............................................. 225
An Analysis of Synchronous Interaction and its Influence on EFL Writers’ Revisions*

Yoonjung Cha (Hanshin University)
Laura Eunae Park (Ewha Womans University)


This study investigated the effects of synchronous online peer feedback on the revision changes made in the subsequent drafts. The researchers conducted a close analysis of the discourse functions found in the chat scripts of fourteen pairs of students enrolled in an intermediate English composition class at a large university in Korea. After the participants wrote an explanatory essay, they exchanged feedback through synchronous online peer response sessions. Then, based on the feedback, they wrote the subsequent revisions. Various types of discourse functions were identified, and the total number of discourse functions showed diverse pair dynamics. Moreover, total messages were counted in order to find out whether the participants had focused on discussing their essay problems. Findings indicate that most of the participants concentrated on exchanging their thoughts and opinions on the essays. A statistical analysis also showed that significant differences were found in the subsequent revisions. Pedagogical implications and suggestions for the further studies were discussed.

I. INTRODUCTION

Peer response has become a common form of practice in most L2 writing classrooms since it was first introduced more than 30 years ago (Honeycutt, 2001). Studies have shown that students not only take active roles in their own learning as they interact with

* This article was supported by Hanshin University Research Grant.
one another in the feedback sessions, but the reactions from their peers may help learners to reconceptualize their ideas (Mendonça & Johnson, 1994). The interactive nature of peer response may also help learners to exchange reactions, questions, and response from authentic readers (Leki, 1990a; Mittan, 1989). In addition, peer response may help build critical skills which in turn may assist learners to analyze and revise their own writing (Leki, 1990b) and foster opportunities for meaning negotiation and language practice (Mendonça & Johnson, 1994).

Although peer response is typically practiced in face-to-face (F2F) contexts, online peer response is becoming increasingly popular in the writing classroom (Braine, 2001; DiGiovanni & Nagaswami, 2001; Hewett, 2006; Jones, Garralda, Li, & Lock, 2006; Liang, 2010; Liu & Sadler, 2003). According to Warschauer (1996, 2002), online peer response may promote motivation, participation, and collaboration.

Studies in online interaction in peer response have examined the participants’ discourse categories (DiGiovanni & Nagaswami, 2001; Heift & Caws, 2000; Liang, 2010) or the functional-semantic view of dialogue (Jones et al, 2006). Aside from placing an emphasis on the nature of online discourse, Hewett (2006) examined the revision-related discourse and revision changes. Some studies have compared F2F peer response to synchronous online peer response (DiGiovanni & Nagaswami, 2001; Jones et al, 2006) while others have compared different modes of online interaction (Cha, 2007; Honeycutt, 2001).

Although online peer feedback has been examined from various angles as shown above, studies in the Korean context are difficult to find. Nevertheless, considering the profound impact online communication has had on the younger generation, incorporating online peer feedback sessions in EFL writing instruction seems to be a natural option to consider; thus, this study examined how Korean EFL learners may respond to online peer feedback exchanges and to what extent the feedback sessions may affect the subsequent drafts. Furthermore, it is important to note that synchronous interaction always involves authentic individuals who display certain characteristics and personality traits in the way they interact with others which in turn may affect the way they revise the subsequent drafts. This study not only examined the interactional discourse of synchronous online peer response sessions and its effects on the revision changes, but significant factors such as personality traits were also briefly taken into consideration for the analysis and the interpretation of the results.
II. LITERATURE REVIEW

1. The Benefits of Peer Response: Meaning Negotiation and Collaborative Learning

The benefits of peer response in L2 writing contexts may be found in the two major characteristics of L2 interaction: meaning negotiation and collaborative learning (Liang, 2010). Studies have shown that exchanging meaning negotiations (e.g., confirmation checks, comprehension checks, clarification requests) during L2 interaction may help learners notice certain linguistic features which in turn may help them to modify messages (Pica, 1996). Long (1996) also claimed that the process of meaning negotiation may facilitate learner output as well as error correction. In addition to exchanging meaning negotiation during peer feedback sessions, the participants may also benefit from collaborative learning as peer assistance and scaffolding are promoted during the interactions (Swain, 2000; van Lier, 2000).

Collaborative learning also stems from Vygotsky’s (1978, 1981) theories of human learning and development which claim, “All higher-order functions develop out of language-based, social interaction” (Vygotsky, 1981, p. 163). In addition, Warschauer (1997) defined the benefits of collaborative learning through computer mediated communication (CMC) as follows: a) text-based and computer-mediated interaction; b) many-to-many communication; c) time-and place-independence; d) long distance exchanges; and e) hypermedia links (p. 470). In the era of information and technology, it may be difficult to separate collaborative learning and CMC, and yet only a few studies (Cha, 2007) examining peer response through synchronous online interaction have been conducted in Korean EFL contexts.

2. Online Interaction in L2 Peer Response

Peer feedback approaches are still widely used in most writing contexts, but many researchers and practitioners have now begun to examine and incorporate the use of CMC methods in L2 writing classes. Although studies have found that CMC interactions share certain similar discourse functions as F2F communications (Smith, 2003; Sotillo, 2000), differences (Negretti, 1999) such as the use of technical actions (e.g., the use of emoticons in place of facial expressions), and the opportunity to see and correct errors through delayed responses to messages (Lee, 2001) have also been found to exist.

In terms of CMC interactions in L2 peer response, researchers have compared online
activities from various angles. DiGiovanni and Nagaswami (2001) compared the participants’ discourse categories (e.g., questions, explanations, restatements, and suggestions) in online and F2F communications, and found that the F2F environment promoted a higher number of negotiations while the proportions of agreement or disagreement with ideas appeared to be higher in the online environment.

In another study examining online peer response, Jones et al. (2006) discovered that L2 students discussed more local issues such as grammar and vocabulary in F2F contexts, while discussions were more focused on global concerns such as content and organization in synchronous computer mediated communication (SCMC) sessions. These findings were contradictory to that of Liu and Sadler (2003) who found that local concerns were more discussed during online sessions while the participants in the F2F environment focused on both local and global concerns.

Other studies have examined two different types of online peer response environments: SCMC versus asynchronous computer mediated communication (ACMC). Honeycutt (2001) compared ACMC (e-mail) and SCMC conferencing in peer response and found that students made greater reference to documents, content, and rhetorical contexts when using e-mail to exchange peer response; on the other hand, students made greater reference to both writing and response tasks using synchronous chats than e-mail exchanges. Although the students did not show a significant preference of one mode over the other, they indicated that using e-mail was more helpful than chat which was considered to be more “playful” in nature.

Studies in SCMC have also found the drawbacks of synchronous online interaction. Problematic features of online communication such as disjointed discourse, off-task messages in simultaneous online composing were discovered (Braine, 2001; Liu & Sadler, 2003). In addition, Liang (2010) found that the participants seldom engaged in meaning negotiation, error correction, and technical actions whereas social talk, task management, and content discussion predominated the conversations. Hewett (2006) also found that half of the talk in synchronous online peer response sessions were related to interpersonal connections, interactional facilitation, and workspace discussion.

Despite the drawbacks found in synchronous online peer response, Hewett’s (2006) study may become a new form of writing practice; however, although revision changes took place as students participated in synchronous online peer response sessions, Liang (2010) claimed that Hewitt’s (2006) study took place in an L1 context and that “relationships among types of interaction and their connections to revision remain unclear in L2 contexts” (p. 47). Studies examining synchronous online interaction in peer response
Online interaction has now become a common mode of communication for most young people in Korea, and more studies examining the characteristics and the outcome of SCMC in peer response are needed. Therefore, this study posed two research questions as follows:

1) What types of discourse functions are present in the chat scripts, both qualitatively and quantitatively?
2) To what extent is the content of the feedback effective in the subsequent drafts?

III. METHODOLOGY

1. Participants

This study took place in an intermediate English composition class at a large university in Korea. 28 students who were majoring in English Education enrolled in the compulsory writing class; although seven of the students had taken an English composition course prior to enrolling in the current class, none had ever participated in any types of online peer response activities. The students were required to take two English writing classes, and the current course was the first level, which was aimed at introducing the basic components of English composition. The writing class was taught in English by a Korean–American bilingual instructor, who is also one of the researchers of this study. The students were also required to speak only in English during class, and the online chat sessions were to be conducted in English as well.

2. Data Collection and Procedures

The writing class for this study was taught by one of the researchers of this study, and the class was taught from a strong process-oriented perspective. Students wrote four major essays in the following order: explanatory, problem-solution, compare–contrast, and persuasive. They were then asked to exchange peer feedback through online chat sessions.
An Analysis of Synchronous Interaction and its Influence on EFL Writers’ Revisions

for the explanatory and persuasive essays, while compare-contrast and problem-solution essays were reviewed through F2F peer response sessions in class. The chat sessions were scheduled outside of class time and each pair chose an appropriate time for themselves. In order to take a close examination of the interactional dynamics of the chat sessions and its effects on the subsequent drafts, only the explanatory essays were analyzed for the current study.

After the instructor provided the basic instructions on writing an explanatory essay, the students were asked to write the first draft at home. After completing the first draft, they were asked to pair up with a partner for the online peer feedback sessions (the students were allowed to choose their own partners). Then, the students received basic instructions and training on conducting a peer response session: they were asked to conduct the chat sessions according to a peer feedback form provided by the instructor (see Appendix A). Upon completing the online peer response, the students were asked to revise their first drafts accordingly. The second drafts were then reviewed by the instructor and the students were asked to revise the second drafts and submit the third draft; however, this study only examined the students’ online interaction and the first and second drafts, so the teacher feedback and the final drafts will not be discussed.

3. Data Analysis

1) Analysis of Discourse Functions

The data were analyzed by both quantitative and qualitative measurement. Three methods of quantitative measures were conducted: a) total frequency of discourse functions; b) revision-related discourse functions; and c) actual incorporation of discourse functions. First, to measure the total frequency of the discourse functions, fourteen chat scripts were analyzed by Sotillo’s (2000) coding categories, which were originally modified from the coding scheme by Mendonça and Johnson (1994). Some of the categories used in this study were also adopted from Liang (2010). The two researchers of this study coded all of the chat scripts and twelve discourse functions were identified: under each discourse function, more specific categories were adapted from Sotillo (2000), Mendonça and Johnson (1994), and Liang (2010). However, due to complicated classifications, the researchers decided to only report the main discourse functions in this study. The total discourse functions including the sub-categories with frequency were added in the Appendix B for more specific references.
Definitions of coding categories and examples from the participants’ chat scripts are summarized in Table 1. While the two researchers analyzed the fourteen chat scripts, it was also discovered that synchronous interactions had to be counted by the number of sentences because some of the data contained more than one sentence including multiple discourse functions (Heift & Caws, 2000). As shown in the example below, there are two sentences written by one participant: (a) was under a response category, and (b) was categorized as comment.

(a) I can’t clearly understand your intention to use the word “both-sided”. (b) It’s ambiguous.

Second, to determine the frequency of the pairs’ turn-taking discussions on their writing problems, we used a different method from the previous one. For this purpose, we
categorized the discourse function as “Content Discussion” adopted from Liang (2010). Each posting by the participants is referred to as “messages”. Heift and Caws (2000) define these messages as, “one student posting equaled a message regardless of the number of sentences the posting contained (p. 210).” For each chat script, the total messages by each participant were counted. Then, the messages related to the discussion about the participants’ essays were grouped together as “Content Discussion,” and the rest of the messages were grouped as the “Others.” Lastly, to investigate how much the participants actually incorporated their discussion into the revisions, the total messages grouped as “Content Discussion” were divided into two categories: incorporation and no incorporation.

A quantitative measurement of the frequencies and the percentages were reported from all three methods. The researchers reviewed all of the chat scripts together. All cases of disagreement were resolved through discussion until a consensus was reached. Regarding the qualitative measurement, the participants’ chat scripts were introduced and evaluated in order to examine what happened during the synchronous interaction.

2) Analysis of First and Subsequent Drafts

The participants’ first drafts and the subsequent drafts were analyzed in terms of holistic and analytic measurements. The Test of Written English (TWE) was used to measure the holistic scoring. As for the analytic scoring, the Arizona’s Instrument to Measure Standards (AIMS) Six Trait Analytic Writing Rubric, which was developed by the Northwest Regional Educational Laboratory (NWREL), was used. This particular rubric was chosen for several reasons: a) it is research-based; b) it provides specific information about the participants’ essays; and c) it allows consistent scoring method for general types of writing. The six traits are Ideas & Content, Organization, Sentence Fluency (sentence structure, and rhythm and flow of language), Word Choice, Conventions (punctuation, spelling, capitalization, grammar and usage, paragraph breaks, and proper format), and Voice (appropriate topic, purpose, and audience). These six traits were separately evaluated on a six point scale.

The scores of the first drafts and the subsequent drafts were analyzed utilizing SPSS 15.0. Descriptive statistics and paired samples $t$-tests were reported in order to examine how the synchronous peer feedback sessions influenced the differences between the two drafts. The researchers scored the first drafts and the subsequent drafts both holistically and analytically. The inter-rater reliability between the two researchers was $r = .845$ (holistic) and $r = .965$ (analytic) for the first drafts, and $r = .739$ (holistic) and $r = .938$ (analytic) for the subsequent drafts.
(analytic) for the subsequent drafts.

IV. FINDINGS AND DISCUSSION

1. Quantitative Analysis of Discourse Functions

According to Sotillo (2000), discourse functions are described as “categories of behavior in electronic discourse, such as requests, responses, apologies, greetings, and complaints” (p. 84). Therefore, the first quantitative analysis of discourse functions were examined in order to offer a general overview of the types of interactions exchanged between the participants. To explore the various types of discourse functions in the synchronous interaction, chat scripts from fourteen pairs of students were analyzed. Table 2 represents the total frequency of discourse functions, and Table 31) shows the percentage of its frequency.

As can be seen from Table 2, the total frequency of each pair varied from the lowest 52 to the highest 437. The Response function in every pair gained the highest frequency and percentage because under the Response function, there were categories such as agreement, explanation, clarification, emotions, and emoticons. An emoticon may be defined as “a sideways image of a face formed by keyboard symbols, which is used in e-mails or chatting to express a particular emotion.” A Response can be considered as an important discourse function while communicating and commenting on each participants’ writing. Moreover, depending on the participants’ preference, some used emoticons all the time (Pair 13) whereas some rarely used them in their responses (Pair 9 and Pair 10). When comparing the two highest total frequency pairs, P6 (422), and P13 (437), the total frequency of emoticon use for P13 was 156 (35.7%) and P6 was 71 (16.8%). It was interesting to note that these two pairs used the emoticons the most among all the pairs, but P13 used twice as many as P6 (see Appendix B). This was one of the reasons why P13 gained the highest total frequency.

1) The data in Table 3 were supposed to be included in Table 2; it was inevitable that the data had to be divided into two tables because of the size.
An Analysis of Synchronous Interaction and its Influence on EFL Writers' Revisions

**[Table 2] Total Frequency of Discourse Functions**

<table>
<thead>
<tr>
<th>Discourse Functions</th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
<th>P5</th>
<th>P6</th>
<th>P7</th>
<th>P8</th>
<th>P9</th>
<th>P10</th>
<th>P11</th>
<th>P12</th>
<th>P13</th>
<th>P14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Openings</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Closing</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Statements</td>
<td>1</td>
<td>17</td>
<td>6</td>
<td>7</td>
<td>9</td>
<td>20</td>
<td>3</td>
<td>7</td>
<td>1</td>
<td>7</td>
<td>10</td>
<td>10</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Questions/Requests</td>
<td>10</td>
<td>38</td>
<td>5</td>
<td>12</td>
<td>20</td>
<td>38</td>
<td>11</td>
<td>13</td>
<td>11</td>
<td>14</td>
<td>11</td>
<td>20</td>
<td>63</td>
<td>18</td>
</tr>
<tr>
<td>Responses</td>
<td>18</td>
<td>72</td>
<td>29</td>
<td>87</td>
<td>65</td>
<td>207</td>
<td>79</td>
<td>45</td>
<td>23</td>
<td>64</td>
<td>93</td>
<td>57</td>
<td>57</td>
<td>138</td>
</tr>
<tr>
<td>Suggestions</td>
<td>5</td>
<td>14</td>
<td>9</td>
<td>26</td>
<td>10</td>
<td>41</td>
<td>25</td>
<td>10</td>
<td>5</td>
<td>7</td>
<td>9</td>
<td>14</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Comments</td>
<td>3</td>
<td>40</td>
<td>28</td>
<td>14</td>
<td>13</td>
<td>53</td>
<td>26</td>
<td>9</td>
<td>10</td>
<td>24</td>
<td>16</td>
<td>17</td>
<td>35</td>
<td>31</td>
</tr>
<tr>
<td>Correction</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Topic</td>
<td>1</td>
<td>8</td>
<td>3</td>
<td>27</td>
<td>7</td>
<td>19</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>6</td>
<td>35</td>
<td>6</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Compliments</td>
<td>10</td>
<td>5</td>
<td>2</td>
<td>9</td>
<td>21</td>
<td>9</td>
<td>14</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>7</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Task-Management</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>22</td>
<td>8</td>
<td>11</td>
<td>2</td>
<td>6</td>
<td>9</td>
<td>10</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td>Social Talk</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
<td>199</td>
<td>90</td>
<td>187</td>
<td>154</td>
<td>422</td>
<td>177</td>
<td>105</td>
<td>57</td>
<td>130</td>
<td>196</td>
<td>141</td>
<td>437</td>
<td>237</td>
</tr>
</tbody>
</table>

**[Table 3] Percentage of Discourse Functions**

<table>
<thead>
<tr>
<th>Discourse Functions</th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
<th>P5</th>
<th>P6</th>
<th>P7</th>
<th>P8</th>
<th>P9</th>
<th>P10</th>
<th>P11</th>
<th>P12</th>
<th>P13</th>
<th>P14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Openings</td>
<td>0.0</td>
<td>0.0</td>
<td>2.2</td>
<td>0.0</td>
<td>0.0</td>
<td>0.5</td>
<td>1.7</td>
<td>1.9</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.5</td>
<td>0.8</td>
<td></td>
</tr>
<tr>
<td>Closing</td>
<td>5.8</td>
<td>0.0</td>
<td>2.2</td>
<td>1.6</td>
<td>1.9</td>
<td>0.0</td>
<td>1.1</td>
<td>1.0</td>
<td>3.5</td>
<td>1.5</td>
<td>2.0</td>
<td>0.0</td>
<td>0.5</td>
<td>0.8</td>
</tr>
<tr>
<td>Statements</td>
<td>1.9</td>
<td>8.5</td>
<td>6.7</td>
<td>3.7</td>
<td>5.8</td>
<td>4.7</td>
<td>1.7</td>
<td>6.7</td>
<td>1.8</td>
<td>5.4</td>
<td>5.1</td>
<td>7.1</td>
<td>1.6</td>
<td>3.8</td>
</tr>
<tr>
<td>Questions/Requests</td>
<td>19.2</td>
<td>19.1</td>
<td>5.6</td>
<td>6.4</td>
<td>13.0</td>
<td>9.0</td>
<td>6.2</td>
<td>12.4</td>
<td>19.3</td>
<td>10.8</td>
<td>5.6</td>
<td>14.2</td>
<td>14.4</td>
<td>7.6</td>
</tr>
<tr>
<td>Responses</td>
<td>34.6</td>
<td>36.2</td>
<td>32.2</td>
<td>46.5</td>
<td>42.2</td>
<td>49.1</td>
<td>44.6</td>
<td>42.9</td>
<td>40.4</td>
<td>49.2</td>
<td>47.4</td>
<td>40.4</td>
<td>64.5</td>
<td>58.2</td>
</tr>
<tr>
<td>Suggestions</td>
<td>9.6</td>
<td>7.0</td>
<td>10.0</td>
<td>13.9</td>
<td>6.5</td>
<td>9.7</td>
<td>14.1</td>
<td>9.5</td>
<td>8.8</td>
<td>5.4</td>
<td>4.6</td>
<td>9.9</td>
<td>5.0</td>
<td>6.3</td>
</tr>
<tr>
<td>Comments</td>
<td>5.8</td>
<td>20.1</td>
<td>31.1</td>
<td>7.5</td>
<td>8.4</td>
<td>12.6</td>
<td>14.7</td>
<td>8.6</td>
<td>17.5</td>
<td>18.5</td>
<td>8.2</td>
<td>12.1</td>
<td>8.0</td>
<td>13.1</td>
</tr>
<tr>
<td>Correction</td>
<td>1.9</td>
<td>1.0</td>
<td>0.0</td>
<td>0.5</td>
<td>0.0</td>
<td>1.4</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>1.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Topic</td>
<td>1.9</td>
<td>4.0</td>
<td>3.3</td>
<td>14.4</td>
<td>4.5</td>
<td>4.5</td>
<td>3.4</td>
<td>2.9</td>
<td>3.5</td>
<td>4.6</td>
<td>17.9</td>
<td>4.3</td>
<td>0.7</td>
<td>1.3</td>
</tr>
<tr>
<td>Compliments</td>
<td>19.2</td>
<td>2.5</td>
<td>2.2</td>
<td>4.8</td>
<td>13.6</td>
<td>2.1</td>
<td>7.9</td>
<td>2.9</td>
<td>1.8</td>
<td>0.0</td>
<td>0.0</td>
<td>5.0</td>
<td>0.9</td>
<td>2.1</td>
</tr>
<tr>
<td>Task-Management</td>
<td>0.0</td>
<td>1.5</td>
<td>2.2</td>
<td>0.5</td>
<td>2.6</td>
<td>5.2</td>
<td>4.5</td>
<td>10.5</td>
<td>3.5</td>
<td>4.6</td>
<td>4.6</td>
<td>7.1</td>
<td>2.1</td>
<td>5.9</td>
</tr>
<tr>
<td>Social Talk</td>
<td>0.0</td>
<td>0.0</td>
<td>2.2</td>
<td>0.0</td>
<td>1.3</td>
<td>1.2</td>
<td>0.0</td>
<td>1.0</td>
<td>0.0</td>
<td>0.0</td>
<td>2.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
There can be possible explanations for differences in total frequency among the pairs. One of the reasons may be due to each participants' lack of English proficiency and editing ability in English. That is, communicating in English can be a barrier for explaining in detail about what was wrong with their essays. Also, some participants may not have had enough knowledge about English grammar or other editing skills to provide useful suggestions. In addition, although the participants received a basic training session for online synchronous interaction, a more systematic training may be necessary in order to help them to conduct their peer response sessions more effectively and efficiently. In terms of efficiency, Honeycutt (2001) emphasized the importance of communicative grounding, which is derived from Clark's (1996) concept: “the collective process by which people create mutual knowledge through incremental acts of referencing” (p. 29). That is, when participants communicate through online discourse, they must let each other know “explicit document referents.” Some pairs had problems indicating the location of the essays, which resulted in confusion. Finally, the participants’ personalities played an influential role in the synchronous interaction. By observing the chat scripts, the way the participants discuss, make requests, or respond revealed certain aspects of their characteristics and personalities. For example, one participant always seemed to be careful and cautious about her partner’s feelings, so she repeatedly mentioned apologetic words such as, “It’s just my opinion, so please understand that I’m not trying to criticize your opinion. T.T.” during the interaction.

The first quantitative analysis, which is a general overview of the entire chat discourse exchanged among the participants, alone cannot explain which discourse functions were actually related to revision-oriented exchanges. For example, there were categories of Suggestions and Comments which were most likely connected to revision-oriented statements; however, it may be difficult to state that discourse functions other than Suggestions and Comments were not directly related to revisions just by looking at the names of the categories. Thus, the second quantitative measure was adopted to investigate how much the participants focused on discussing their essays during the synchronous interaction. The chat scripts were classified according to new discourse functions: Content Discussion (exchanges related to content of the essays) and Others (the rest of the exchanges other than Content Discussion).

As shown in Table 4, the total messages were different from the total frequency measured in Table 2. From the total messages, the researchers distinguished the categories into two discourse functions. Except for Pair 1, every pair concentrated on discussing their essays more than 50%. These results seemed to correspond with findings
of DiGiovanni and Nagaswami's (2001) and Liang's (2010). Only one pair (P10) yielded more than 90%, but three pairs (P2, P13, and P14) gained more than 80%, and four more pairs (P6, P8, P9, and P12) gained more than 70%. These findings indicate that most of the pairs understood that synchronous interactions were important in helping them to revise their essays; therefore, they seemed to focus on exchanging their opinions on their writing.

**Table 4** Content Discussion

<table>
<thead>
<tr>
<th></th>
<th>Content Discussion</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
<td>Frequency</td>
</tr>
<tr>
<td>Pair 1</td>
<td>23</td>
<td>48.9%</td>
<td>24</td>
</tr>
<tr>
<td>Pair 2</td>
<td>118</td>
<td>89.4%</td>
<td>14</td>
</tr>
<tr>
<td>Pair 3</td>
<td>14</td>
<td>50.0%</td>
<td>14</td>
</tr>
<tr>
<td>Pair 4</td>
<td>101</td>
<td>62.7%</td>
<td>60</td>
</tr>
<tr>
<td>Pair 5</td>
<td>74</td>
<td>64.9%</td>
<td>40</td>
</tr>
<tr>
<td>Pair 6</td>
<td>285</td>
<td>76.0%</td>
<td>90</td>
</tr>
<tr>
<td>Pair 7</td>
<td>94</td>
<td>68.1%</td>
<td>44</td>
</tr>
<tr>
<td>Pair 8</td>
<td>82</td>
<td>78.8%</td>
<td>22</td>
</tr>
<tr>
<td>Pair 9</td>
<td>21</td>
<td>75.0%</td>
<td>7</td>
</tr>
<tr>
<td>Pair 10</td>
<td>139</td>
<td>92.1%</td>
<td>12</td>
</tr>
<tr>
<td>Pair 11</td>
<td>110</td>
<td>54.2%</td>
<td>93</td>
</tr>
<tr>
<td>Pair 12</td>
<td>116</td>
<td>74.4%</td>
<td>40</td>
</tr>
<tr>
<td>Pair 13</td>
<td>446</td>
<td>89.6%</td>
<td>52</td>
</tr>
<tr>
<td>Pair 14</td>
<td>180</td>
<td>82.2%</td>
<td>38</td>
</tr>
</tbody>
</table>

The final analysis for the quantitative measure was conducted to find out whether the participants actually incorporated their peers’ opinions or ideas in revising their essays as shown in Table 5. The total messages of Content Discussion for Pair 10 were 139, and all of the Content Discussions were incorporated into the revisions. Pair 1, Pair 4, and Pair 7 incorporated more than 90% from the Content Discussion, and interestingly, Pair 13 gained the total number of discourse functions (Table 2) as well as the messages (Table 5).
[Table 5] Incorporation from the Content Discussion

<table>
<thead>
<tr>
<th></th>
<th>Incorporation in Revision</th>
<th>No Incorporation in Revision</th>
<th>Total (CD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
<td>Frequency</td>
</tr>
<tr>
<td>Pair 1</td>
<td>22</td>
<td>95.7%</td>
<td>1</td>
</tr>
<tr>
<td>Pair 2</td>
<td>51</td>
<td>43.2%</td>
<td>67</td>
</tr>
<tr>
<td>Pair 3</td>
<td>6</td>
<td>42.9%</td>
<td>8</td>
</tr>
<tr>
<td>Pair 4</td>
<td>94</td>
<td>93.1%</td>
<td>7</td>
</tr>
<tr>
<td>Pair 5</td>
<td>54</td>
<td>73.0%</td>
<td>20</td>
</tr>
<tr>
<td>Pair 6</td>
<td>193</td>
<td>67.7%</td>
<td>92</td>
</tr>
<tr>
<td>Pair 7</td>
<td>86</td>
<td>91.5%</td>
<td>8</td>
</tr>
<tr>
<td>Pair 8</td>
<td>40</td>
<td>48.8%</td>
<td>42</td>
</tr>
<tr>
<td>Pair 9</td>
<td>11</td>
<td>52.4%</td>
<td>10</td>
</tr>
<tr>
<td>Pair 10</td>
<td>139</td>
<td>100.0%</td>
<td>0</td>
</tr>
<tr>
<td>Pair 11</td>
<td>60</td>
<td>54.5%</td>
<td>50</td>
</tr>
<tr>
<td>Pair 12</td>
<td>53</td>
<td>45.7%</td>
<td>63</td>
</tr>
<tr>
<td>Pair 13</td>
<td>126</td>
<td>28.3%</td>
<td>320</td>
</tr>
<tr>
<td>Pair 14</td>
<td>99</td>
<td>56.3%</td>
<td>77</td>
</tr>
</tbody>
</table>

CD= Content Discussion

However, this pair incorporated only 28.3% from the *Content Discussion*. That is, the total number of messages did not reflect the actual incorporation in writings for some pairs. Table 6 clearly shows the frequency and percentage of incorporation from the total number of messages unlike Table 5, which only illustrates from the total number of messages within *Content Discussion*. Pair 10 gained the highest percentage among all the pairs, and only three pairs (Pair 4, 6, and 7) were above 50% incorporation rate. The differences in frequency and percentage in Table 4, Table 5, and Table 6 can be due to the complexity of discourses and the uniqueness of revision-related exchanges found in each pair.

For the qualitative analysis, each pair’s dynamics during the synchronous interaction and excerpt will be explained and summarized. For every pair mentioned, the names of the participants will be their initials.
First, three pairs (Pair 1, Pair 3, and Pair 9) contained the lowest number of messages. Pair 1, KS and HE, superficially went through their essays from the title to conclusion. There were 47 messages in total and they mostly concentrated on talking about changing the appropriate titles just before this excerpt. HE requested suggestions for her introduction, but instead of providing any suggestions for HE, KS complimented her introduction, and immediately asked HE about her own introduction. HE suggested some ideas, and KS actually accepted her suggestions, and incorporated in her essay. For the rest of the chat period, they complimented each other’s essays and ended the interaction. This pair’s interaction was one of the shortest among all of them. These two participants were not confident enough to suggest critical views on each other’s essays, which may have led to passive attitudes on their interaction. This attitude also resulted in making one of the lowest suggestions among the pairs (see Table 2).

HE: What do you think of my introduction?
KS: I think it’s great.
KS: interesting
KS: I like the question in the first sentence
KS: It makes reader have a quiosity
KS: I mean curiosity sorry
KS: What about mine?
HE: hmmm. If you write an interesting or memorable experience, it would be more impressive.
KS: Okay
KS: I got it
KS: I will make a change on my 2nd draft
HE: The structure of the body is clear. It was easy for me to understand.
KS: How about the topic sentences?
KS: Does it match with thesis statement?
HE: Yes, it also properly include the content of each paragraph.

Pair 3, SH and SL, scored only fourteen messages; short interaction, and long messages. In other words, compared to other pairs, overall interaction was short as Pair 1 and Pair 9: also SL’s messages were particularly very long, as can be seen from this excerpt below. The interaction itself was very focused, and specific comments were made, which actually led to incorporation. Upon reading their chat scripts, it was interesting to note that they always used complete sentences, which is not a typical characteristic of discourse found in synchronous interaction. Also, the participants appeared to be very patient with each other, they always waited for their partner to finish what she had to say. That is, SH and SL never interrupted each other throughout the whole interaction. SL’s last response in the excerpt (italics) was very long, but this was only the first part of her answer. Two thirds of her response was not included because it was very long. This was the reason why the total number of the discourse functions and the messages were low among the pairs.

SL: We should write explanatory essay, but I’m a little bit confused whether yours is explanatory essay or not. It sounds like a persuasive essay a little bit. I can’t exactly point out which one was felt like a persuasive, but I just felt that it might be sound like a persuasive to others.
SH: Yeah, it seems to have the problem as you say. Then what shall I do with it?
SL: I wish I can tell you what you have to do, but it’s out of my ability. You may ask some questions to professor about this. It might sound like a persuasive “only” to me.
SH: OK. Thank you for your advice. :D Then how about other parts?
SL: For the first topic sentence, it will be more obvious for readers if you state what kind of effect Amazon rain forest does have more clearly. For example, you can
give us specific examples in order to explain what the global environment exactly means or what kind of extreme climate change will occur if we destroy the rain forest....

In the case of Pair 9 (SP and YJ), the interaction was very short with only 21 messages. Unlike Pair 1, the chat scripts were compact and focused, but they only touched some points about the content of their essays and quickly finished their interaction. The following excerpt illustrates how SP and YJ exchanged their opinions on their essays. For instance, YJ asked for opinions about the structure of her essay. SP provided comments about the essay being too narrative. Then, YJ explained why her essay was like narrative and requested for suggestions. In response to YJ, SP gave suggestions. By discussing their different opinions, they came to an agreement. Moreover, this pair used complete sentences like Pair 3, and produced the topic of their discussion (italics): therefore, the whole interaction was easy to follow and understand. However, not many suggestions were made due to the short interaction.

SP: Well, I'm not sure about grammar, but I can tell you about the structure of your essay.
YJ: That's fine. So, how was it?
SP: The overall context was okay, but I think it is a bit too narrative.
YJ: Really? I thought it would be okay since the sample essay in the text book was something like this; experience in life, impacts, etc. So should I change it?
SP: Oh, no. You don't have to change the whole essay. I think it would be enough if you give some specific examples in the body paragraphs.
YJ: Specific examples? can you give me more information on that?
SP: Umm... Maybe you could explain what your friend did, or how your friend helped you instead of just saying that you learned a lot from your friend. I thought it was a bit abstract.
YJ: Okay, I get it. Thanks a lot!
SP: You're welcome. Now, tell me about mine.

The second, Pair 6 (HA and JK), and Pair 13 (BP and YC) had several things in common. Both had the highest number of messages, and the total number of discourse functions. As previously mentioned, they also used the highest number of emoticons. However, their interactional pattern was quite different from each other. This is the excerpt for Pair 6. Instead of using one message to explain what JK wanted to suggest, there were
eight messages. This may be a typical type of interaction found in the chat discourse. This pair went through their entire essays specifically and carefully, from introduction, each body paragraph, and conclusion, and provided the largest number of suggestions compared to other pairs.

HA: than how about contents in the first body paragraph?
HA: Is there anything to add or abstract?
HA: subtract
HA: sorry~ I have too much typographical erro~
JK: aaah it's ok i do too XD
JK: mmm
JK: i think
JK: the former part of the first paragraph is ok ^^
JK: but the latter part is somewhat ambiguous
JK: i mean,
JK: i can't get what you're trying to say..
JK: like,
JK: students get frustrated because their mischief is sometimes just a behavior to attract teacher’s attention.
JK: especially this part. > <
HA: yeah~ it need more explaing~!! there is no example why i felt that way
HA: anything else?
JK: mmm
JK: I think there’s no more ambiguous sentences on the first paragraph.

Pair 13 (BP and YC) followed the questions in the peer feedback form, but as can be seen from the following excerpt, they spent most of the time simply answering the questions without providing any constructive feedback. They also noticed that they had spent most of their time simply answering each other’s questions, so BP suggested that they write down the answers on the peer feedback form. Then, they changed the direction of the interaction by being more active in giving suggestions, and commenting other problems in the essays.

BP: Is there a specific topic sentence beginning at each body paragraph?
BP: Yes~
YC: yes!
YC: wow
YC: it is too short answer kk
YC: only three letters.
BP: simple... gg
YC: the next question is...
YC: is...
YC: Do the topic sentences relate to the thesis statement?
BP: yes, again~
YC: yes!
YC: too!
YC: kk
YC: No problem.
YC: Do the supporting sentences give additional, detailed information about the topic sentences?
YC: yep! clearly! kk
YC: wow
BP: yours, yes~

Finally, some of the pairs’ synchronous interactions were differentiated from others. In case of Pair 2 (JC and JL), they sincerely shared each other’s thoughts by exchanging longer messages than any other pairs. In order to revise the hook and the thesis more clearly, JC kept asking questions, and tried to make JL understand about why she wrote the sentences as she did. Until they reached an agreement, they kept exchanging their views like this excerpt.

JL: and..shall we move on to your writing?
JC: oki, so about the linkage between my hook and the thesis.
JL: yes
JC: i guess i should focus on education as a tool to provide opportunities for minority students.
JL: yes... what about marginalized?
JC: so, should dominic coryell be described as a guy with poor educational background.. oh, that one, in the intro, ‘marginalized areas’ was meant, jeonju province
JL: right, definitely. he is the person with little education, right? but he anyhow made a success - that should be the main point.
JC: yeah, but then I didn’t tell his background
JL: aha now i understand
JC: and should I just skip the part that, if he were in korea, he might have ended up being a misery, or somthin’
JL: I thought it means that students who are learning lower quality education receiving
JC: my point was that korea education system isn’t encouraging such programs that train students to be an enterpreneur but now reading mine again, it doesn’t sound like I meant to deliver.

JL: yes. I absolutely distort your meaning; ; ; ;

Pair 7 (YL and YC) were exemplary participants of synchronous interaction and displayed how synchronous interaction should be carried out. As far as the frequency of discourse functions are concerned, this pair did not stand out among the other pairs; however, the content of the interaction set a good example for effective synchronous interaction. YL and YC always mentioned the whereabouts in the essays, each of them pointed out the problem, and tried to understand the comments by asking questions or requesting for information. The differences between Pair 2 and Pair 7 are that Pair 2’s interactions were much more focused and detailed than Pair 7. In case of Pair 7, it was sometimes difficult to follow what they were discussing due to a lack of direction and coherence.

YL: You started with a general statement. It’s good for starting an essay.

YL: But the problem is, the first body paragraph. It does not properly support the thesis that you mentioned in the introduction. The details are not about ‘the right way to learn English’ but mainly about the policy.

YC: duh-----

YC: Kkkkkkkkkk After I read it again I could find my problem as you pointed out~ I KEPT saying about the English education policy, right? Maybe I was so excited to write about the bad policies kkkkkkk.

YL: kkkk and I think you intended to say that Dr. Lee motivated you to major in English Education.

YC: Yes, exactly.

YC: And also the fact that he taught me the problem of the English Education policy and the right way to study English at the same time.

YL: So I think, it would be better to change the thesis a little bit, like, ‘he motivated me to major in English Education’ Or you can keep your thesis and change the details to support the idea you want to deal with, ‘the right way to learn English’.

YC: Yes, I think I made a big mistake kkkkkkk

YL: I’m just giving advice~! kk

YC: Kkkkkkk. Then I will change my thesis sentence a little according to your advice.

These excerpts have shown that each pair presents a different set of interactional dynamics. It was insightful to examine how the participants interacted with each other,
shared their opinions, reacted to one another’s responses, questions, or statements through synchronous interaction.

2. Effects of Chat Discourse on Subsequent Drafts

To investigate the effects of synchronous discourse in the subsequent drafts, the two drafts were scored holistically and analytically. As shown in Table 7, the mean scores of the holistic measurement for the first drafts were 3.23 and the subsequent drafts were 3.86. Statistically, significant differences were found. Similar to Cha’s (2007) findings, it is reasonable to assume that synchronous exchanges on participants’ writing helped improve the subsequent drafts in some degree.

Regarding the analytic scoring, the mean scores of the first drafts for each trait were as follows: Ideas & Content, 3.34; Organization, 3.52; Sentence Fluency, 3.39; Word Choice, 3.14; Conventions, 3.34; and Voice, 3.57. The findings indicate that Word Choice has the lowest mean score of all the traits, which implies that the participants may have had difficulty in selecting the appropriate words when writing the essays. The reason Conventions had a low mean score was probably due to grammar and its usage. Many EFL writers have a hard time in writing since they lack grammatical competence. However, there may have been few mistakes in spelling, punctuations, and capitalizations because word-processing programs such as MS Word or Hangul can check those areas as the participants write their first drafts. In case of Organization and Voice, the participants showed higher mean scores than the other traits possibly because of instructional effects. That is, before they began writing the essays, they were taught how to write an explanatory essays, focusing on the organization as well as the purpose of the essays, and how to attract audience with their chosen topics.

The mean scores of all the six traits increased from the first drafts to the subsequent drafts. Similarly, Organization and Voice scored higher than the rest of the traits as they were in the first drafts. The mean score of Word Choice was the lowest. The mean scores of each trait in the subsequent drafts were all different, but interestingly, the overall scores of the mean differences between the first drafts and the subsequent drafts were similar among the six traits. Moreover, there were significant differences between these two drafts; therefore, synchronous online feedback could have resulted in facilitating the participants’ revisions to some varying degree.

Furthermore, to demonstrate how the participants incorporated feedback into their own essays from the exchanges in the interaction, some of the examples were discussed below. This is the sample of one of the students in Pair 7's conclusion part.
[Table 7] Effects of Chat Discourse on Subsequent Drafts

<table>
<thead>
<tr>
<th></th>
<th>First Drafts</th>
<th>Subsequent Drafts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>D</td>
</tr>
<tr>
<td>Holistic</td>
<td>3.23</td>
<td>.65</td>
</tr>
<tr>
<td>Analytic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ideas &amp; Content</td>
<td>3.34</td>
<td>.61</td>
</tr>
<tr>
<td>Organization</td>
<td>3.52</td>
<td>.66</td>
</tr>
<tr>
<td>Sentence Fluency</td>
<td>3.39</td>
<td>.63</td>
</tr>
<tr>
<td>Word Choice</td>
<td>3.14</td>
<td>.65</td>
</tr>
<tr>
<td>Conventions</td>
<td>3.34</td>
<td>.71</td>
</tr>
<tr>
<td>Voice</td>
<td>3.57</td>
<td>.66</td>
</tr>
</tbody>
</table>

p < .05

[1st draft]
In conclusion, even though all students might have their own tastes in deciding who is the best teacher, I believe that my math teacher can be the one who meets all students' tastes. If you want to be a teacher in the future as me, why not try this way? You will soon be able to get students' respect.

[Subsequent revision]
In conclusion, my math teacher seems to be a qualified teacher because he found his own effective teaching method, possessed various personalities, and steadily tried to improve himself. Even though all students might have their own tastes in deciding who is the best teacher, I believe that my math teacher can be the one who meets all students' tastes. If you want to be a teacher in the future as me, why not try this way? You will soon be able to get students' respect.

This student accepted her partner's suggestion about adding the summary of her body paragraphs in the conclusion. By including a short summary, her writing became clearer to the reader. Here is the another sample for grammar corrections (Pair 14).

[1st draft]
~It seems like (a) to bring up a baby, so I can experience pre-mammy. (b) For long time raise my puppy I learn many things.~

[Subsequent revision]
~It seems like (a) to bring up a baby, so I can experience pre-mammy. (b) For long time raise my puppy I learn many things.~
[Subsequent draft]

～It seems like (a-1) bringing up a baby, so I can experience pre-mammy. (b-1) After raising for a long time, I learned many things.

As can be seen from the above example, this subsequent draft still needed to be revised in that this was not the final version, but the student provided corrections for typographical and grammatical errors in a-1. Also, sentence b was revised based on the exchanges during the interaction. These small changes might not have been a great influence on the participants’ whole essays, but depending on the pairs, effects of revision incorporations varied.

V. CONCLUSION

Considering the wide acceptance and implementation of peer response in L2 writing classrooms and the significant influence of the Internet today, it might be fair to conclude that alternative peer feedback approaches to the traditional F2F method are in need of close investigation. Recognizing this need, researchers have begun to investigate online peer response from various angles: a) placing an emphasis on online discourse categories (DiGiovanni & Nagaswami, 2001; Jones et al, 2006; Liang, 2010); b) placing an emphasis on revision-related discourse and revision changes (Hewett, 2006); c) placing an emphasis on the problematic features of online interaction such as disjointed discourse and off-task messages in simultaneous online composing (Braine, 2001; Liu & Sadler, 2003); d) comparing F2F peer response and online peer response (DiGiovanni & Nagaswami, 2001; Jones et al, 2006) and e) comparing different modes of online communication (Cha, 2007; Honeycutt, 2001).

The studies mentioned above have shown some important features of online peer response, and the current study also attempted to examine Korean EFL learners’ peer response through synchronous online interaction. In addition to analyzing the various types of discourse categories, the participants’ individual characteristics were also taken into consideration when examining the revision changes made in the subsequent drafts. Furthermore, it is important to note that interaction always involves authentic individuals who bring forth a diverse set of personal traits and characteristics to the discourse; such factors may contribute toward the way the participants interact with one another (Fitze, 2006; Villamil & de Guerrero, 1996), which in turn may affect the quality of the revisions
made in the subsequent drafts. Thus, in addition to investigating the discourse categories found in the online interactions and the revision changes made in the subsequent drafts, the current study also briefly explored how certain factors such as individual characteristics class affected the quality of the online interaction, and consequently the quality of the revisions made in the subsequent drafts.

Finally, the researchers of this study acknowledge the limitations as follows: a) in order to gain a close examination of the individuals’ personal traits, motivation, and prior experience of taking an English composition class, a detailed survey should have been conducted; b) upon completion of the survey, the participants should have been paired according to certain categories of individual traits and prior experience of English composition (the categories would have to be dependent on the research questions); and c) explicit instructions and scaffolding on conducting effective online peer response should have been given to all of the students prior to the actual online peer response sessions.

In order to gain further insights on synchronous online peer response in Korean EFL contexts, various types of investigations are needed. For example, a comparative study of peer response groups representing different levels of English language proficiency and prior experience of English composition (e.g., low-level pairs versus high-level pairs), a study of mixed-level pairs (e.g., low-level & high-level pairs) may reveal meaningful insights on implementing effective synchronous online peer response sessions. Furthermore, a more detailed qualitative analysis on the effects of individual personality traits may help EFL writing instructors to gain meaningful insights on implementing effective online peer response sessions in their classrooms. In order to conduct such an experiment, a thorough investigation on each participant’s personal characteristics such as learning styles, personality traits, motivation, future aspirations, prior experience of English composition, and English proficiency levels is necessary.

For most young people, social networking and online communication have now become natural components in their daily lives; moreover, communication and collaborative learning can no longer be discussed apart from the technological resources which have now become indispensable aspects of human interaction and communication. In order to continue searching for effective approaches to writing instruction in Korean EFL contexts, the effects of peer collaboration and online interaction should not be overlooked.
REFERENCES


APPENDIX A

Peer Feedback Form

1. Does the introduction have an interesting hook?
2. Is the thesis statement in the introduction?
3. Is the thesis statement clear?
4. Does the thesis statement reveal what the essay is about?
5. Is there a specific topic sentence beginning at each body paragraph?
6. Do the topic sentences relate to the thesis statement?
7. Do the supporting sentences give additional, detailed information about the topic sentence?
8. Does the conclusion summarize the thesis (or the main points) of the essay?
9. Does the writer conclude with concluding remarks (prediction, suggestion, opinion, what the writer learned or discovered, etc.)?
10. Which sentences or areas do you have trouble understanding?
11. Underline this area and ask your partner to explain or clarify.
12. Which sentences or areas do not belong in the essay?
13. Underline this area and ask your partner to explain or clarify.
14. What is(are) the best part(s) of the essay?
15. Did your partner arrive on time for the online session?
16. Are there any other comments?

APPENDIX B

Overall Total Frequency of Discourse Functions

<table>
<thead>
<tr>
<th>Discourse Functions</th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
<th>P5</th>
<th>P6</th>
<th>P7</th>
<th>P8</th>
<th>P9</th>
<th>P10</th>
<th>P11</th>
<th>P12</th>
<th>P13</th>
<th>P14</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.Opencings</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2.Closing</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3.Statements</td>
<td>1</td>
<td>17</td>
<td>6</td>
<td>7</td>
<td>9</td>
<td>20</td>
<td>3</td>
<td>7</td>
<td>1</td>
<td>7</td>
<td>10</td>
<td>10</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>4.Questions/Requests</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1)Simple Q</td>
<td>2</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td>10</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>6</td>
<td>19</td>
<td>1</td>
</tr>
<tr>
<td>2)Clarification R.</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>3)Comprehension</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>4)Confimation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5)Explanation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6)Request for</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suggestion</td>
<td>8</td>
<td>10</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------</td>
<td>----------------</td>
<td>-------------</td>
<td>---------------</td>
<td>---------</td>
<td>----------------</td>
<td>------------------</td>
<td>----------------</td>
<td>----------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>38</td>
<td>5</td>
<td>12</td>
<td>20</td>
<td>38</td>
<td>11</td>
<td>13</td>
<td>11</td>
<td>14</td>
<td>11</td>
<td>20</td>
<td>63</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>5. Responses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Simple Responses</td>
<td>2</td>
<td>19</td>
<td>3</td>
<td>5</td>
<td>23</td>
<td>31</td>
<td>3</td>
<td>7</td>
<td>2</td>
<td>15</td>
<td>18</td>
<td>21</td>
<td>32</td>
<td>30</td>
</tr>
<tr>
<td>2) Clarification</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3) Explanation</td>
<td>0</td>
<td>13</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>29</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>7</td>
<td>3</td>
<td>9</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>4) Agreement</td>
<td>8</td>
<td>22</td>
<td>9</td>
<td>25</td>
<td>9</td>
<td>60</td>
<td>34</td>
<td>16</td>
<td>8</td>
<td>23</td>
<td>5</td>
<td>11</td>
<td>34</td>
<td>18</td>
</tr>
<tr>
<td>5) Disagreement</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6) Emotions</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>20</td>
<td>3</td>
<td>6</td>
<td>7</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>9</td>
<td>7</td>
<td>27</td>
<td>16</td>
</tr>
<tr>
<td>7) Uncertainty</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>9</td>
<td>0</td>
<td>2</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>8) Emotions/Expressions</td>
<td>4</td>
<td>9</td>
<td>9</td>
<td>32</td>
<td>21</td>
<td>71</td>
<td>29</td>
<td>14</td>
<td>1</td>
<td>3</td>
<td>56</td>
<td>5</td>
<td>156</td>
<td>45</td>
</tr>
<tr>
<td>6. Suggestions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Content</td>
<td>1</td>
<td>8</td>
<td>6</td>
<td>15</td>
<td>0</td>
<td>11</td>
<td>15</td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>7</td>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2) Grammar</td>
<td>0</td>
<td>6</td>
<td>2</td>
<td>8</td>
<td>9</td>
<td>22</td>
<td>7</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>9</td>
<td>18</td>
<td>12</td>
</tr>
<tr>
<td>3) Organization</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4) Simple Suggestions</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>7. Comments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Comment</td>
<td>2</td>
<td>19</td>
<td>7</td>
<td>6</td>
<td>3</td>
<td>12</td>
<td>10</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>7</td>
<td>4</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>2) Criticism</td>
<td>1</td>
<td>1</td>
<td>8</td>
<td>5</td>
<td>0</td>
<td>8</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>6</td>
<td>8</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>3) Offer</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4) Elaboration</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>5) Self-Correction</td>
<td>0</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>17</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6) Text Citation</td>
<td>0</td>
<td>13</td>
<td>1</td>
<td>0</td>
<td>8</td>
<td>14</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>8. Correction</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>9. Topic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Topic Initiation</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2) Off Topic</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>18</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>34</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>3) Topic Shift</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>17</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>10. Compliments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) General C.</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>2) Content-related</td>
<td>6</td>
<td>3</td>
<td>0</td>
<td>9</td>
<td>17</td>
<td>5</td>
<td>12</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>11. Task Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Social Talk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Frequency</td>
<td>52</td>
<td>199</td>
<td>90</td>
<td>187</td>
<td>154</td>
<td>422</td>
<td>177</td>
<td>105</td>
<td>57</td>
<td>130</td>
<td>196</td>
<td>141</td>
<td>437</td>
<td>237</td>
</tr>
</tbody>
</table>

Key words: synchronous peer feedback, discourse functions
Applicable levels: tertiary education
An Analysis of Synchronous Interaction and its Influence on EFL Writers’ Revisions

Authors: Cha, Yoonjung (Hanshin University, first author); yjcha@hs.ac.kr
Park, Laura (Ewha Womans University); eunaelaura@ewha.ac.kr

Received: May 15, 2010
Reviewed: July 30, 2010

This study investigated the issue of whether focus on form instruction using text-based online chat has adequate feasibility primarily from participating learners' perspectives. A three-week English learning program was designed to help college students practice interaction in English outside their regular English class hours. Thirty-two students at a university in Korea interacted with the researcher via Windows Live Messenger. The learners practiced chatting in week 1 and participated in a role-play task in week 2. During the task, the researcher corrected their errors and helped them with their form related questions. In week 3, they completed a review task based on the chat script and filled out a questionnaire. It was found that the learners evaluated focus on form (corrective feedback and the researcher's answers to their questions), role-play task, and text-based online chat positively, with focus on form being more positively evaluated than the others. This finding suggests that imbedding focus on form within an L2 learning program based on text-based online chat contributes to learner satisfaction, and thus makes it a feasible approach to addressing the learners' needs for various English forms outside the classroom.

* This article is partly based on the first author's doctoral dissertation completed at the University of Illinois in 2008. An earlier version was presented at KAMALL International Conference 2009 at Dongduk Women's University on October 24th in 2009. Young Woo Cho is the first author; Il-Hee Kim is the second author.
1. INTRODUCTION

As English has become an indispensible means for global communication, there is a growing trend in Korea that English is learned and taught for authentic communication. However, there are still somewhat limited resources available outside classrooms for Korean learners to acquire contextualized expressions and forms through meaningful interaction with competent English users. Text-based online chat, which has less restriction in time and space, can be a great tool for Korean students to foster their English communication skills. Text chat is also a very useful tool for focus on form (FonF) (Doughty & Williams, 1998; Long & Robinson, 1998) because learners can pay attention to new forms or their errors more easily in written conversational form.

Motivated by these benefits of text-based online chat, a series of investigations were conducted to provide theoretical, empirical, and practical rationales for FonF instruction utilizing text-based online chat. In an earlier investigation (Cho, 2009), literature on FonF was reviewed to demonstrate that the concept is firmly based on contemporary second language acquisition (SLA) theory, and then empirical evidence was provided to demonstrate the significant effect of FonF instruction through text-based online chat on second language (L2) learning. Despite these theoretical and empirical justifications for FonF, whether such a FonF approach is a feasible instructional option for L2 teaching and learning in real instructional settings has not been much investigated. This follow-up study, therefore, attempts to find out about the feasibility of text-based online chat as an effective communicative tool for implementing FonF targeting Korean college students.

In determining whether an instructional approach is feasible in a particular setting, it is important to consider learner beliefs and perceptions because if the learners perceive text-based online chat negatively, then, its feasibility and usefulness for FonF might be undermined. Thus, an investigation into learner perceptions may provide key information about the feasibility of FonF instruction. Previous studies of learner perceptions of text-based online chat (Choi, 2004; Kim, 2007; Lee, 2004) have provided useful insights into some key issues involved in using text-based online chat for FonF. However, few of these studies have explicitly linked learner perceptions to a broader issue of feasibility. It is quite necessary to fill this gap in the existing literature where there is no previous research investigating L2 learners’ perceptions as evidence of feasibility. Therefore, the current study investigated whether using text-based online chat for FonF is sufficiently feasible, based on data on participating L2 learners’ evaluation of the FonF treatment. The following section begins with a discussion of the theory, research, and feasibility of FonF
Ⅱ. LITERATURE REVIEW

1. Theory, Research, and Feasibility of FonF Instruction Using Text-Based Online Chat

Ellis (1997) stated that “SLA has in part, perhaps the largest part, been motivated by an expressed desire to improve language pedagogy” (p. 69). According to him, however, researchers differ in their stances toward the viability of using SLA research findings to improve classroom teaching. For example, Long (1990) was relatively optimistic about using well-established research findings to guide pedagogical decisions. It should be noted that FonF as an SLA concept interconnecting SLA and L2 pedagogy was proposed within this context as an organizing principle of L2 instruction, drawing on well-attested SLA research findings particularly concerning conversational interaction and psycholinguistic processing of the L2 (Doughty, 2003; Long, 1991; Long & Robinson, 1998). An implicit assumption underlying FonF is that the concept is consistent with valid SLA theory (Gass, 2003; Mackey, 2007), and is supported by firm empirical research. Accordingly, classroom teaching should incorporate some kind of FonF into classroom interaction. Within this framework, empirical research serves two important purposes. One is to validate the theory of FonF and the other is to test out various FonF instructional options so that empirically verified FonF methods may be applied to classroom teaching.

Although such a relationship between theory and practice would be highly desirable, the role of SLA is still limited in improving L2 teaching practices. Researchers such as Tarone, Swain, and Fathman (1976) and Hatch (1978) question the assumption that discoveries about L2 acquisition have direct pedagogical implications, because FonF, as commonly understood and studied by SLA researchers, does not address a number of real-world challenges and constraints faced by L2 teachers, most of which go beyond the scope of SLA. For this reason, Ellis (1997) called for “an educational perspective,” which stresses the awareness that “there are still few certainties” (p. 70) about L2 learning processes that are directly applicable to classroom teaching.

Ideally, FonF is a theoretically and empirically motivated approach to L2 pedagogy, representing a meaningful interface between SLA and L2 pedagogy. However, as Ellis (1997) pointed out, FonF as a top-down approach to L2 pedagogy rather than a bottom-up approach such as action research (Richards & Lockhart, 1996) poses a dilemma that,
The Feasibility of Using Text-Based Online Chat for Communicative Focus on Form

despite adequate theoretical and empirical evidence supporting the beneficial effects of FonF, the expected benefits are constrained by many real-world issues in the classroom. Thus, typical empirical studies do not necessarily provide evidence of whether a FonF treatment is feasible in a given instructional setting.

Recently, FonF has been studied in conjunction with Synchronous Computer-Mediated Communication (SCMC), which refers to online interaction that occurs in real time between two or more interlocutors over a computer network. SCMC has become indispensable part of the academic, business, or personal domains of many second language (L2) learners’ lives. Among several types of SCMC tools, text-based online chat is a widely used medium of online communication. Text-based online chat is considered a very useful tool for FonF because it helps learners pay attention to form during meaning-focused interaction. In addition, as previous descriptive studies have shown, text-based online chat elicits active participation and facilitates production of various linguistic and functional forms (Böhlke, 2002; Chun, 1994; Kern, 1995; Roed, 2003). These benefits of text chat have been found to contribute to the effectiveness of FonF instruction (Cho, 2008, 2009; Shekary & Tahririan, 2006).

When FonF is implemented through text-based online chat, yet another set of feasibility issues arises such as learners’ familiarity with or access to the Internet network, typing speed, and time arrangement (Lee, 2004). This means that for FonF to be a useful concept that may guide L2 teaching at both classroom and online settings, its feasibility needs to be considered in addition to its theoretical and empirical rationales. Doughty and Williams (1998) stated that the purpose of the chapters of the book titled Focus on form in classroom second language acquisition they co-edited was “…the exploration of the nature and feasibility of focus on form” (p. xiv, emphasis in original). Despite their explicit nomination of the issue of feasibility in FonF research, the studies reported in their book mainly represented SLA researchers’ perspectives, not addressing true feasibility issues commonly faced by L2 teachers or learners. Thus, the meaning of feasibility used in their book was not precise enough to tackle a wide range of real-world issues that may arise when implementing FonF.

By definition, feasibility refers to whether a research or instructional plan is possible or viable within a particular instructional setting. For teaching practitioners interested in implementing FonF in the classroom, its feasibility concerns not only its implementation possibility, but also its potential for success, which is closely related to their students’ attitudes toward FonF and its instructional medium. Previous research has shown that when there exists a wide gap between the teacher and the students in their perspectives
toward the lesson, mistrust and even misunderstanding may develop, which may seriously undermine the value of the lesson (Schulz, 2001; Yorio, 1986). From this perspective, the feasibility of implementing FonF in a text-based SCMC environment depends largely on participating L2 learners’ perceptions especially when participation is voluntary. If learners do not find a FonF treatment helpful for their L2 learning, they would not be likely to adopt that way of learning the L2, no matter how strong empirical evidence may be. Thus, L2 learners’ perspective is central to determining the feasibility of using text-based online chat as a tool for FonF.

One might argue that feasibility is not a big issue in the L2 classroom because the teacher’s decision to implement FonF instruction normally leads to an actual lesson when the teacher is supported with proper training. However, in online instructional settings, particularly when FonF is not part of a regular course, feasibility is not simply a matter of the teacher’s decision, but more of the learners’ decisions. Then, what issues are critical in determining the feasibility of FonF instruction mediated by text-based online chat? Financial issues do not pose significant challenges to its implementation because of the wide availability of free chatting programs (i.e., Windows Live Messenger1, Skype2, Google Talk3, etc.) and a lack of the need for physical space. Technical or network access issues used to be critical in earlier days of computer-based instruction. Regarding these issues, Kang (2000) found that whether learners possessed their own computer determined the extent to which learners utilized the Internet. Nowadays, most Korean university students own a personal computer, and thus the issues of access to the computer/the Internet or of learner computer skills do not stand out as major issues any more. For example, Kwon (2002) found a high level of Korean students’ familiarity with computer and web-based classroom instruction. A more important issue may be the learners’ attitudes toward online communication (Lee, 2003). This issue essentially involves a local context of instruction, a particular group of learners or individual learners because whether a certain type of instruction is of practical value is closely related to such local contextual and learner-related factors.

Therefore, the learner’s perspective toward FonF through text-based online chat may be the most important factor to be considered in determining its feasibility in an SCMC context. To reap the expected benefits of FonF within this context of L2 teaching and learning, learners need to have a sufficient level of willingness to participate in the online learning program and commitment to its completion. Thus, data regarding learner

---

1) http://explore.live.com/windows-live-messenger?os=other
2) http://www.skype.com
3) http://www.google.com/talk
perceptions, though limited in its role in providing rigorous objective evidence for an effect of FonF, may serve as strong evidence for the feasibility of a program utilizing text-based online chat for FonF. Based on the discussion of the relationship between feasibility and learner perceptions, the following section reviews key previous studies to demonstrate how this line of research may provide evidence of the feasibility of a FonF treatment.

2. Learner Perceptions as Evidence of Feasibility

Within the domain of Computer-Assisted Language Learning (CALL) research, several empirical studies investigated learners’ perceptions. In Kwon’s (2002) study, L2 learners felt that the utility of computer and the Internet was limited by such problems as unexpected technical malfunctions and a lack of the learners’ sufficient computer skills. Similarly, Lee (2004) found that, although the learners perceived online conversation as beneficial in terms of receiving authentic input and engaging in conversational scaffolding, her Spanish L2 learners encountered problems such as the difficulty of arranging a common time for chat activities and their lack of sufficient language ability and self-confidence. These studies demonstrate that the benefits associated with text-based online chat may not be obtained without considering the feasibility issues such as technical problems and time arrangement issues as perceived by the learners.

Regarding L2 learners’ perspectives toward text-based online chat, Choi (2004) conducted a study using text chat as an out-of-class opportunity for L2 learners to practice English. In this study, the Korean students expressed dissatisfaction with working with their peers because they felt their peer chat partners had possessed inadequate linguistic resources to support their learning during the online communicative activity. For that reason, the learners wanted to work with an English native speaker. Moreover, the learners felt that they should have been allowed some leeway to choose the topics for discussion. The finding directly related to FonF was that the learners wanted their errors to be corrected. This is related to the difficulties they expressed when working with their classmates because neither of them was grammatically competent enough to provide each other with corrective feedback.

Kim (2007) investigated learners’ perceptions of task types in SCMC. In her study, two types of tasks in SCMC were devised, and a questionnaire and interviews were used to evaluate the learners’ perceptions of the two tasks. Two types of tasks were compared with respect to the learners’ perceptions of their usefulness based on a questionnaire and interviews. The learners were found to prefer the task requiring them to pay attention to
target English vocabulary over the other one having no such requirement. These results may not be considered to be sufficient empirical evidence for the argument that the lexically oriented task is a more effective task than the other one with no lexical focus, for there was no objective testing procedure. However, like other previous studies, the learners in this study indicated some problems commonly associated with learner–learner interaction in online settings such as time delay due to low typing speed and limited English competence. However, this study clearly demonstrates the learners’ positive attitudes toward the lexical FonF task, suggesting that FonF should be imbedded in SCMC, because the learners’ positive evaluation of FonF is likely to generate a higher level of learner motivation, participation, and involvement, thereby rendering the treatment sufficiently feasible for implementation.

In summary, L2 learners’ evaluation of their experience in the chatroom is central to drawing implications about the feasibility of using text–based online chat for FonF. As the previous studies have suggested, L2 learners prefer to interact with an interlocutor whose English competence is sufficient enough to provide them with grammatical information and corrective feedback whenever needed. For successful implementation of FonF using text–based online chat, learners should be given enough leeway to choose the most convenient time and a conversation topic that is relevant to their communicative needs.

The review of previous research motivated the current study to investigate L2 learners’ perceptions of their participation in FonF in a text–based SCMC environment. The present study attempts to answer the following research question:

Research Question 1: What are Korean college students’ needs for FonF instruction as shown in their expressed difficulties with English, attitudes toward English learning, and interest in English forms?

Research Question 2: How do Korean college students perceive the benefits and limitations of task–based FonF mediated by text–based online chat?

III. METHOD

1. Participants

This research project was advertised as a short–term online English practice program targeting students in three English education major courses at a private university in
Korea. Forty-two students volunteered to participate in this project, but 32 of them fully completed the research procedures (10 male and 22 female). The participants were all English or English education majors. Nineteen learners had taken an official English proficiency test (the TOEFL or the TOEIC). Their average TOEFL score was 133 on the CBT scale (or 45-46 on iBT) \( (SD: 42.13) \). The scores ranged from 83 to 250 (four learners below 100, nine in the 100-150 range, five in the 150-200 range, one over 200). The participants told the researcher that, even though they were majoring in English, they usually spent little time interacting in English outside the classroom. Whereas all of them had previously used online chatting to have a conversation with their friends or family members, none of them had experienced chatting in English for learning purposes.

2. Procedure

The learners interacted with the researcher one-on-one in an online chatroom via Windows Live Messenger three times over a three-week period. There was no interaction between learners. In week 1, the participants had a familiarization session in which they introduced themselves to the researcher, practiced typing, and answered some questions about themselves. Three specific questions were asked regarding their overall attitudes toward English learning, FonF (corrective feedback in particular), and perceived difficulties with English. This activity took approximately 40-60 minutes, depending on the learner. In Week 2, they participated in an online role-play task for 50 minutes. For some learners whose typing speed was relatively low, additional minutes were given for them to complete the task. The role-play task simulated a situation where they were to visit their English teacher to get some information needed for planning their trip to the US during the summer vacation. During the role-play task, the researcher provided corrective feedback whenever a learner error was considered significant in terms of meaning delivery and learning, and helped them with their questions about or problems with English vocabulary, expressions, or grammar. Immediately after the task, the learners participated in a post-task activity in which they reviewed their chatscript and reported their discovery of new grammar rules, expressions, and/or vocabulary based on the first two questions in the debriefing questionnaire. The post-task activity took approximately 20-30 minutes. In week 3, the learners were given a reflective learning activity in which they were presented with their chatscript from the role-play task and were asked to recall their learning of new linguistic forms. Finally, they completed the remaining questions in the debriefing questionnaire. This procedure is summarized in Table 1 below.
3. Role-Play Task

A role-play task was designed to promote attention to form within an authentic communicative context. An imaginary situation was given in which the learner were planning on a trip to the US, but they did not know where to go, what to do, and how much money they needed to carry because they had never been to the US. With this situation in mind, the learners needed to visit their English teacher and then ask for help with their planning process. No more specific requirements were given because more specific task demands seemed to be too challenging due to their generally low English proficiency and unfamiliarity with this type of task. A role-play task used in this study has several advantages in terms of FonF. First of all, the learners’ unfamiliarity with the situation itself may push learners to use vocabulary and expressions they do not usually use, and often lead them to ask the teacher for help with those forms (Example 1).

Example 1: Learner request for help as FonF
T: So, this semester is moving toward the end.
L13: What is meaning semester?
T: Hak-ki in Korean.
L13: I go to the university in US when next semester.

Second, while producing unfamiliar language, learners produce various types of errors, many of which become the objects of the teacher’s corrective feedback. Example 2 below illustrates how the role-play task may create an opportunity for the teacher to provide corrective feedback on a learner error.

Example 2: Teacher corrective feedback
T: What’s your plan after you arrive at Baltimore?
L11: I don’t have plan yet.
T: I see. You don’t have any plan yet.
4. Learner Attitudes Questions and Debriefing Questionnaire

Three questions were asked during the familiarization session to identify the learners’ needs for FonF, so that the information obtained about the learners’ attitudes toward interaction in English, FonF, and English learning (See Appendix A) may be taken into consideration to boost the level of learner motivation and satisfaction. A separate questionnaire was designed to collect data about the learners’ perceived effectiveness of FonF through text–based online chat for their English learning (Appendix B). In this questionnaire, the first two questions were just part of the post–task activity in which the learners were asked to recall their discoveries of new linguistic items after the role–play task. Thus, the learners’ responses to these questions were not included in the analysis in this study. The learners were then asked to complete the remaining five questions about their evaluation of corrective feedback, answers to their questions, role–play task, and text–based online chat.

5. Analysis

1) Learner Attitudes Questions and Debriefing Questionnaire

The learners’ responses regarding their attitudes toward FonF and English were classified into several major common theme categories. Then, the learners’ responses to the debriefing questions were more specifically examined employing a content analysis method described in Dörnyei (2003), who suggested a two–phase analytical procedure:

1. Taking each person’s response in turn and marking in them any distinct content elements, substantive statements, or key points
2. Based on the ideas and concepts highlighted in the texts (cf. Phase 1), forming broader categories to describe the content of the response in a way that allows for comparisons with other responses (p. 117)

In the first stage of the analysis, all idea units in the learner responses to each question were identified. It was found that some learners repeated the same ideas across different questions. Thus, all such redundant ideas were identified and removed. After this step, each specific idea unit was categorized into three broad evaluative categories: positive, neutral, and negative, depending on the learners’ evaluation of the research procedure. The responses were also classified into five content categories: corrective feedback, teacher answers to learner questions, text–based online chat, role–play task, and
other (additional comments or suggestions).

A potential source of bias was addressed in this analysis. Kirk (1995) discussed a threat, among others, to valid interpretation of data: cooperative-subject effect. Cooperative participants tend to “please the researcher” and “they try, consciously or unconsciously, to provide data that support the researcher’s hypothesis” (p. 20). Cooperative-subject effect was considered a significant threat in this study because the learners might have thought a positive answer would meet the researcher’s expectation, even though the researcher stressed that there would be no disadvantage of expressing a negative opinion and that they were asked to express their feelings freely. Thus, a strict criterion for positive responses was essential to valid analysis.

A positive response was defined as a statement containing a clear thesis and at least one specific supporting explanation. A statement only with a positive thesis but without any specific and relevant supporting argument was classified as neutral because the learners may not have actually found any specific reason for a positive opinion. The following example illustrates the difference between a positive and a neutral response.

Example 3: Positive statement
L4: Yes, surely, it was helpful. It was good because the teacher corrected my errors about tense or other errors that I was not aware of.

The first statement expresses the main idea that corrective feedback was helpful. The underlined part of the second statement provided specific supporting evidence by citing two specific types of errors (i.e., tense and other errors).

Example 4: Neutral statement
L25: It was very helpful.

This response has a thesis, as is the case with positive statements, but there is no concrete supporting explanation. Thus, this response was not considered a genuine positive statement. It was classified as neutral instead.

Example 5 below shows a negative statement in which L30 expressed her difficulty understanding corrective feedback in the second part of the statement. Thus, it was considered (potentially) negative.

Example 5: (Potentially) negative statement
L30: I understood most of them, but I didn’t understand some.
The reliability was checked by another rater, who was an MA TESOL graduate student. She was given instructions regarding the coding process, and worked independently to code the entire data. The resulting simple percentage rate was 98.56%. The coding results were entered into SPSS 16.00 to run a chi-square test to determine whether the learners’ evaluation differed depending on the four elements of the treatment. The responses in the last category, other, were analyzed separately because those responses were just suggestions for improvement or complimentary remarks.

IV. RESULTS AND DISCUSSION

1. L2 Learners’ Attitudes toward Conversational Interaction, FonF, and English Learning

A majority of the learners reported having difficulty with production-related issues. Nineteen of the learners felt that building sentences by putting individual English words together grammatically was the most challenging part of interacting in English. These results are summarized in Table 2 below.

<table>
<thead>
<tr>
<th>Difficulties</th>
<th>N = 32</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sentence Construction</td>
<td>19</td>
<td>59.38</td>
</tr>
<tr>
<td>Grammar</td>
<td>14</td>
<td>43.75</td>
</tr>
<tr>
<td>Vocabulary/expressions</td>
<td>6</td>
<td>18.75</td>
</tr>
<tr>
<td>Pronunciation</td>
<td>2</td>
<td>6.25</td>
</tr>
<tr>
<td>Listening/comprehension</td>
<td>1</td>
<td>3.13</td>
</tr>
<tr>
<td>Anxiety</td>
<td>2</td>
<td>6.25</td>
</tr>
<tr>
<td>Low self-confidence</td>
<td>1</td>
<td>3.13</td>
</tr>
</tbody>
</table>

More specifically, the learners’ comments commonly referred to a situation where a message conceptualized mainly in Korean was not easily formulated combining a proper syntactic structure and lexical items, as is shown in Example 6 below.

Example 6: The comments on difficulties with interaction in English
L10: I can’t express all my ideas in English, I want to ask a question or say about
something, but when speaking in English, I can’t remember the word and really
don’t know what to say.

L22: The words are in my head, but I can’t put them together to say what I want to say.

These expressed difficulties can be explained in terms of common speech production
processes (Doughty, 2001; Levelt, 1989) because their comments, though in not
professional SLA terms, quite accurately describe the formulation stage involved in speech
production, whereby lexical items are inserted into a proper syntactic structure. The
problem is that because this perceived difficulty is still learner–internal, there is no way
the teacher or interlocutor can help them unless they explicitly indicate their difficulty.
This suggests that a FonF lesson targeting EFL learners who have limited proficiency
should be different from one targeting more proficient learners. To lower their linguistic
and affective burdens, it would be helpful to allow them to use their L1 when they cannot
express their intended messages in English. Once learners are allowed to take a moment
to make a request for assistance in Korean, the teacher or interlocutor may provide them
with timely help. This type of FonF, known as preemptive FonF (Ellis, Basturkmen, &
Loewen, 2001) or learner–generated FonF (Williams, 1999), requires a warm and
supportive environment. Therefore, some key design features of a feasible FonF treatment
using text–based online chat for the learners in this context seemed to be adequate L1
(Korean) and affective support using encouraging language and showing enough empathy
and considerateness to lower their anxiety about interacting in English.

Second, regarding their attitudes toward corrective feedback, almost all of the students
\( n = 29 \) responded that they felt it was helpful to receive corrections on their errors. Only
three students felt that they had shameful feelings when they received corrective feedback.
Based on these results, providing corrective feedback on learners’ errors during interaction
in a warm and friendly atmosphere was considered an appropriate and feasible FonF
option.

Finally, when they were asked if they had any questions about learning English, the
learners expressed their interest in various issues ranging from how to improve their
English to, more specifically, how to get a high score on the TOEIC test. It was difficult
to classify their diverse responses into a focused set of themes. However, their questions
tended to be quite broad. No students asked questions about linguistic forms. This
suggests that the level of the learners’ awareness of their needs for particular types of
form was quite low. In previous studies (Cho, 2008; Ortega, 1999), some ESL learners
were more form-oriented than other learners, and they more actively searched for opportunities for FonF during language learning activities. In this study, the learners in general were more interested in improving their TOEIC scores rather than specific types of form. This meant a more active and skillful role on the part of the researcher in directing the learners’ attention to form as necessitated by the moment–by–moment identification of the learners’ needs for FonF. In summary, the learners’ responses to the three questions were helpfully used to tailor the FonF treatment to each learner.

2. Perceived Effectiveness of Extensive Focus on Form Through Text-Based Online chat

The analysis of the questionnaire data initially showed that four of the learners misunderstood the intent of the two questions on the questionnaire regarding the researcher’s help with their form–related questions and provision of corrective feedback. They thought that the questions were about their peer’s help in their regular English classes. Those irrelevant responses were removed from the analysis, which resulted in 139 idea units. Positive statements \((n = 90, 64.7\%)\) outnumbered negative statements \((n = 28, 20.1\%)\). In terms of content category, the greatest number of comments were made on the role–play task \((n = 49, 35.3\%)\), followed by 33 comments \((23.7\%)\) on text–based online chat.

As shown in Table 3, the results from the chi-square test with two variables (evaluative category and content category) indicated a significant association, suggesting that the learners’ evaluation varied depending on which element of the FonF treatment they commented on \((\chi^2(6) = 24.76, p < .001)\). The effect size of .30 (Cramer’s V) indicates that the strength of this association was moderate. The largest positive value \((1.5)\) of standardized residuals was found in the positive/corrective feedback category, which means that the learners’ positive comments on corrective feedback contributed most to the significance of the association. In contrast, the largest negative value was obtained for the role–play category \((\text{std. residual} = -2.10)\). Therefore, the learners generally viewed FonF and corrective feedback in particular as most beneficial.
A closer examination of the positive responses about corrective feedback indicated that many of the responses mentioned the benefits of corrective feedback for specific linguistic problems ranging from lexical items to grammar problems such as tense, prepositions, and determiners \((n=14)\). The specific responses in Example 7 below support the interpretation that their positive responses indeed reflected their actual learning experiences.

**Example 7: Comment on corrective feedback**

L24: The tea school that I have never had opportunities to use in meaningful interaction.

Various responses of the learners regarding text-based online chat indicated the advantage of easy retrieval of chatscripts, which they found helpful in reviewing their typed sentences.

**Example 8: Comment on text-based online chat**

L11: I think learning English through text chat is an opportunity to practice English easily. While chatting, I can keep a record of my sentences accurately and easily, so that I can recognize my errors.

L11’s comment directly refers to the advantage of text-based online chat that all sentences are automatically saved on the computer. These learner comments are congruent with the finding reported in Cho (2009) that post-task report was one of the significant variables that accounted for correct scores on the posttest. Thus, analyzing the chatscript after interaction may significantly enhance the effect of FonF, and L2 learners seem to be
well aware of this advantage of text chat. Another advantage of text chat seems to be that it can benefit EFL learners who are unfamiliar with spontaneous conversation and have a high level of anxiety about face-to-face conversation in the L2, based on several learners’ responses indicating that the text chat mode helped them feel more comfortable interacting with the researcher. Those learner responses confirm the earlier finding that text chat may lower learners’ anxiety about interaction (Kern, 1995).

The findings of this study are consistent with the finding reported in previous studies (Kim, 2004; Kim, 2007) that L2 learners believe that some kind of FonF is necessary in a L2 lesson. This means that FonF should be viewed as essential to bringing about a higher level of learner satisfaction, thereby contributing to a higher level of feasibility. Also, L2 learners are well aware of the beneficial role of text chat for FonF. However, the relatively negative evaluation of the role-play task indicates that it is important to allow learners to choose tasks that they want to work on (Choi, 2004).

3. Other Comments

Twenty-five comments were classified into other, ten of which expressed the learners’ appreciation for the opportunity to participate in the research and the researcher’s help with their errors and questions. For example, L29 stated as follows:

Example 9: Comment on the opportunity to participate

L29: While chatting in English, I thought I would like to study English this way. I mean really, not just a passing idea. It was so fun that I felt an hour was too short and I was able to study more actively than usual.

In another set of nine comments, the learners asked either for another opportunity to participate in this type of research or for more extended text chat sessions. The remaining six comments are summarized in Table 4 below.
These learner suggestions support the view again that the learners found the program very helpful for their English learning, and were willing to continue their participation. It should be mentioned that, taking some learners’ low typing speed and limited English proficiency into consideration, the researcher made various efforts to show patience, empathy, and understanding. The researcher’s use of encouraging language (e.g., You did a great job, very good, etc) seemed to play an important role in raising the learners’ confidence and motivation.

V. CONCLUSION AND IMPLICATIONS

In conclusion, given the analyses presented in the previous section, an online FonF instructional program following the procedure of this study is of adequate feasibility for implementation at this university setting. Also, the finding that the learners ascribed their generally positive evaluation primarily to teacher corrective feedback suggests that FonF should be viewed as a key element of such an online L2 learning program that may be implemented in a similar Korean EFL context. Also, for Korean students who are not familiar with spontaneous interaction in English, the use of encouraging and empathetic language would be essential to boosting their motivation and self-confidence. The three need analysis questions significantly helped to identify their perceived difficulties and their level of awareness of English forms. Thus, an needs analysis phase is crucial in successful implementation of FonF instruction using text-based online chat. Text chat helps make FonF instruction at an online setting more feasible also in the sense that it
does not require any special technological features as audio and video chat do, which also supports its role as an easily accessible and practical tool for enhancing L2 learning. Based on the findings of this study, FonF instruction utilizing text-based online chat is not only a theoretically valid, empirically proven approach, but also a sufficiently feasible one to provide L2 learners with a useful out-of-class opportunity to acquire new forms and address their errors in meaningful interaction.

A remaining issue is whether it is feasible for a single teacher or researcher to interact with many learners one-on-one. In this study, the researcher interacted with 32 learners one-on-one. This was an inevitable decision to help make the FonF treatment consistent across different learners. In the future, increasing the number of teachers would be an important factor in increasing the feasibility of the program. A practical solution would be that some graduate students in the MA TESOL program at this university may serve as interactors as part of their research project or course requirements. The graduate students may sharpen their interactive and FonF skills while the undergraduate students may receive reliable help with their various form-related issues. Also, training advanced undergraduate students to help their peers with lower proficiency would open a new opportunity for FonF based on learner-learner interaction.

A limitation of this study concerns the number of participants and the amount of data. Future studies may need to collect data from a larger number of participants in different settings so that more valid and reliable information about the feasibility of FonF instruction may be obtained. Also, an empirical study of whether allowing L2 learners to use their L1 in learner-generated FonF may provide useful implications for both SLA research and L2 teaching would make significant contributions to this area of research. It would be also intriguing to investigate how dyadic chatting compares to other arrangements such as triadic chatting (i.e., one teacher chatting with two learners or three learners working together) or learner-learner chatting. In this study, only one type of task (i.e., role-play task) was used. A more specific investigation into the role of role-play tasks in FonF instruction would help reveal much about the relationship between type task and the outcomes of FonF instruction. Finally, a study conducted over a more extended period would provide more helpful insights into the potential of text-based online chat for FonF instruction.
REFERENCES


APPENDIX A

Questions about Learner Attitudes

1. Can you tell me what problems you have, if any, when you interact with someone in English (grammar, vocabulary, pronunciation or any others)?

2. How do you feel when your error is corrected during conversation in English?

3. Do you have any questions about English (pronunciation, grammar, vocabulary, expressions, or any others) or English learning (an effective way of improving oral proficiency or grammar)?

APPENDIX B

Debriefing Questionnaire

1. Please read your chatscript. While reading your chatscript, please tell me what you were thinking at the time you were chatting with your partner.

2. Do you feel that you learned something from this role-play activity? If yes, please write down as many examples of learning as you can recall from the chatscript. Please note that you do not need to report new learning as you are reading along now. Only report learning of specific items you experienced during the task last week. If you feel that you did not learn anything, feel free to say either “I did not learn anything” or “I do not remember...
anything."

- Vocabulary
- Expressions
- Grammar
- Others

3. Sometimes, your partner helped you correct your error. Did you understand all of your partner’s corrections? Were they helpful to you? Please explain.

4. Sometimes, your partner also answered your question about a word/expression/grammar rule. Were your partner’s explanations helpful to you? Please explain.

5. What do you think about text chatting as a tool for English learning? Do you feel that it is helpful for your English learning? Or do you feel that it has some problems? Please explain.

6. What do you think about the role-play activity? Do you think this activity is helpful for your English learning? Or do you think it has some problems as an English learning activity?

7. Please provide any comment/suggestions about the activity here.

Key words: SCMC, focus on form, text-based online chat, feasibility
Applicable levels: adult education

Authors: Cho, Young Woo (Pai Chai University); ywcho@pcu.ac.kr
Kim, Il-Hee (Indiana University–Purdue University Fort Wayne); kimi@ipfw.edu

Received: May 15, 2010
Reviewed: July 30, 2010

The present study intended to suggest desirable directions of early childhood English learning by examining the actual conditions of the Internet-based English learning activities using a range of services and information as a means of activities applicable to multimedia labs along with case studies with infants and preschoolers. For the purpose of this study, 26 infants and 20 preschoolers were selected as subjects in an infant school attached to S university. The subjects were observed for one term with regard to their English learning experiences, activities, process and effects based on the Internet in the multimedia lab. As a result, the process of learning English using the Internet in the multimedia lab consists of helping children understand structures and functions of computers, which is a ‘recognition phase’, followed by a ‘usage phase’ where children’s fear of computers is resolved due to increasing familiarity, and finally an ‘application phase’, where they can actually learn English on the Internet. Also, as for the response to the Internet-based early childhood English learning in the multimedia lab, both children and their parents were mostly satisfied. They viewed teacher–children interaction and increasing infant’s attention to computers as the most important aspects to be considered in this approach to English learning.
1. INTRODUCTION

As the Internet has been increasingly used in recent times, diversified Internet-based English learning methods for infants and preschoolers have been suggested (Kelly, 2002; Lee, 2007; Seo, 2006). English as a foreign language (EFL) is acquired through interactions with others in actual living where children experience the language and its expressions and develop relevant senses or intuition. Under EFL conditions as in Korea where opportunities to use English in daily environment are absolutely insufficient, lots of restrictions exist. As an alternative to overcome the environment where they hardly have chances to use English, the Internet-based English education for preschoolers aged 5-6 in kindergartens was suggested (Jeong, 2003). The Internet-based English learning is essential in such an unfavorable reality where lack of teachers and materials is far from meeting the strong social desire for English. In this age of information, the Internet-based English teaching for preschoolers and infants is desperately needed in that it provides infinite convenience and useful information.

Domestically, English education for the 3rd and 4th graders in elementary schools began in 1997 as a regular course, and since September 2006, the 1st and 2nd graders have been included in English education, which has been determined as a regular course after a period of trial operation. Now, the importance of English education for infants and preschoolers is brought out.

As preschoolers' concentration time is shorter than older children, they are not expected to have any clear goals or motives for learning English. Therefore, it is necessary to help them build up familiarity with and confidence in English learning and remain interested in English. Particularly the Internet-based English education for preschoolers and infants uses animated images or video to interest children. And leads them to learn accurate pronunciation of native speakers and allows differential education, which is why the approach is used in other subjects. If the Internet-based multimedia effects are applied to learning, more effective results can be expected in that preschoolers show more interest in audio-visual components such as pictures and animation than static texts. As infants and preschoolers lack in English reading skill, interesting pictures, animation and video images they use by clicking the mouse rather than static picture books get them to be exposed to English environment naturally and improve their language skills and interest in English.

As a rule, English education for infants and preschoolers refers to direct or indirect English education for children in early childhood. Direct English education methods for
those children include language institutes, worksheets, the Internet- or computer-based media education, private tutoring and overseas language courses. Indirect methods of English education include watching English-based videos and TV programs as well as listening to English songs. The Internet-based English education for preschoolers and infants are composed of fairy tales (animation), children’s songs, games and chants caused by online sites along with their favorite colors and designs to arouse children’s aural and visual interest. Also, online content is built in stages and levels, causes children’s curiosity and guides learners to incremental and sequential learning step by step. In addition, learners can replay the content for repetition and be free from temporal and spatial restriction. Online English learning is a good way to learn native speakers’ pronunciation and to overcome different educational environment depending on regions. To access the online content for English learning, the Internet connection and other audio-visual multimedia devices have to be installed.

Again, the Internet enables an array of children-oriented activities for preschoolers (Kim, et al, 2000), and the information on the web can be easily modified and complemented as necessary, which is not the case in CD-ROMs that are hard to modify once produced. Thus, web-based English content for learning does not cause extra cost, and can integrate components whose effects on children have been verified such as texts, sounds, video images, pictures and photos for multimedia approaches. Through the Internet children may have more chances to exchange ideas with other learners who have grown in different environment and interact with them. More chances for communication lead children to understand and accept cultural differences (Gersh, 1994). Online encounters may possibly exclude prejudices associated with race, age and appearance, which are likely to occur offline.

According to ‘2009 Internet Usage Survey’ released by KISA (Korea Internet & Security Agency) and KCC (Korea Communication Commission) regarding the familiarity with the Internet among infants and preschoolers, Internet usage among children aged 3-9 has increased, and 61.8% (840,000) of them are children aged 3-5, indicating the Internet use in early childhood is active.

And according to findings on applying the Internet to education (Bruce & Levin, 1997), the web arouses learners’ curiosity which is as natural as that of children, leading them to express their thoughts, exchange opinions and possibly change their actual behaviors in real world. Also, the online learning environment encourages learners to lead their learning progress according to their needs and interest (Means, 1994). Further, the Internet is used for language classes based on mother tongues and foreign languages (Beauvois, 1992;

In particular, according to a study on actual conditions and directions of home-based English education for preschoolers using the Internet (Seo, 2006), it is necessary to provide appropriate information and guidance on online sites for parents who do not take advantage of the Internet and who are interested in it but have no idea about available sites. Regarding the disadvantages of the Internet-based English education for preschoolers and infants, a study (Lee, 2007) points out that teachers’ or parents’ instructions and guidance are required to help choose quality sites as children may be exposed to inappropriate content, that children using the Internet without interactions with teachers, parents or peers are prone to enjoy passive and simple games, and that children are subject to weakened eye sights and lack of physical activities in case they sit at computers for long hours without changing their postures.

As aforementioned, systematic approaches to the Internet-based actual programs for early childhood education have not been taken, nor have their effects been verified domestically. Hence, considering social transformation and flow and the emerging necessity and importance of English and computer education for infants and preschoolers, the present study is to present the actual conditions and directions of English learning activities using diverse information and services on the Internet as a means of learning activity applicable in a multimedia lab based on case studies with infants and preschoolers.

1) What is the plan for the Internet-based English learning of infants and preschoolers in the multimedia lab?
2) How do children and their mothers perceive the Internet-based English learning of infants and preschoolers in a multimedia lab?
3) How do teachers perceive the Internet-based English learning of infants and preschoolers in a multimedia lab?

II. LITERATURE REVIEW

Computer-based language education till 1990s was mainly comprised of repetition drills and private tutoring programs. With multimedia developing further, diverse learning programs have been created to support a variety of audio-visual features such as problem solving, trial exams and game programs (Kim, 2004; Choi, 2003; Lee, 2007; Seo, 2006). In
general, those programs are classified into five categories such as repetitive drills, tutorial instructions, problem solving, simulation and games (Kim, 2004; Cha, 1998; Choi, 1992). In this study three typical types of the Internet-based English learning methods as follows are discussed.

1. Project-Based Learning

In project-based learning, infants and preschoolers are assigned to groups and set project goals, phases and time to complete each project using four language skills including speaking, reading, writing and listening for English learning. The teacher visits multiple sites on the Internet to find and select materials that would interest learners. With the materials the teacher has found or the ones children found themselves, the teacher leads learners to discuss and determine goals, steps and time of their learning. Then, infants and preschoolers can use the Internet to collect materials and complete the project while acquiring the four language skills such as listening, speaking, reading and writing. Also, the project performed goes through a final review and revision and the result is submitted for assessment. Here, the teacher should be careful to take children’s cognitive levels into account and not to choose projects that they would not be able to fulfill. Even in the course of performing the project, the teacher should have flexibility to modify plans as necessary.

2. Game-Based Learning

Games induce learners’ interests and have learners immersed themselves in learning based on basic human desire to win. The most important thing in game-based learning is to explain rules of the game to be observed and to monitor the process. Such rule setting and monitoring can be best done in games on the Internet using the computer. That is because the computer has attributes workable based on rules clearly set in place, and it is possible to keep monitoring players, who cannot win games without following the rules from beginning to end. Now, a plethora of game-based learning materials are offered on the Internet including word games, word scrambles, picture puzzles, finding patterns, matching games and invaders. Game-based learning is most interesting and gives children a chance to become familiar with the computer and strong motivation for English learning.

3. Story Telling-Based Learning

Learning through stories is analogous to children’s experience of listening to fairy tales
from adults around them. So it is a familiar way of learning something along with the excitement arising when somebody tells a story. On the Internet the Aesop’s Fables and Andersen’s Fairy Tales are presented along with pictures, letters and voices. These are useful sources for learners to improve English reading and listening skills and to become more familiar with English affectively. Yet, this method is far from direct effects on English learning among infants and preschoolers.

III. METHODOLOGY

This study focused on the Internet-based English learning activities of infants and preschoolers in the multimedia lab of S university for one term last year. Study subjects selected were from the infant class of 26 children aged 3~5 and the preschooler class of 20 aged 6~7 in S kindergarten attached to S university.

1. Participants

A questionnaire survey was conducted with 30 mothers of children aged 5 and older out of the 26 3~5-year-old infants and 20 6~7-year-old preschoolers for assessment. In addition to 16 (8 boys; 8 girls) copies returned, 11 teachers participated in the study. 6 (one main and 5 assistant teachers; two were assigned) of them were in charge of the 3~5-year-old infants and 5 were responsible for the 6~7-year-old preschoolers (1 main and 4 assistant teachers).

Mothers’ age groups included 31~35 (50%), 36~40 (37.5%), ~30 (6.25%) and 41~ (6.25%). The average age of teachers was 27.4 years. All the teachers were university graduates or had higher academic background.

2. Materials

The questionnaire used to assess the English learning of infants and preschoolers using the Internet in the multimedia lab consisted of 12 questions in the sheet A to find out how children and their mothers found the approach and 10 questions in the sheet B for teachers. The sheet A was composed of 6 questions for moms and 4 for children on the Internet-based learning and 2 regarding computer environment. The sheet B was comprised of 7 questions corresponding to criteria of an Internet assessment site and 3 regarding overall learning assessment. Each question was presented with the scale
ranging from 1 point (Not at all) to 4 (Absolutely affirmative).

3. Procedure

Children learned English three times a week. On Mondays and Wednesdays, workbooks and CD-ROM produced in-house for English learning were presented to 10 children in the classroom of the kindergarten by a teacher, who majored in English education, for 30 minutes. On Fridays, children moved to the multimedia lab on campus, where they were assigned to two classes of 26 and 10 each. One main and four assistant teachers were assigned to one of two classes: a class of 26 and the other of 10. The class lasted for 40 minutes excluding 20 minutes spent traveling to and from the lab. After the 16-week trial, children, moms and teachers were asked to assess the approach to learn computers and English in the multimedia lab from July 10 to 14.

4. Measurement

To determine the response distribution of children and their mothers with regard to the Internet-based English learning of infants and preschoolers in the multimedia lab, frequency and percentage were used. For teachers’ response, average and standard deviation were applied. To see whether there was any difference between boys and girls, x-test was used. To identify any difference between infant-class teachers and preschooler-class ones, t-test was applied for analysis.

As the experiment was conducted with small groups of subjects to apply the program developed here, personal interviews with children, moms and teachers were used as a significant indicator.

IV. FINDINGS AND DISCUSSION

1. What is the Plan for the Internet-Based English Learning of Infants and Preschoolers in the Multimedia Lab?

1) Multimedia Lab Environment Construction

To enhance interactions between children, at least 2–3 computers need be installed in the classroom and, if the space and affordability permit, it is desirable to consider a computer per 6–7 children (Shin, 1996). When installing two computers, they had better be
installed at an angle of 130° to see each other. This is to set a physical environment where interactions between children can improve. It is good to place more than two chairs per computer for children to talk and cooperate with each other. It is appropriate to keep the monitor’s height slightly higher than children’s eye height. Computer zones should not be separated from other zones. A printer and scanner must be installed to print results of children’s activities. By contrast, the multimedia lab is regarded as a completely independent space away from the typical arrangement of computers in kindergarten classrooms. In general, most elementary schools have independent computer labs where students are supposed to use two computers per person.

The present study suggests an environment for the Internet-based English learning of infants and preschoolers in a multimedia lab as in Figure 1 below. As it was a lab attached to the university, it was advantageous in terms of LAN lines and the latest high-performance computers, while it had disadvantages for children in terms of heights of computer desks and chairs and sizes of mice and keyboards.

![Figure 1] Multimedia Lab Environment Construction

The multimedia computer screen for teachers was connected to an LCD (Liquid
Crystal Display) projector, working in line with the screen put up on the front side of the classroom for learning activities. The LCD projector should be positioned on the ceiling of the room to save the inconvenience of wiring and the trouble of putting the device on a separate desk as in using an OHP. Also, to arouse children’s interest, headsets may be used for them to listen to sounds or to record their own voices. Essentially, the broadband Internet connection is a must.

2) Procedure for the Internet-Based English Learning of Infants and Preschoolers

A common procedure applied to the Internet-based English learning using computers is made up of three phases: recognition→usage→application.

In practice, English learning and teaching using computers need be adjusted by multiple factors including local conditions, learners’ previous learning status, teaching–learning types, etc. Above all, it is most important that any multimedia technology cannot replace teaching and learning. In other words, so-called ‘multimedia’ is three-dimensional presentation of new learning materials, and work for repetitive learning which teachers can hardly do. Hence, multimedia may as well be used as a temporary means as necessary in teaching–learning situations where teachers and students study the content together. However effective a medium may be, it cannot replace the class, and no matter how three-dimensional learning content may appear, the effects of such splendid learning content can be maximized when it is used in contrast to plane learning materials.

The three-phase procedure includes a ‘recognition phase’ with the plane English learning, followed by a ‘usage phase’ of songs and chants and making story books, and lastly an ‘application phase’ of making use of the Internet or CD-ROM in the multimedia lab. In the application phase, particularly, individual learning time had better be set to last 15–20 minutes lest infants and preschoolers should use the computer and the Internet too long in the multimedia lab. More importantly, the teacher should not force unwilling children to learn. Unlike individual and personalized class, children’s personal opinion is to be ignored in a class with a large group of students. Computer activities assume large gaps in concentration, interest and usage depending on ages, so teachers should not force children who want to stop computer activities to keep up with the progress especially in a class consisting of diverse age groups. Otherwise, the children would end up losing interest in the computer. It is a good alternative to have unmotivated children spend time watching and enjoying animations on the computer screen while others go on with learning. In this case, however, teachers should pay attention to the children so that they may not distract other participants’ interest in learning.
Teachers should help children get to know how to do things for themselves. In class, teachers are advised to say “What will happen if we click on this picture?” rather than “Click on this picture.” In that way, they can drive children to learn how to use the programs for themselves. Then, infants and preschoolers try this and that and enjoy the pleasure of discovery while developing the senses necessary to keep up with the program.

The first thing for teachers to consider in a multimedia class is to introduce how to use the computer to learners. Also, they need be prepared to run the English learning programs online in class. The following are the steps for teaching English using programs provided on web sites:

First, it is necessary to download application plug-in programs required to run programs on web sites, which saves time for learning progress and keeps off troubles as well as prevents errors from happening on children’s screens.

Second, the teacher should be prepared to go online to get programs for learning on web sites in relation to daily learning objectives, as necessary. Especially, the multimedia lab used in the present study has a security system which erases all the data saved in the computer once the computer is turned off, which is why it is important for the teacher to keep the relevant web site data promptly accessible.

Third, it is time to access the programs on web sites in class. Here, the teacher demonstrates learning activities to children emphasizing the teaching targets of the day. Also, the teacher should promote individualized learning in accordance with children’s learning abilities.

3) Syllabus for the Internet-Based English Learning of Infants and Preschoolers in the Multimedia Lab

(1) Syllabus for English Learning of Infants and Preschoolers Using the Internet

As mentioned earlier, it is not easy for infants and preschoolers to learn English immediately on using the Internet. Accordingly, as in Table 1, a three-phase learning procedure is considered here. First, it is a ‘recognition’ phase where children understand basic structures and functions of the computer. The second phase is a ‘usage phase’, where children get out of the fear of computer and become familiar with it. The final stage is an ‘application phase’, where children can use the Internet to learn English.

In the 3-week recognition phase, the teacher presents PPT material containing photographs of computer hardware parts along with Korean and English letters for children to become familiar with the structures and functions of the computer, and uses
### Syllabus for the Internet-Based English Learning of Infants and Preschoolers

<table>
<thead>
<tr>
<th>Phase</th>
<th>Week</th>
<th>Subject</th>
<th>Objective activities</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognition</td>
<td>1</td>
<td>What is a computer?</td>
<td>To know names/functions of computers. To be able to turn on/off computers.</td>
<td>Understanding structures and functions of computers with power point</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Catch the mouse!</td>
<td>To learn to use a mouse. To be able to speak of icons.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Press the keyboard!</td>
<td>To learn to use keyboards. To speak of cautions in using computers.</td>
<td></td>
</tr>
<tr>
<td>Usage</td>
<td>4</td>
<td>Let’s do the Internet.</td>
<td>To log on/off the Internet. To speak of how to use headphones.</td>
<td><a href="http://www.geocities.com/Heartland/7134">http://www.geocities.com/Heartland/7134</a></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Alphabet games &amp; learning</td>
<td>To learn English on the Internet. To learn alphabets on keyboards.</td>
<td><a href="http://billybear4kids.com">http://billybear4kids.com</a></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Let’s study with games</td>
<td>To learn 'backward'/forward' to get used to the Internet.</td>
<td><a href="http://www.kidspace.com/kids">http://www.kidspace.com/kids</a></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Love your computer</td>
<td>To feel computers as friends; to rid fear of computers; to build up confidence.</td>
<td>Present ‘Complaints of Computer Family’ with power point</td>
</tr>
<tr>
<td>Application</td>
<td>8</td>
<td>My body</td>
<td>To learn eye, mouse, nose, ear and other words related to body through games.</td>
<td><a href="http://kidsnature.co.kr">http://kidsnature.co.kr</a></td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>Alphabets &amp; numbers</td>
<td>To put on headphones and to click the mouse while listening to sounds of alphabets and numbers.</td>
<td><a href="http://www.jayzeebear.com/Dreamer%E2%80%99s">http://www.jayzeebear.com/Dreamer’s</a> House</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>JayZee Bear’s house(1F)</td>
<td>To click each room (living room, activity room, kitchen) and learn their uses and English words.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>JayZee Bear’s house(1F)</td>
<td>To click each room(parents’ room, bathroom, bedroom) and learn their uses and English words.</td>
<td><a href="http://www.jayzeebear.com/JayZeeBear's">http://www.jayzeebear.com/JayZeeBear's</a> house</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>What is it?</td>
<td>To learn English words like kid, mouse, ball, clock etc online.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>What’s different?</td>
<td>To understand the difference between ‘What is’ and ‘What’s’.</td>
<td><a href="http://www.bbc.co.uk/education/teletubbies">http://www.bbc.co.uk/education/teletubbies</a></td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Teletubbis</td>
<td>To enable coordinated abilities of eyes and hands through games.</td>
<td><a href="http://www%5Brandomhouse.com/seussville">http://www[randomhouse.com/seussville</a></td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>Protect trees</td>
<td>To understand environment is precious.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>Happy summer holiday</td>
<td>To help children choose sites out of a set of sites the teacher collected.</td>
<td><a href="http://www%5Brandomhouse.com/seussville">http://www[randomhouse.com/seussville</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>To help children understand and express Summer and Vacation as in 'A dog on Vacation.'</td>
<td><a href="http://www.afroam.org/children/children.html">http://www.afroam.org/children/children.html</a></td>
</tr>
</tbody>
</table>

**Table 1** Syllabus for the Internet-Based English Learning of Infants and Preschoolers

the Paint feature to drill them in using the mouse and keyboard.

In the 4-week usage phase, children become familiar with getting on the Internet using the computer, especially the address window and 'backward' and 'forward' keys. In this phase, teachers should lead children to feel familiar with the computer as a friend, to relieve their fear of using the computer, and to build up confidence. Some children tend to feel frustrated and embarrassed and even cry when they see their own screens lag behind other children’s or not work properly. Those children may possibly find it hard to use the computer again, so teachers should be pay considerate attention to them. It may be a good way to have them use headphones to listen to fun sounds or familiar and easy English songs.

In the 9-week application phase after the recognition and usage phases out of the entire 16 weeks set for this study, actual English learning is combined with the computer and Internet–based approach. The teacher is to find online sites relevant to subjects to teach in class and use the 'Plug In' feature for children not to have difficulties in class while saving time. It is important to have them understand the computer and English are not difficult, so diverse games are adopted for learning here. In practice, it was found that children showed more response to environment, or sites, familiar with them such as cute characters like bears, objects easily seen in daily lives and multimedia elements.

As in Table 1, 'JayZeeBear’s house' in the plan for the Internet–based English learning was most popular and interactive among the children in the present study. The JayZeeBear’s house site was an environment familiar with infants and preschoolers and helped children get used to the computer and the Internet at around the 10th week. Also, the site was satisfactory from the perspective of teachers as it is fitted with a variety of children–oriented educational learning materials and English learning approaches available. Most of all, the site assures individualized learning by enabling adjustment of levels according to children’s ages and abilities.

(2) Useful Sites for Early Childhood English Learning on the Internet

The best way to be familiar with the computer is to play games. Most children like to play games. Even children who do not know English at all play English–based games well. This is because infants and preschoolers show strong willingness toward something interesting, but most of parents consider it a waste of time and money. However, many Internet games are interesting and educational as well as effective. It is not easy to find such useful sites, and sites change their addresses frequently, which makes it harder to find the sites using the old addresses. Recently, some independent pay sites are developed to provide service only for members. Fortunately, even those pay sites present some free
content for test trials. Importantly, infants and preschoolers tend to become more interested in English naturally when they are presented with sites containing easy materials to learn alphabets and simple words through card games, puzzles, and other games with characters. Furthermore, through a range of game activities children can develop and better observation power and creativity to come up with new things. In addition, they can build up confidence and curiosity in using computers, which otherwise they would find hard to use and avoid.

English–based sites run in English–speaking countries abroad are particularly helpful for children to get familiar with English letters and spelling. Moreover, lots of renowned public agency sites like NASA run separate sites where children can get specialized materials. In addition to such public agency web sites, lots of museums and art–related organizations run their own sites which prove useful in English learning.

2. How Do Children and their Mothers Perceive the Internet–Based English Learning in the Multimedia Lab?

There was no gender gap among infants and preschoolers in learning English in the multimedia lab. In terms of whether mothers have knowledge on the Internet and guide their children at home, most of respondent mothers were found to know the Internet and teach their children at home for about 30–60 minutes a day.

Both groups were found to like the idea of children’s using the computer and the Internet. As in Table 2, children and their mothers show interest in both computers and English, and children particularly are more interested in computers than English.

In Table 3, asked where English learning was more effective, 50% of respondents chose kindergarten and the multimedia lab used alternately; 37.5% chose the multimedia lab and 12.5% the kindergarten. The result demonstrates that using the Internet in the multimedia lab is more effective for actual English learning than in the kindergarten.

<table>
<thead>
<tr>
<th>Question items</th>
<th>Computer</th>
<th>English</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which interests children more, computers or English?</td>
<td>5(31.3)</td>
<td>4(25.0)</td>
<td>7(43.8)</td>
</tr>
<tr>
<td>Which do you (moms) think is more necessary in teaching, computers or English?</td>
<td>1(6.3)</td>
<td>4(25.0)</td>
<td>11(68.8)</td>
</tr>
</tbody>
</table>
Table 3: English Learning Environment

<table>
<thead>
<tr>
<th>Kindergarten</th>
<th>Multimedia lab</th>
<th>Alternately</th>
</tr>
</thead>
<tbody>
<tr>
<td>2(12.5)</td>
<td>6(37.5)</td>
<td>8(50.0)</td>
</tr>
</tbody>
</table>

Table 4: Factors to be Considered in Using the Internet in the Multimedia Lab

<table>
<thead>
<tr>
<th>Question items</th>
<th>N(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interaction between teachers and children</td>
<td>7(43.8)</td>
</tr>
<tr>
<td>Children’s voluntary participation</td>
<td>2(12.5)</td>
</tr>
<tr>
<td>Increasing children’s interest in computers</td>
<td>5(31.3)</td>
</tr>
<tr>
<td>Effective English learning</td>
<td>1(6.3)</td>
</tr>
<tr>
<td>Providing favorable learning environment</td>
<td>1(6.3)</td>
</tr>
</tbody>
</table>

With regard to what should be considered important in using the Internet in the multimedia lab to learn English, 43.8% of mothers picked interaction between teachers and children, and 31.3% of them chose the increasing interest of children in computers (see Table 4).

Ultimately, both moms and children regarded the Internet-based English learning effective. In regard of the advantages of English learning on the Internet in the multimedia lab, most of mothers mentioned computer literacy of children, relieving children’s fear of using a computer, increased interest in computers, adding Interest to learning by means of combining English with computers, fun factors, availability of diverse learning methods and acquisition of information on quality sites. Meanwhile, they came up with the disadvantages of the Internet-based approach attributable to lack of teachers compared to class sizes, uncontrollable behavior resulting from too much use of computers, difficulties in using keyboard owing to too much reliance on mouse to move around the Internet sites, mothers’ frustration from insufficient knowledge on computers compared to children and the likelihood of children to become estranged from English.

The following are comments made by mothers of those children who participated in the Internet-based English learning in the multimedia lab:

It seems good for children to have interest in and focus on learning materials linked to the animating computer screens. However, it is a big concern that my child finds it
very hard to stop once he logs on the Internet. Still, he appears more interested in several sites with confidence in doing things by himself on the Internet. It seems to be a good chance to be naturally familiar with the computer. I am a little concerned about his using the Internet too much, which is undoubtedly as bad as too little, but in terms of his English learning I feel very satisfied. (H’s mom)

On seeing how the class goes, I thought it would be a great way for my child to be able to use the computer. He has been through the fear of learning the computer, and now he loves it, which is a great effect. Some moms might say it is too early, so they would rather not have the system at home and save it for another time. Personally, however, I think the sooner, the better. I worry about my child’s vision getting weaker. Also, I feel uncomfortable because children should cross the road to walk to the lab especially when it is so hot these days. So, if possible, I wish the computer lab were in the kindergarten building, and children would not have to move out. (K’s mom)

Thank you for taking care of children with all your heart for the past term. At first, I was skeptical about the effect. Now, my child can help her grandmother with how to finish the computer system, which is encouraging and surprising. Still, she is not good at mouse clicks but it is just amazing to see her know what to do, for which I am so grateful to you, teachers. My child says the Internet is fun but not the computer. She likes the icon e, which indicates that she has enjoyed the computer class during the term. I expect your constant love and care for children to improve their English and computer skills in the next term. (L’s mom)

Further, it was found that children first brought up words such as “icon, Jay-Z, Kidsnature (a site), mouse, rat, Internet games, grapes, fun, Ba-Z (a bear called JayZeeBear), elephant game, e, good, bear’s house, Teletubbis etc.” This suggests that children prefer and recognize the games they have played on the Internet sites.

3. How do teachers Perceive the Internet-based English learning in the multimedia lab?

Teachers’ views on the Internet-based English learning in the multimedia lab in early childhood for one term are summarized in [Table 5]. In summary, teachers rated highest the item that ‘Programs are oriented toward experience, play and children,’ with average 3.55 point, whereas they rated low on the item that ‘Programs are well integrated with curriculum for infants and preschoolers,’ with average 2.55 points and ‘Programs match well with early childhood learning ability’ with 2.82 on average. The result indicates that
from the perspective of teachers, effectively integrated learning is viable with the early childhood curriculum considered. Besides, the result suggests that teachers have difficulties in leading the class based on individual learning abilities of infants and preschoolers as it is done in a uniform multimedia–based manner.

In view of the results from comparison of assessments between infant and preschooler classes, age gap among children had no significant difference. The result indicates infants and preschoolers do not show any difference in English learning using the Internet in the multimedia lab. Further, the result suggests English and computer as unfamiliar subjects to infants and preschoolers may be applicable to early childhood class comprised of children in different age groups. On top of anything else, teachers pointed out the lack of teachers, which prevented them from sufficient interaction with children (infant class, in particular) and said it would be appropriate for one teacher to take care of 4.46 children.

In addition, teachers found online activities interesting and the multimedia lab helpful.
for children to have interest in computers and learning activities, while they pointed out other problems that need considering such as safety of children’s mobility, individualized teaching in accordance with each child’s learning ability, lack of interaction due to few assistant teachers and installation of mice for young children.

V. CONCLUSION

English can be learned on the Internet more effectively than any other subject. Considering the nature of language learning that learners should watch, listen to and speak as much as possible, the Internet provides educational environment that could not be more favorable.

The present study intended to suggest desirable directions of early childhood English learning by examining the actual conditions of the Internet-based English learning activities using a range of services and information as a means of activities applicable to multimedia labs along with case studies with infants and preschoolers.

For the purpose of this study, 26 infants and 20 preschoolers were selected as study subjects in an infant school attached to S university. The subjects were observed for one term with regard to their English learning experiences, activities, process and effects based on the Internet in the multimedia lab.

First of all, the Internet-based English learning program for infants and preschoolers included projects, games and stories. Games were found to be suitable for children in that learning activities using games were effective in calming fear and inducing interests in learning and computers.

Particularly, lots of sites are developed and run for early childhood learning abroad. Quality foreign sites for children provide visitors with children-oriented characters, games and animation for them to play with. However, those sites are English-based mostly, which calls for teacher’s intervention, help and guide. As these sites are built for infants, menus and content are presented with graphic components and the games they provide are intuitively playable without reading instructions on how to play the games. Hence, infants can proceed with games by themselves without much trouble. Once they start those learning games, infants tend not to stop clicking the mouse. Infant, therefore, can learn English just by visiting online sites designed for them in English, and its effects are considerable.

Second, in terms of multimedia lab environment, personal computers should be installed
for seamless interactivity along with broadband connection which is most important in the
Internet-based learning. Namely, high-performance broadband access and computers are
prerequisites for multimedia labs. Multimedia labs in preschools or infant schools can
provide learning environment as favorable as, or more favorable than, the computer rooms
in the university lab here, if afford-ability allows. Specifically, multimedia labs need be
oriented toward infants and preschoolers with respect to the dimensions of mice,
keyboards, desks, chairs and other devices. The LCD screen projector used in the present
study is applicable to the space for large groups.

Third, the process of learning English using the Internet in the multimedia lab consists
of helping children understand structures and functions of computers, which is a
‘recognition phase,’ followed by a ‘usage phase,’ where children’s fear of computers is
solved in favor of increasing familiarity, and finally an ‘application phase,’ where they can
actually learn English on the Internet.

Fourth, as for the response to the Internet-based early childhood English learning in
the multimedia lab, both children and their parents were mostly satisfied. They viewed
teacher–children interactions and increasing infant’s attention to computers as the most
important aspects to be considered in this approach to English learning.

Fifth, teachers responded the Internet-based English learning for infants and
preschoolers in the multimedia lab would be appropriate and effective if a teacher took
care of 4.4 children on average. ‘Programs are oriented toward children, play and
experience’, and ‘The Internet is installed for infants and preschoolers to use it easily’,
were found to get the highest average scores of 3.5. The lowest score of 2.7 on average
was given to the item saying ‘Programs are well integrated with the curriculum for
infants and preschoolers. Regarding overall assessment of teachers and mothers on the
effects of Internet-based early childhood English learning in the multimedia lab, mothers
gave a higher score of 3.75 (0.77) than teachers’ 3.09 (1.14).

Finally, the Internet-based early childhood English learning in the multimedia lab was
found effective, specifically as interactive, individualized, affective and integrated learning
approaches.

The interactive learning effect is associated with the aspect that children can be given
opportunities to improve communication skills in cyber space as in offline classrooms,
leading to develop English skills. Most of all, the approach assumes considerable factors
motivating infants and preschoolers affectively, which results from the applicability of
English expressions learned to actual situations, For teachers, the Internet may be used as
a space for discussion when they are faced with teaching-related issues.
Individualized learning effect can be gained from the Internet–based approach in the sense that multiple choices of a range of learning materials are possible in accordance with individual differences in performance, objectives and preferences in learning. Online learning should be thoroughly children–oriented. That is to say, teachers are not to build what children should learn. Rather, students themselves find and integrate necessary knowledge with his or her own knowledge network online. Teachers may as well provide the appropriate environment where children can build up necessary knowledge base actively.

The affective learning effect refers to eliminating mental pressure infants may undergo in learning English online to help them acquire English in a more natural communication context. Kim (2000) important factor in determining the language, cognitive, affective and social elements of student learning outcomes among the most closely related to the affective element is the element was present. In other words, the Internet–based English learning works better for introverted children, who cannot respond properly before teachers and classmates, as a natural learning space with less anxiety.

The integrated learning effect refers to breaking down the walls separating subject areas to give integrated learning experience. The Internet itself exists not for English education but for delivery of content as the sea of information, so users are to see a multitude of content types, and their English skills will improve in the course of acquiring the content incidentally.

So far, positive effects of the Internet–based English learning in the multimedia lab in early childhood have been mentioned above. The advantage of using the Internet for teaching young children English Jeong (2002) opinion, as a strong intrinsic motivation for learning English, improving, and cultural context to learn English, and natural language on the Internet can expose young children to view them puts significant. However, this approach has never been tried before, so further in–depth studies need be conducted in the following directions:

First, assessment criteria for useful online sites need establishing to prevent difficulties resulting from indiscreet exposure of privacy and other information, which is a disadvantage of the Internet.

Second, practical programs for English learning using multimedia need developing as the study subjects here could take full advantage of the university lab under its favorable condition, which is not common in reality.

Third, study efforts may be extended to other learning areas let alone the English learning using the Internet in a multimedia lab. For project–based learning, in particular, a
wide variety of content and methods can be gained on the Internet.

Finally, anyone feels uncomfortable and embarrassed before a machine when they do not know how to operate it. So do children in front of the computer especially when it comes to learning language using the machine. Such anxiety may appear at first, possibly resulting in unsuccessful learning. However, having infants and preschoolers use the computer repetitively will help them overcome the anxiety or fear of not knowing how to handle it. In that sense, proper programs need be implemented to help young children drill how to deal with computers and peripherals before applying the Internet–based English education to them.

REFERENCES


Key words: kindergarten, multimedia lab, Internet-based english learning activities, infants and preschoolers, young children.

Applicable Levels: primary education

Author: Huh, JungKyoung (Seoul Digital University); hjk@sdu.ac.kr

Received: May 15, 2010
Reviewed: July 30, 2010
Comparison between the Effects of SCMC and SCMC with Peer Feedback on EFL Writing*

Eunmi Jeong (Sookmyung Women’s University)


This study compared the effects of two different types of synchronous computer mediated communication activity—synchronous computer mediated communication (SCMC) only and SCMC with peer feedback activity—on writing proficiency. The data was collected from 16 university students in an SCMC only and an SCMC with feedback group who took pre- and post-writing proficiency tests and conducted 8 weekly sessions on the same topics. The participants’ test results were analyzed using the Wilcoxon signed-ranks test, and the results showed that the SCMC with feedback group improved overall writing proficiency nearly significantly. Using T-units, the participants’ SCMC language analyzed in terms of accuracy, complexity, and fluency which showed no significant difference between the two groups. However, accuracy from the within-group comparison revealed that the SCMC with feedback group improved significantly, while the SCMC only group did not. In terms of complexity and fluency, all the participants did not show any statistical change in both groups. The data analyzed herein provides an insight to the possibility that SCMC combined with feedback activity would enable learners in writing class to foster their accuracy by raising consciousness of grammatical forms through SCMC with feedback activity.

* This work is partly based on the author’s doctoral thesis completed at Sookmyung Women’s University in 2010.
1. INTRODUCTION

These days, with the advent of radical advances in computer technologies, traditional face-to-face communication between people can be replaced by online chats or video conferences. With the increased interest in the potential of computer mediated communication (CMC) emphasizing the learners’ dynamic through the computer (Kern & Warschauer, 2000), frequently many studies have frequently compared two different contexts to examine the effectiveness of CMC: networked vs. traditional classroom contexts (Cooper & Selfe, 1990; Kern, 1995; Schultz, 2000; Sullivan & Pratt, 1996; Warschauer, 1996) or synchronous vs. asynchronous (Abrams, 2003; Sotillo, 2000). In addition, not a few studies focused on the positive effect of SCMC on participants’ speaking (Chapelle, 1997; Chun, 1994; Kern, 1995; Pelletieri, 2000; Warschauer, 1996) while some studies examined the use of SCMC in terms of the development of both oral speech and written language (Abrams, 2003; Beauvois, 1992; Chun, 1994; Kelm, 1992; Warschauer, 1997).

In spite of a plethora of previous studies of CMC, however, there are still gaps to be filled including the following three areas. First, in the field of CMC research, many studies on CMC relevant to writing were mainly focused on asynchronous computer mediated communication (ACMC) (Davis & Tiede, 2000; Mabrito, 1991; Sotillo, 2000; Sullivan, 1993), not synchronous computer mediated communication (SCMC). Second, many researchers have been interested in the effect of SCMC on learners’ speaking (Chapelle, 1997; Chun, 1994; Kern, 1995; Pelletieri, 2000; Warschauer, 1996a) even though SCMC language has the blurred properties of both speaking and writing because of its medium of visualized written text (Hyland, 2002). Chun (1994) also pointed out that learners who showed language competence in the SCMC mode could be able to transfer their language competence to both speaking and writing. Accordingly, more research on SCMC in relation to writing needs to be explored. Third, there is also a debate over the role of SCMC in enhancing accuracy either in speaking or in writing. Kern (1995) raised the possibility of participants’ diminished attention to grammatical accuracy caused by the fast pace of discussion in the SCMC mode. This seems to be contradictory to the assumption that SCMC might be beneficial to its participants because of enhancing learners’ awareness of the language forms (Lai & Zhao, 2006; Warschauer, 1997). Given this, the question as to whether SCMC would help to enhance accuracy in writing requires more empirical research studies. Fourth, in discussing the accuracy issues in SCMC, Lee (2002) claimed that teachers need to advise the participants to write correctly to maintain a balance
between function, content, and accuracy because they showed a tendency to move forward with SCMC discussions ignoring each other’s mistakes. Later, in a research study of errors that Korean college students produced during SCMC, Han (2005) emphasized the importance of adequate task design for SCMC which can contribute to learners’ language accuracy. Shim (2006) also asserted the importance of helping learners correct their language errors found in SCMC scripts. The studies mentioned above, therefore, shed light on the necessity for an investigation on the effect of feedback on participants’ language in SCMC activity. Fifth, there are few studies on the effectiveness of the different types of SCMC activity within one mode, namely SCMC or ACMC, while there are some studies on the comparison of the two different CMC modes, synchronous vs. asynchronous (Abrams, 2003; Sotillo, 2000). Accordingly, more research on the effect of the different types of modified activities within SCMC mode needs to be conducted.

With the rationale mentioned above, this study tried to investigate the effect of two different types of SCMC activity—SCMC only activity and SCMC with feedback activity—on the development of writing proficiency. For those purposes, this study administered writing proficiency tests to determine the overall effect of SCMC only and SCMC with feedback activities on the participants’ writing development. In addition, it evaluated and compared the SCMC language produced by two different groups to investigate the effectiveness of SCMC and peer feedback as a post-SCMC activity on participants’ writing respectively. Accordingly, to look at the effect of SCMC only and SCMC with feedback in detail, this study examined and compared the development of accuracy, complexity, and fluency of the participants’ language on SCMC scripts. Consequently, this study aims to provide pedagogical implications for the practical application of SCMC to English writing class.

Ⅱ. LITERATURE REVIEW

1. Peer Feedback in L2 Writing

It is not difficult to find peer feedback activity during language class. Nevertheless, it is true there are some constraints with peer feedback. Leki (1990) pointed out potential problems with peer feedback in ESL writing classes, which resulted from ESL students’ lack of experience of peer feedback. Ferris and Hedgcock (1998) also warned of potential problems with peer feedback as follows: students focusing too much on surface level concerns, unclear or unhelpful comments, or overly critical response to their classmates’ writing. Moreover, students can be uncertain about their classmates’ feedback compared to
that of teachers. According to Zhang (1995), most ESL learners preferred teacher feedback to peer feedback, so the affective advantage of peer feedback which had been favored by teachers was not clear in the ESL writing class.

However, despite those constrains, there are still more benefits to peer feedback. According to Witbeck (1976), first, peer correction would give learners extensive practice in terms of the skills necessary for editing and revising their papers. Second, it could be another opportunity for learner-learner and learner-teacher communication. Third, the correction giver could understand more the language rule in question. Lastly, the process of peer correction would have learners realize that errors in their writing could be problems to be solved or an inevitable part of the process of learning rather than failure. In terms of learners' motivation and attitude, peer feedback can help L2 learners exercise their thinking actively instead of receiving passive information from the instructors (Mittan, 1989). Ellis (1994) also emphasized that peer feedback could affect students' actual understanding as a cognitive aspect, and motivational support experienced as an affective aspect. According to Chaudron (1984), in terms of the affective advantage of peer feedback in ESL writing, peer feedback seems to be more at the learner's level of language development or interest, therefore it can be more informative than that from teachers. Multiple peer feedback also enables students to gain feedback from a wider audience than just from one teacher. In addition, learners engaged in writing can be encouraged by supportive peers and have an opportunity to learn more about writing and revision while reading each other's writing critically. Mendonca and Johnson (1994) found that students in peer feedback activities could experience a more active learning process, building more confidence as writers and reconceptualizing their thoughts better than those who relied on teacher feedback. Tsui and Ng (2000) also found peer feedback enabled learners to be aware of their own strengths and weaknesses.

Despite of the controversy over the effectiveness of error correction on learners' accuracy in L2 learning, some studies have investigated the benefits of peer feedback in L2 writing (Ferris, 1999; Truscott, 1996, 1999). Learners who receive error feedback showed some evidence that such feedback helped in learners' development in accuracy over time. Peer feedback provides students with the opportunities to learn from their peers and negotiate meaning with each other (Liu & Hansen, 2002) and leads to meaningful revisions (Stanely, 1992).

Recently, some scholars (Cha, 2007; Jones, Gerraldia, Li, & Lock, 2006; Liang, 2010) have also explored the effect of online peer response as an alternative to face-to-face feedback. Yoonjung Cha (2007) found that participants realized peer feedback was useful
in EFL writing regardless of whether it was conducted through either chatting or bulletin boards. In the study of Jones et al. (2006), the EFL students in a writing class tended to discuss textual issues such as grammar, vocabulary, and style in face to face interaction but decided to pay attention to global aspects such as contents, organization, topic and thesis through online peer response. Liang (2010) pointed out the need for writing instructors’ scaffolding and support to make peer response revision-related online discourse beneficial.

In summary, peer feedback can be helpful for students to improve their writing skills through interaction with others or other’s perspectives on their writing whether it is online or face-to-face. Accordingly, feedback needs to be investigated as an additional activity in a writing class for more effective learning.

2. SCMC and L2 Writing

The pedagogical transformation of computer technologies from drill and practice to social interaction applications in L2 learning is related to the movement of writing instruction. These days, the writing programs of universities are working in networked-computer environments where students can improve their writing fluency and rhetorical skills while participating in networked communication with a real audience (Slatin, 1998). As is well known, networked communication consists of SCMC and ACMC.

SCMC allows participants to exchange instant messages with each other, so it is a written conversation. Warschauer (1999) stated, “The historical divide between speech and writing has been overcome with the interactional and reflective aspects of language merged into a single medium” (p. 6). Accordingly, those who engaged in SCMC perform it using typing messages through the Internet, and interact in real time like oral speech.

There are some studies focused on the possibility that SCMC can be applied to L2 learners’ writing development. SCMC as a written conversation draws on the processes found in reading, writing, and oral speech (Anson & Beach, 1995 cited in Beach and Lundell, 1998). Accordingly, what is unique to SCMC is that reading and writing happen almost simultaneously, unlike oral speech or writing alone (Beach & Lundell, 1998).

Cooper and Selfe (1990) did not think electronic conferences were the only way to pursue writing-intensive courses with computers, but they believed it could be a desirable complement to class in a traditional classroom. Schultz (2000) studied the effect of learners’ collaboration using networked computers on French L2 writing. According to the result, learners in the computer and the mixed environment of both SCMC and face-to-face collaboration produced more changes in the content level compared to those
solely in the traditional face-to-face context.

Some scholars (Hyland, 2002; Schultz, 2000) considered the field of foreign language writing as one of the most compelling areas for computer use. Hyland (2002) cited the opportunities which networked computers provided for learner-centered and collaborative class as one of the most compelling reasons for adopting computer technology in teaching writing. Sullivan and Pratt (1996) stated the collaborative nature of networked computing fits well with Kaplan’s social view of writing (1991) and with the generally accepted view that interaction and group work facilitate the second language acquisition process (Long and Porter, 1985). As scholars have pointed out, writing seems not to be done by isolated writers any more. This social viewpoint of writing emphasizes the possibility and the effectiveness of using computer networking in writing class.

Language learners need reading, thinking, talking, and writing about a subject as essential parts of the writing process. Especially for second language learners, those activities could be more valuable because they allow learners to be able to communicate in the target language (Raimes, 1987). According to the research of Sullivan and Pratt (1996), students in the networked computer-assisted classroom showed some improvement in their writing quality compared to those in the traditional oral classroom.

Chun (1994) examined the possibility of using SCMC for providing students with the opportunity to produce and initiate various kinds of discourse structures. The written script gained from German classes was analyzed for the number and length of turns, grammatical complexity, and the type and discourse functions. The data showed that students performed a number of different productions in the written mode and used their initiative more than in the classroom discussions. As a result, Chun maintained that writing ability might be enhanced by SCMC because the participants were able to engage in SCMC which required coherent thinking and cohesive linguistic references.

On the other hand, many researchers (Doughty & Williams, 1998; Ellis, 1994; Long & Robinson, 1998) continued to emphasize that the communicative way of language learning possessed a limitation in that it did not work in terms of the aspect of accuracy in language learning. In order to overcome this limitation, focus on form activities or feedback activities should be added and integrated to the present communicative method. In terms of attention being paid to accuracy again as an issue in language acquisition, Skehan and Foster (1997) suggested that for improving their language accuracy, learners need to be offered the opportunities to use what they learned in the classroom and to give attention to the target language form. Lee (2002) also claimed teachers should advise their students to write correctly with a balance between function, content, and accuracy because
the participants in SCMC have a tendency to ignore each other’s mistakes. Accordingly, SCMC in writing class needs further investigation into the possibility that the role of feedback activity could be combined with SCMC to improve learners’ language accuracy as well as other aspects in L2 learning.

III. METHODOLOGY

1. Participants and Process

The participants in this study were 16 college students in the class taking the ‘Introduction to American Studies’ course at H university in Gyeonggi Province. They were 14 females and two males in a variety of school years with three sophomores, seven juniors, and six seniors. As regards their majors, 13 majored in international relations, two in English language and literature, and one in German language and literature.

For the study, all the participants were divided into two groups (i.e., the SCMC only group and the SCMC with feedback group) evenly based on the results of their Multimedia Assisted Test of English (MATE) writing proficiency test as a pre-writing proficiency test (Appendix A). The MATE writing proficiency test, one of the official tests authorized by the Korean government, consists of three parts with time allowed for each writing segment: 5 minutes, 12 minutes, and 20 minutes exactly.

According to the answers from the participants (Table 1), seven out of the 16 participants (43.75%) seemed to have sufficient English typing skills to conduct SCMC at the beginning of the semester. However, nine (56.25%) replied they would have some difficulty in communicating when typing in English, so before the main SCMC, all the participants had extra training sessions (4 times, 30 minutes each) intended to familiarize them with typing skills as well as SCMC in English.

<table>
<thead>
<tr>
<th>[Table 1] Participants’ Background Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCMC Only Group</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>Can you type in English without much difficulty for communication purposes?</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>Do you have any experience of chatting in English?</td>
</tr>
</tbody>
</table>
For the main SCMC sessions, all the participants from the two groups participated in the 8-week SCMC using messenger programs such as MSN or Daum messenger on the Net with eight topics (Appendix B) related to contents from their textbook, *American ways* (Datesman, Crandall, & Kearny, 2005). After each SCMC session, all the participants were supposed to submit their SCMC scripts to the instructor by e-mail every week. While the SCMC only group conducted SCMC for 60 minutes every week as homework, the SCMC with feedback, conducted SCMC for 40 minutes at home, and exchanged peer feedback in dyads as a post-SCMC activity for 20 minutes in the classroom after the class with a printed version of the previous week’s SCMC script.

After the whole course of SCMC sessions, a post-MATE writing proficiency test was administered to find whether and how much the participants engaged in SCMC alone and SCMC with feedback improved their overall writing proficiency.

Extra interview questions were offered to the participants in SCMC with feedback group related to peer feedback activity to get some qualitative information to support the analyses of the main data such as the SCMC language in the scripts.

2. Research Questions

The main purpose of the study was to examine and compare the effect of SCMC only and SCMC with feedback activity on writing proficiency. Accordingly, the main research questions were posed as follows:

1) Do SCMC only and SCMC with feedback activity affect the participants’ overall writing proficiency differently?

2) Do SCMC only and SCMC with feedback activity affect participants’ SCMC language in terms of accuracy, complexity, and fluency respectively?

3. Data Collection and Analysis

1) Pre and Post Writing Test

To determine the participants’ overall writing development, this study administered pre- and post-MATE writing proficiency tests. After the pre-test at the beginning of the semester, the participants were divided into two groups evenly in terms of their writing proficiency. After the whole course of eight SCMC sessions, a post-MATE test was also conducted again at the end of the semester to evaluate whether SCMC only and SCMC with feedback activity affected the participants’ overall writing proficiency differently.
To report what was the effect of SCMC and SCMC with feedback on the participants’ overall writing proficiency, this study analyzed the MATE writing proficiency tests results (Appendix A) between the two groups and within each group after all the SCMC sessions were completed. In the analysis of the MATE writing proficiency tests, non-parametric statistics were applied to analyze the test results because the MATE test results were reported on ordinal scales. The Mann-Whitney U test was applied to compare the effect of SCMC alone and SCMC with peer feedback on the writing development between the two groups, and the Wilcoxon signed-ranks test was used within each group.

2) SCMC Transcripts

All the participants in the study conducted an SCMC activity in dyads on the given topics as their homework every week. After finishing each SCMC session, one of the participants in each dyad e-mailed their chatting script in a text file format to the instructor by the due date, midnight every Wednesday.

For the data analysis, this study chose the second and eighth SCMC transcripts in order to measure and compare the participants language development. The reason why the first-session scripts were excluded from the data analysis was that it was considered a mock SCMC session where the participants were still unfamiliar with the SCMC and feedback session. Each script was arranged for analysis of the SCMC language data.

To know whether any development in writing proficiency happened or not, the second and eighth SCMC scripts were examined in terms of the three major aspects of language development: accuracy, complexity and fluency. The three aspects were compared within each group and between the two groups to compare the effect of SCMC only and SCMC with feedback as a post task activity after SCMC activity in detail.

For the analyses of the scripts that have both characteristics of spoken and written language, this study used some of “the fluency, accuracy, and complexity measures that have been used in studies of second and foreign language development in written communication” (p. 1) referring to Wolfe-Quintero, Inagaki, and Kim. (1998).

As for accuracy, the researcher examined the SCMC scripts considering the five categories of Ferris and Roberts’ study (2001) and adopting error-free T-units (EFT/T) by dividing the total number of error-free T-units by total number of T-units (Wolfe-Quintero et al., 1998). For the accuracy analyses, there was some help from a native speaker of English who is a foreign language high school teacher with teacher experience in the United States and a Korean bilingual who had English teaching experience at a Korean university.
In terms of participants' language complexity, the T-unit Complexity Ratio (C/T) calculated by dividing the total number of clauses by the number of T-units was applied for the analyses. The C/T was designed to measure how grammatically complex the writing of a learner is, with the assumption that the more clauses there are per T-unit, the more complex the writing is (Wolfe-Quintero et al, 1998).

To measure the fluency of the participants' SCMC language, this study used T-unit length (W/T) by counting the total number of words divided by total number of T-units (Wolfe-Quintero et al, 1998).

In order to add some explanation to the analysis of results, some qualitative approach was conducted: interview with participants, and analysis of SCMC language on the chat logs.

IV. FINDINGS

The purpose of this study is to answer the research questions regarding the effect of SCMC only and SCMC with feedback activities on overall writing development and the results of the analysis of the SCMC scripts in terms of accuracy, syntactic complexity and fluency in detail.

1. Results of the MATE English Writing Proficiency Tests

As shown in Table 2, the results of the Mann-Whitney U test \((p = 0.74)\) revealed that the two groups had identical English writing ability at a 5% level \((\text{Mann-Whitney } U = 29.00, n1 = n2 = 8, p = 0.74)\). It means the SCMC only and SCMC with feedback groups were statistically homogeneous in terms of writing proficiency at the beginning of the present study.

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Median Rank</th>
<th>Mann-Whitney U</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCMC Only</td>
<td>8</td>
<td>8.13</td>
<td>29.00</td>
<td>0.74</td>
</tr>
<tr>
<td>SCMC with Feedback</td>
<td>8</td>
<td>8.88</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MATE : Multimedia-Assisted Test of English

After completing the 8-week SCMC sessions, this study compared the post-MATE test results between the SCMC only and SCMC with feedback groups again. As Table 3 shows, the median MATE levels in SCMC only and SCMC with feedback groups were
7.94 and 9.06, respectively. The median ranks of the SCMC with feedback group were higher than those of the SCMC only group. However, English writing proficiency between the two groups did not differ significantly (Mann-Whitney U = 27.50, n1 = n2 = 8, p = 0.6) in terms of post-test results.

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Median Rank</th>
<th>Mann-Whitney U</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCMC Only</td>
<td>8</td>
<td>7.94</td>
<td>27.50</td>
<td>0.60</td>
</tr>
<tr>
<td>SCMC with Feedback</td>
<td>8</td>
<td>9.06</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MATE : Multimedia-Assisted Test of English

This study compared the results of pre- and post-MATE writing proficiency tests within the SCMC only and SCMC with feedback groups respectively using the one sample Wilcoxon Signed-Rank test to see whether the participants’ writing proficiency was significantly improved or not in each condition. As shown in Table 4, comparing the two test results within each group respectively, this study found that the SCMC with feedback group improved their writing significantly (p = 0.08) at the level of p = 0.1, but the SCMC only group did not (Table 4). Thus, after conducting the 8-week SCMC, the participants in the SCMC with feedback group showed slightly improved result of their writing proficiency. In this case, feedback activity after the main SCMC sessions seems to have influenced the participants to perform better in their writing.

<table>
<thead>
<tr>
<th>Group</th>
<th>Response</th>
<th>Frequency</th>
<th>Median Rank</th>
<th>Z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCMC Only (n=8)</td>
<td>Negative</td>
<td>1a</td>
<td>2.5</td>
<td>-1.00</td>
<td>0.32</td>
</tr>
<tr>
<td></td>
<td>Positive</td>
<td>3b</td>
<td>2.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ties</td>
<td>4c</td>
<td></td>
<td>-1.00</td>
<td>0.32</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCMC with Feedback (n=8)</td>
<td>Negative</td>
<td>0a</td>
<td>0.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>positive</td>
<td>3b</td>
<td>2.0</td>
<td>-1.73</td>
<td>0.08</td>
</tr>
<tr>
<td></td>
<td>Ties</td>
<td>5c</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a: post test (pre test, b: post test) pre test, c: post test = pre test.
2. Results of SCMC Language Analyses

The second research question was whether SCMC only and SCMC with feedback activity affected participants' writing differently in terms of accuracy, complexity, and fluency. To know whether any development in writing proficiency happened or not, this study examined the SCMC language of the participants in terms of the three major aspects of language development respectively within each group and between the two groups.

1) Accuracy

To determine any significant differences within each group over time, this study performed paired samples t-tests. As shown in Table 5, the accuracy of the SCMC with feedback group appeared to be significantly improved in terms of error-free T-unit analysis ($t = 5.92$, $p = 0.001$), but SCMC only group did not ($t = 1.22$, $p = 0.26$).

When comparing the SCMC language accuracy rate between the SCMC only and SCMC with feedback groups, this study ran two independent sample t-tests on the accuracy rate of the eighth session scripts after 8 weeks. According to the result, the two groups did not show any difference in accuracy from the analyses using the error-free T-unit ratio ($t = 0.31$, $p = 0.76$) as shown in Table 5.

<table>
<thead>
<tr>
<th>Time Tested</th>
<th>n</th>
<th>SCMC Only Group</th>
<th>SCMC with Feedback Group</th>
<th>t-value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd session</td>
<td>8</td>
<td>0.52 ± 0.060</td>
<td>0.47 ± 0.063</td>
<td>0.56</td>
<td>0.58</td>
</tr>
<tr>
<td>8th session</td>
<td>8</td>
<td>0.56 ± 0.047</td>
<td>0.59 ± 0.056</td>
<td>0.31</td>
<td>0.76</td>
</tr>
<tr>
<td>t-value</td>
<td></td>
<td>1.22</td>
<td>5.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Probability</td>
<td></td>
<td>0.26</td>
<td>0.001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Regarding accuracy, the participants engaged in the SCMC with feedback sessions made significant improvement according to the result of a within group comparison between the second and eighth transcripts ($p < 0.001$). This improvement can be partly driven by the feedback session after each main SCMC activity. During the feedback sessions, the participants might have increased their awareness of English grammar.

Previous studies in relation to SCMC (e.g., Lai & Zhao, 2006; Pelletieri, 2000
Warschauer, 1997) provide positive evidences that SCMC facilitates participants’ language accuracy by allowing them to have more thinking time to process language than spoken conversation and to see their own language on the computer monitor. Consequently, SCMC might be considered to have a beneficial effect on its participants’ writing through enhancing their awareness of the language forms. However, there are still some scholars who argued that computer mediated communication should balance fluency and linguistic accuracy (Lee, 2004; Levy & Kennedy, 2004).

In addition, as Donato (1994) mentioned “the speakers are at the same time individually novices and collectively experts” (p. 46), the participants in the SCMC with feedback group could be helpful to each other when they had feedback sessions in a group, not alone.

Qualitative analysis of the SCMC scripts and questionnaire lent support for the positive role of the feedback activity in awareness raising. When asked “Can you give me some of the most impressive examples of feedback you received from your partner?” (Appendix C), for example, Young-hee in the SCMC with Feedback group explained her case as follows:

My partner, Seon-ju unnie trained me to correct my wrong grammar, so I could learn a lot during the feedback session. I remember third person singular -s after the verb forms in the sentence whose subject is she, he or it (translated).

In addition, Young-hee added:

Seon-ju unnie told me not to write two main verbs in a sentence simultaneously (translated).

“Two main verbs in a sentence” above means “two main verbs in a clause” syntactically. Examples include “My father is not come house” and “My father is usually like it.” Significantly, qualitative analysis of Young-hee’s scripts identified some changes in her use of the grammar form in question. In Session 2, Young-hee made a mistake in using two main verbs in a clause four times. Excerpt 1, which took place in Session 2, partly shows two of this type of mistakes.

**Excerpt 1**
from the Seon-ju & Young-hee dyad from Session 2
(SCMC with feedback group)
[Young-hee]: Actually, I wish join the play the dramma
[Seon-ju]: oh really? are u interested in acting?
Comparison between the Effects of SCMC and SCMC with Peer Feedback on EFL Writing

[Young-hee]: yes, But she doesn’t like it yes;;
[Seon-ju]: why don’t u enjoy acting at university?
[Young-hee]: It is not interesting, in school.
because I’m grow ;;; um;;;;;

Then, in Session 8, Young-hee made the mistake only once as in Excerpt 2

Excerpt 2
from Young-hee’ script in Session 8
[Seon-ju] : u like meetig new people
[Seon-ju] : right?
[Young-hee] : just my romace~ kk
[Young-hee] : yes
[Young-hee] : yes~ kk
[Young-hee] : it is sounds interesting isn’t it?
[Seon-ju] : right
[Seon-ju] : that’s cool..

Through feedback, Young-hee seemed to have learned some grammatical knowledge related to her own errors found in her SCMC transcripts. It was not confirmed whether she could acquire or use that linguistic knowledge during the SCMC in a stable way, but it was true to some extent that her awareness of grammar related to her own mistakes or errors seemed to be increased. As shown in the excerpts above, when the researcher compared her SCMC scripts from the second and eighth sessions, Young-hee used two main verbs in a sentence four times during the second SCMC session but only once during the eighth session. This implies Younghee was consciously making sentences while chatting and being careful not to use two main verbs in a single sentence after she had got some feedback from her partner on that point.

Another episode related to a participant in the SCMC with feedback group is from Seon-hee. Responding to interview question No. 4, (Refer to Appendix C) asking about her impression of the feedback session, Seon-hee answered,

I think I preferred feedback session to chatting itself because I could find some of my errors during the feedback. If I did not have the feedback session, I could not have realized that I had made those errors. (translated from Seon-hee’s interview)

Finding grammatical mistakes in the scripts during the feedback sessions may have
helped her to raise her consciousness of grammar.Possibly due to her raised awareness of the grammar system, Seon-hee’s MATE writing score improved from moderate low (ML) to moderate mid level (MM).

To conclude, the participants engaged in feedback as a post-SCMC activity might have been able to raise their grammatical awareness, which could be beneficial for improvement in their accuracy in writing to some extent.

2) Complexity

In order to determine the effect of different types of SCMC activities on the complexity in the participants’ SCMC language, this study performed two independent sample t-tests on the means of C/T between the groups, and a paired t-test within each group.

As illustrated in Table 6, the comparison of the means of C/T between the two groups resulted in an insignificant difference ($t = 0.78$, $p = 0.45$) after 8 weeks. Using C/T, the comparison of complexity within the groups also did not show any significant difference for both the SCMC only ($t = 1.30$, $p = 0.24$) and the SCMC with feedback ($t = 0.44$, $p = 0.67$) groups.

[Table 6] Descriptive and T-test Statistics for Complexity Using T-unit Complexity Ratio (Mean±SE)

<table>
<thead>
<tr>
<th>Time Tested</th>
<th>n</th>
<th>Comparison between / within Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SCMC Only Group</td>
<td>SCMC with Feedback Group</td>
</tr>
<tr>
<td>2nd session</td>
<td>8</td>
<td>1.11 ± 0.028</td>
</tr>
<tr>
<td>8th session</td>
<td>8</td>
<td>1.14 ± 0.025</td>
</tr>
<tr>
<td>t-value</td>
<td></td>
<td>1.30</td>
</tr>
<tr>
<td>Probability</td>
<td></td>
<td>0.24</td>
</tr>
</tbody>
</table>

In terms of complexity analysis using C/T, the participants in both two groups did not show significant improvement in their syntactic complexity when compared within and between the two groups.

3) Fluency

This study estimated language fluency by the number of words per T-unit length (W/T) in the SCMC data (Table 7). This study performed independent t-tests to determine the differences in fluency development between the two groups. The mean
scores for fluency using W/T did not show any significant difference between the SCMC only and SCMC with feedback groups (at the second session, $t = 0.23$, $p = 0.83$, and at the eighth session, $t = 1.42$, $p = 0.18$). As a result, the two groups showed no difference in fluency for each session.

In examining any change in language fluency within each group, paired t-tests applied to both the two groups respectively showed the results presented in Table 7.

<table>
<thead>
<tr>
<th>Time Tested</th>
<th>n</th>
<th>SCMC Only group</th>
<th>SCMC with Feedback group</th>
<th>t-value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd session</td>
<td>8</td>
<td>6.72 ± 0.234</td>
<td>6.60 ± 0.472</td>
<td>0.23</td>
<td>0.83</td>
</tr>
<tr>
<td>8th session</td>
<td>8</td>
<td>6.39 ± 0.227</td>
<td>6.91 ± 0.280</td>
<td>1.42</td>
<td>0.18</td>
</tr>
</tbody>
</table>

Regarding fluency, the results revealed that the participants’ fluency stayed at almost the same level after the 8-week SCMC sessions within each group and between the two groups. Based on this finding, it could be assumed that fluency in writing might not be affected by repeated SCMC activities in the case of the relatively short term of an 8-week SCMC sessions.

V. CONCLUSION AND IMPLICATIONS

This study explored the effects of different types of SCMC activities – SCMC only and SCMC with peer feedback – on the development of EFL learners’ writing proficiency. For this purpose, this study compared and analyzed the participants’ overall writing proficiency change and language development to measure aspects of accuracy, complexity, and fluency.

After eight weeks of SCMC sessions, there was no difference in the results of the post-MATE test between the SCMC only and SCMC with feedback groups. It means that the two different SCMC activities seemed not to cause significant difference in the participants’ writing proficiency development between the two groups. However, because the participants in the SCMC with feedback group showed a slightly improved result in
their writing proficiency within group analysis, SCMC would have had a more positive effect with additional post SCMC activity such as feedback.

As for accuracy, the within-group comparison of the second and eighth week transcripts revealed that the SCMC with feedback group improved significantly, while SCMC only group did not. Owing to the effect of peer feedback, the participants might have raised their consciousness of language accuracy or English grammatical forms. Accordingly, SCMC with feedback activity could be beneficial to its participants through enhancing learners’ awareness of the language forms. Regarding the aspect of complexity and fluency, the participants did not show any statistical improvement in either the SCMC with feedback or SCMC only groups. Their language complexity and amount stayed at a similar state to that at the beginning of the SCMC sessions without any significant difference between the two groups and within each group.

The implications for utilizing SCMC to help EFL learners’ English writing emerged from the findings of this study as follows. First, this study provided empirical evidence that SCMC can influence learners’ writing positively with an application that combines SCMC itself with an additional post-SCMC activity such as feedback. Compared in terms of language measure results such as accuracy within the group, the participants in the SCMC with feedback groups showed significant accuracy development. Accordingly, if SCMC combined with feedback activity is applied to English writing class or an other language learning activity, it might be beneficial for learners to enhance their accuracy by raising awareness of grammar through SCMC with feedback activity. Especially, for EFL learners who have limited time and opportunity to produce English, SCMC or SCMC combined with additional activity such as feedback could be a helpful method to improve their English. In terms of the teachers’ position where they manage their writing class using writing workshops or one-on-one advice which are time consuming and often constrained by time limitations, SCMC can also be used as a part of the most feasible supplementary ways for writing instruction. This is because a more positive effect of SCMC seems to be possible with additional post SCMC activity such as feedback and because SCMC can be conducted out of the classroom as an additional supplementary task for the writing class. Teachers need to pay attention to SCMC for writing class as well as for speaking.

Despite some contribution to the use of SCMC in relation to writing, this study was under some limitation in terms of a small sample size and a short research period. Future studies need to be conducted with more data gained from larger pools of participants over a longer research period in order to get more precise findings beneficial to language
learners and professionals. Additionally, if a future study could have enough participants to make dyads of various combinations of language proficiency levels, the study would be able to explain better what is the most effective combination of participants’ levels in a dyad for the study of SCMC’s effectiveness on writing related to feedback.

REFERENCES


Cambridge: Cambridge University Press.


Lee, L. (2004). Learners’ perspectives on networked collaborative interaction with native...
speakers of Spanish in the U.S. Language Learning & Technology, 8(1), 83-100.
Skehan, P., & Foster, P. (1997). The influence of planning and post-task activities on


### APPENDIX A

**Results of the MATE Writing Proficiency Tests**

<table>
<thead>
<tr>
<th>Group</th>
<th>Participants (Pseudonym)</th>
<th>Pre-Test (Level)</th>
<th>Post-Test (Level)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCNC with Feedback</td>
<td>Yoon-ji</td>
<td>R</td>
<td>ML</td>
</tr>
<tr>
<td></td>
<td>Gyeong-ho</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td></td>
<td>Ju-hee</td>
<td>ML</td>
<td>ML</td>
</tr>
<tr>
<td></td>
<td>yeong-hee</td>
<td>R</td>
<td>ML</td>
</tr>
<tr>
<td></td>
<td>Jae-Young</td>
<td>MM</td>
<td>MM</td>
</tr>
<tr>
<td></td>
<td>Seon-hee</td>
<td>ML</td>
<td>MM</td>
</tr>
<tr>
<td></td>
<td>Seon-ju</td>
<td>MH</td>
<td>MH</td>
</tr>
<tr>
<td></td>
<td>Young-hee</td>
<td>ML</td>
<td>ML</td>
</tr>
<tr>
<td>SCMC Only</td>
<td>So-mi</td>
<td>R</td>
<td>ML</td>
</tr>
<tr>
<td></td>
<td>Mi-young</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td></td>
<td>Mi-Jin</td>
<td>R</td>
<td>ML</td>
</tr>
<tr>
<td></td>
<td>Chang-ho</td>
<td>R</td>
<td>ML</td>
</tr>
<tr>
<td></td>
<td>Ji-su</td>
<td>MM</td>
<td>MM</td>
</tr>
<tr>
<td></td>
<td>Hyeo-seon</td>
<td>ML</td>
<td>ML</td>
</tr>
<tr>
<td></td>
<td>Ji-young</td>
<td>MH</td>
<td>MM</td>
</tr>
<tr>
<td></td>
<td>Yoo-mi</td>
<td>ML</td>
<td>ML</td>
</tr>
</tbody>
</table>

MH: Moderate High, MM: Moderate Mid, ML: Moderate Low, R: Rudimentary.

### APPENDIX B

**Topics for SCMC**

<table>
<thead>
<tr>
<th>Session</th>
<th>Discussion Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session 1</td>
<td>What kind of person is your ideal type for Mr. or Mrs. Right?</td>
</tr>
<tr>
<td>Session 2</td>
<td>What was high school like for you, including the competition to enter university?</td>
</tr>
<tr>
<td>Session 3</td>
<td>What is your hobby and what do you do to enjoy your hobby?</td>
</tr>
<tr>
<td>Session 4</td>
<td>What do you think about the influence of television and the Internet on modern life?</td>
</tr>
<tr>
<td>Session 5</td>
<td>How did you spend your last summer vacation?</td>
</tr>
<tr>
<td>Session 6</td>
<td>What would you like to do if you were a college freshman again?</td>
</tr>
<tr>
<td>Session 7</td>
<td>What kind of job do you want to have in the future and why?</td>
</tr>
<tr>
<td>Session 8</td>
<td>Why do you learn English and what do you do to learn it?</td>
</tr>
</tbody>
</table>
APPENDIX C

Open Questions for SCMC with Feedback Group

<table>
<thead>
<tr>
<th>No</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>How did you feel about the chances to examine or correct mistakes or errors while conducting feedback sessions?</td>
</tr>
<tr>
<td>2</td>
<td>Can you give me some of the most impressive examples of feedback you received from your partner?</td>
</tr>
</tbody>
</table>

Key words: synchronous computer mediated communication (SCMC), peer feedback, writing,
Application Levels: adult education,
Author: Jeong, Eunmi (Sookmyung Women’s University); emjeong@sookmyung.ac.kr

Received: May 15, 2010
Reviewed: July 30, 2010

The aim of this study was to investigate the learners’ performance on online peer review activity and their views on computer-mediated writing interaction in English. Students were assigned to be engaged in online activities with given tasks and topics to be discussed during the online collaborative activities. Furthermore, the students were involved in reciprocal teaching during the course of the term. In order to answer questions, 64 samples of group writing were collected and analysed. After finishing online activities, students were asked to fill in the questionnaire and open-ended survey to find out learners’ views on online activity. The study showed that in online peer review activity, learners were interested in finding grammatical errors, providing additional grammatical explanations, paraphrasing the sentences, commenting on styles of writing, suggesting colloquial expressions, performing self-repair and self-clarification, adding post interaction, translating some words into English and so on. By the same token, learners made some incorrect suggestion as well. In the view of online writing and peer review activity, there were more positive opinions than negative ones. Learners showed more favorable attitude on direct instructions, guidance and feedback from the teacher. Learners generally showed strong interests in online collaborative learning and high expectations on the improvement of writing ability through online activities.
1. INTRODUCTION

Recently, computer-mediated communication (CMC) has become a representative of active ways of both interacting and collaborating between participants. For example, in discussion forums, e-mail exchanges, and online debate activities. The wide recognition and utilization of these activities show significant educational and technical roles in educational sectors, especially in the area of second language learning and teaching. According to Chun (1994), computer-mediated communication plays an important role in eliminating the traditional concept and belief of learning, putting the emphasis on the interaction that can be achieved through the computer. In online interaction, learners are seen as more active members of a learning environment and teachers as “guides on the side” (Collison, Elbaum, Haavind, & Tinker, 2000) who act as the role of mediator and moderator.

In traditional classroom settings, most teachers experience time and physical constraints when trying to lead their students to engage, participate, and maintain activities, sticking with monotonous interaction patterns, such as Initiation, Response, and Evaluation (IRE, Mehan, 1979; Sawyer, 2006). For such reasons, time and physical constraints, technological help can be used as a way of not only enhancing students’ learning but also building up their inter-subjectivity, critical thinking, and argumentative ideas in many pedagogical and collaborative settings (Suthers, 2006; Scardamalia & Bereiter, 1994). For instance, in CMC situations, it has been suggested that a significant development of grammatical competence of learners were noticed through experiencing recognizing errors between learners (Dussias, 2006). Lee also (2002) maintained that CMC developed learners’ fluency in exchanging their ideas and information during the interactive activity.

Language learning can be successfully accomplished through the application of socio-cultural learning patterns, especially with effective outcomes of collaborative and interactive participation. According to Johnson & Johnson (1989), language learning is positively related to interactive and cooperative language learning experience in many ways such as developing learners’ creativity, boosting self-esteem, and enhancing interpersonal skills. Learning through collaborative interaction may provide more opportunities for the learner to promote not only their language competence but their psychological confidence by developing their social skills or integrating new knowledge of a language through exchanging peer support or feedback. This activity, therefore, requires important roles from both the teacher and the learner as a mediator or an active participant. This consistent and collaborative learning environment may be essential to the application of socio-cultural
learning theory in our actual learning and teaching environment.

The present study is not only to explore learners’ peer review activity conducted after the online writing activity but to investigate learners’ conception of collaborative online writing and online review activity as well. This paper may help us understand the nature of second language online writing and online peer-review as a supplementary writing activity to exchange more scaffolded interaction in CMC writing circumstances.

II. LITERATURE REVIEW

1. Collaborative Interaction in Second Language Learning

In the second language classroom, interaction can appear in various formations according to different tasks, the learner’s willingness or learning styles. A different type of individual interaction can be performed as a part of collaborative learning in dynamic group activities such as games, role plays or group competitions (Oxford, 1997). In addition, the participant’s willingness to communicate and share ideas might be one of the key elements of establishing interaction. This individual willingness can appear differently according to the participant’s learning style (Donato, 1994). In order to be called collaborative, we may need to consider several aspects of collaboration. Donato (1994) suggested that collaboration can be achieved through the social relations which are jointly constructed with the members’ efforts rather than individual activity. Through collaboration, individuals are recognized as a part of the activity and a contributor to achieve a specific goal. In addition, collaborative interaction plays a key role in distributing knowledge possessed by a single member within interactive relations.

According to Lantolf (2000, p. 33), Vygotsky’s theory of learning and development implies not just information processing conducted by an individual but a form of language socialization between individuals such as mutual understanding of the community and social interaction (Lantolf, 1994, Wertsch, 1985, Thorne, 2000). The final goal of constant interaction includes leading and transforming individuals into participating and contributing to social network they are engaged (Lave & Wenger, 1991). Therefore, from the language learner’s point of view, the value of being involved in collaborative activities is not just accumulating language knowledge as a possession but its consequences of individual contacts among peers or participation through the task. This may be expanded to future contributions for the community activity (Dyson, 2000; Larsen-Freeman, 2003). This collaborative learning interaction is closely related to the goal-oriented activity in second
language learning.

In collaborative activities, interaction is mainly directed towards a specific goal not only to complete the task but to lead the participant to the social community in group context. An individual is engaged in a particular mission and functioning accordingly in a given context such as exchanging ideas and feedback (Dörnyei, 1994; Wertsch, 1985). According to Lomov (1982, p. 72), this may closely link to learners’ achievement, successful completion and evaluation of the task with individual’s persistence or endeavor.

With the current development of computer technology, learners become able to have more opportunities not only to meet each other through online activities and exchange scaffolded assistance in a many-to-many form of collaboration; in this collaborative activity, learners are more likely to be exposed to various types of meaningful input from other peers (Vygotsky, 1962) and provide effective language support on the errors (Vygotsky, 1978) which are based on learners’ enhanced output (Oxford, 1997). According to Sotillo (2002), through collaborative writing, learners showed an increased complexity of language and effective use of other peers’ advice on their writing. Moreover, the general quality of writing was increased showing the high accuracy of grammatical usage of language (Storch, 2005).

2. Collaborative Online Peer Review Activity in Second Language Learning

Teaching writing in second language learning has been considerably changed compared to the process approach to writing instruction in the 1980s. The approach focuses on the process of writing that leads to final product by building repertoires of strategies for pre-writing, drafting, and rewriting through the revision (Brown, 2007). In this process, learners are encouraged to have more feedback from both the teacher and peers during the process of composition. Through this experience, the learners are attempting to bring their meaning closer and closer to intention (Brown, 2007; Ferris, 2010). In revising the written work, peer review is frequently used in order to negotiate meaning and check various expression and interpretation. This activity can be used to provide an optimal chance for developing language skills (Savingnon, 1997).

Peer review activity can be achieved in various ways such as silent reading for reviewing, nominating partner by the teacher or the student, and providing a review worksheet for the guidance including text, content, structure, coherence etc. According to Grabe and Kaplan (1996), through the peer review activity, learners can build up audience awareness, interactive collaboration, a sense of discourse community, various strategies for revision, and language skills on writing style (p.386). Through this interactive negotiation,
students can learn from each other by exchanging ideas, comment on the content, language use, or structure of writing and so on.

Berg (1999) showed the positive effect of peer review in ESL students who received training on revising writing and building up the quality of writing. In the study, by using the guidance and more help from those students, they were able to achieve higher scores on their revised second drafts than others who did not. Many other studies also supported the positive effect of peer review activity (Mangelsdorf, 1992; Nelson & Murphy, 1993). However, there were other studies which highlight unfavorable attitudes on peer review activity by suggesting the learners’ emotional discomfort on exchanging the feedback (Spear, 1987), distrust on peers’ correction (Paulus, 1999), and emotional threat toward learners’ self-esteem (Brown & Levinson, 1987).

Computer mediated peer review has been widely adopted with the advent of computer-assisted language learning (CALL) and computer mediated communication (CMC) in second language learning and teaching. With the help of technology, learners can write and exchange feedback through interactive online programs at any time. According to Savingnon and Roithmeier (2004), online peer review activity not only offers flexibility for learners but reduces emotional pressure on exchanging feedback in face-to-face situations. Tuzi (2004) also showed that there are a number of positive effectiveness in online peer review activity such as flexibility in time and place, careful monitoring in conversation, and less pressure in responses compared to face-to-face written reviews.

Several studies have also pointed out the effectiveness of learners’ motivation of using computer in second language online writing (Colomb & Simutis, 1996; Kelm, 1992; Kern, 1995). Skinner and Austin (1999) suggested that learners tend to establish a virtual community for interactive communication with a high motivation of interacting with other peers. Through this online activity, learners tend to reduce their anxiety in speaking in a second language and establish a sense of collaboration.

Learners’ motivations can be influenced by collaborative and interactive activities through diverse engagement in communicative events, tasks and emotional factors. These can be interpreted as social motivation, task motivation, and self-motivation in online writing and peer review activity. Social motivation conceptualized by Weiner (1994, p. 558) contains the complex motivational influences from a sociocultural aspect. As McGroarty (1998, p.592) suggested, in order to understand the significant aspect of language learning, it may be necessary to understand how the social interaction affects the learner’s motivation in learning processes (p. 592).
Collaborative interaction in CMC can be regarded as a miniature copy of our society as meaningful interaction that occurs in various social discourse settings such as suggesting, negotiating, accepting, praising and refusing etc. Collaborative interaction in CMC is strongly based on a variety of psychological relations between participants. For instance, through the constant interaction, a strong sense of community can be developed with high motivation sometimes by taking responsibility for the task according to their own level of language proficiency. The positive effects of enhancing motivation through interactive activities have been supported by many scholars. Clément (1986) addressed that the quality and frequency of interaction with members of the group will affect learners' positive self-confidence, motivation, and performance. Crandall (1999, p. 234) also argued that having plenty of resources from other peers through interaction may eventually lead to both high motivation and enjoyable activities and voluntary participation. From these positive aspects of having collaborative interaction, it can be assumed that the more learners have social interaction with other peers the more learners realize how to interact with other participants in better ways.

Thus, this study is aimed to investigate learners' performance on online peer-review activity. Furthermore, this study attempts to find out learners' views on online writing and online peer review activity. These are the main issues to be investigated in this study:

1) Finding learners' particular types of peer review on online writing activity
2) Identifying learners’ conceptions of computer mediated writing activity and online peer review activity.

III. METHODOLOGY

1. The Participants and Research Context

Forty Participants of this study enrolled in a Practical Writing module in a University-level course. Students were specialized in English Language Teaching Education (4th year-20, 3rd year-16, and 2nd year-4). Learners who enrolled in the program wanted to improve their academic writing ability through the course. In the main lecture, they were taught various language features related to academic writing. Apart from taking the main lecture, they were asked to participate in group online writing activity and online peer review activity.

The major feature of this study was based on three criteria: (1) students worked on a collaborative online-group writing at least once a week for about two months (2) various
CMC tools were used to enhance students’ online collaborative work such as E-Mail\(^1\), MSN\(^2\), Nate-On\(^3\), and Skype\(^4\). In addition, the writing activities in the in-class session provided many ways in which student learned about writing essays. Additional writing opportunities were also offered in the classroom writing activity: (a) whole-group writing activities and accompanying follow-up writing activities (b) teacher’s instructions on grammar (c) peer-tutoring or Peer-Assisted Learning Strategies (PALS) (Fuchs, Fuchs, Mathes, & Simmons, 1997) (d) regularly scheduled writing opportunities (e) writing discussion groups (f) composition exercises.

2. Data Collection

In order to answer the first question, before starting the online activities, online writing activity and online peer review activity, the instructor provided an orientation session to introduce CMC components to students in order to complete the given task in the course. Forty students were divided into 10 groups, with three to five members per group to have an online discussion once a week for a month. For the group discussion, students were given various topics which could be selected and discussed through online group activity. These are examples:

1. Would you spank your children if they went astray?
2. Do you have any special plan for this summer vacation?
3. Are you worried about second-hand smoke?
4. If you were late for an appointment, would you violate the traffic rules?
5. Talk about the differences between making a phone call and writing a letter, if you were falling in love?

In addition, students were required to perform peer review immediately after the online group writing. Therefore, each student in a group needed to complete the group work discussion and exchange their feedback on their writing. In exchanging peer feedback, they were advised to offer written form such as error correction and additional suggestion. At the end of the course, the students were asked to fill in both the questionnaire and open-ended survey in order to find out their views on online writing and online peer

---

1) E-mail: Electronic mail, a method of exchanging digital messages across the Internet
2) MSN(The Microsoft Network): a collection of Internet services provided by Microsoft
3) NateOn: an instant messaging client provided by Nate in South Korea
4) Skype: a proprietary software application to make voice calls over the Internet
review interactions. They were also asked to submit all the files of their writings to the researcher in order to be analysed through online. For the analysis of collaborative and interactive learning activities, Curtis and Lawson (2001)’s the behaviour categories of collaborative learning was used (1) planning; (2) contributing; (3) seeking input; (4) technology; and (5) social interaction. In order to participate in the interaction, students were required to plan before the activity regarding the topic they were discussing. Then, while interacting with their members, students were encouraged to pay more attention to exchange ideas and seek more input from other members of the group.

IV. FINDINGS

1. Types of Peer Review in Online Writing

Altogether 64 online group writings, 682 pages, were collected and analysed during the data analysis period. In order to answer the first question, various types of peer review feedback were collected and categorized according to each theme. As we can see in Table 1, providing grammatical error was one of the most frequent feedback provided from the peers. It was found that there were frequent grammatical errors made by participants during the online discussion. They were (1) articles (#1, #2) (2) modifier (#3, #4) (3) preposition (#5, #6) (4) verb form (#7, #8) (5) passive voice (#9, #10) (6) agreement (#11) and (7) infinitive, participle, mood (#12, #13, #14).

Excerpt 1.

1. A: But it is a kind of joking
2. A: he is the other person, we just met at the evening,
3. A: Have you ever experienced any volunteer job?
4. A: This is my topic today for the discussion.
5. A: I couldn’t agree more with NaJung.
6. A: Then I don’t want to have more than 2 children! :)
7. A: yes, you guys said are saying that I want to say ..... 
8. A: hum.... i think childless couples sometimes are would be happy
A: In this situation, your friend will be really sorry for you.
9. A: He turned almost purple because he was embarrassed.
10. A: More time for English speaking class should be extended.
A: Yes I’m afraid of being hit by a car
11. A: Asking teachers to take the test makes it possible to not only advanced in their
English speaking but also regain their belief as teachers.
A: I think those kinds of jobs are not included in that topic
A: She said it is(was) very good for her and she has(had) very nice time at that moment.
12. A: But, the best way is to make him find out my birthday and prepare the day
13. A: we need to have more education giving us positive effects.
14. A: But, If I already had two sons, I would really want to have a daughter^_^

As most participants were senior students, there were not many grammatical mistakes in spelling, missing parts of speech, verb form and word order which frequently appears in beginner students. Instead, many participants tried to use other grammatical knowledge through online writing as well as providing more feedback on using Modal Auxiliaries, Participle, Gerund, Mood and Infinitive and so forth.

<table>
<thead>
<tr>
<th>Feedback Types</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammatical Error</td>
<td>A: I attending a lecture of Exercise and Health → I attended</td>
</tr>
<tr>
<td>Additional grammatical</td>
<td>A: Because, when I will fall in love with someone in the future, (Using explanation) present tense in conditional sentences or in time clauses)</td>
</tr>
<tr>
<td>Paraphrase</td>
<td>A: surely, we can know about the gender after pregnancy 8 weeks → having a baby 8 weeks later</td>
</tr>
</tbody>
</table>
| Styles of writing              | A: In my opinion, spanking is a good (useful preferred) punishment only when the children is young
A: So sometimes these kinds of news was so shocked to me. (→came as a shock) |
| Colloquial expressions         | A: I want to ask the question, too! :)                                     
→That was what I wanted to say. (That’s what I had in my mind. You can say that again.) |
| Self-repair & clarification    | A: NaJin is so funny girl.                                                 |
| Post interaction              | A: I agree
→ other useful expressions
(I was all for that. I unanimously agree on your idea. I was in favor of you.) |
| - Further information         | A: have you ever experienced it? (they have been talking about the volunteer job) |
| - Further interaction         | A: So he was very shocked and his car just had to go to the factory to repair → garage or repair shop preferred |
| - further Suggestion          | Translation A: I envied my 후배s(junior friends). T.T Anyway, after the final exam |
The next common feature was to provide grammatical explanation when providing feedback to other colleagues’ writing such as the use of conditional sentences and participle. As the participants had another chance to read and correct the writing, they also added additional explanations on grammatical explanations for their peers.

Excerpt 2.
A: If I already had two daughters, I don't want to try again to have a son, because I want to have only one or two children.
→ using the simple present tense in conditional sentences
If+S+simple present tense~, S +will/shall/can/may+R
If he is(be) honest, I will employ him.
If it rains(rain) tomorrow, we will not go on a picnic.
2. If + past tense; the verb is in the conditional tense (when the supposition is contrary to known facts)
If+S+past tense, S +would/should/could/might+R
If he were honest, I would employ him.
If I knew the answer, I could help you.
A: My parents hit my cheek, because my father said to me (saying)
When you see the mirror, you can reflect your mistakes. because my father said to me;
saying preferred

Another striking feature was to paraphrase sentences or phrases into the better ones. As participants had more time to revise the sentences and expressions, there were more challenges to polish their sentences with more appropriate expressions.

Excerpt 3.
1. A: But I think if I had two daughters I don’t need to have a son, because my husband and I both will work so I think we will be difficult to bring out three children.
→ my husband and I
It might be difficult for us to bring up
2. A: In my case, I have a younger sister and we really like to have time with my father, but, I think he sometimes lonely...
   → spend time........he feel lonely
3. A: I think, if I have many children, sometimes, they are (will be a) burden to me, but most of time it is good for me
   → it can be enjoyable time for me?
4. A: Sometimes it is children that solidify love^_^
5. A: It is really work for her, she was very moved. Through the many kinds of shop on the Internet, nate-on site, I can send anything such as coffee, donuts, pizza....
   → I tried to make her happy, so she was very impressed. I looked up and down on Internet to send gifti-cons for her such as coffee, and pizza, etc.
6. A: I think talking to him naturally is the best and most important way in this situation
7. A: Why they spanked you guys? → Why were you spanked?
8. A: the letter looks elaborate. → Writing a letter is an elaborate work.

As we can see Excerpt 3, participants tried to change some of unclear sentences with various colloquial expressions such as bring up (#1), spend time (#2), feel lonely (#2), enjoyable time (#3), be impressed (#5), up and down (#5), a elaborate work (#6) etc.

Next, participants also paid more attention to the style of writing, making the sentences more natural by changing auxiliary verbs (#1-#5) tense (#6), and pronouns (#7), comparing spoken and written styles with alternative expressions or phrases (#8-#12).

Excerpt 4.
1. A: Yes, but maybe the friend might feel sorry to me
2. A: I could remember the date of her birthday after the one day passed
3. A: She might have felt sad a bit. ^^;
4. A: Sometimes I will (strong assumption) spank my child to lead them right.
5. A: In my case, I always say → I used to say ...
6. A: I’m ready → I’ve been ready. (present perfect tense preferred)
7. A: They do that because they have some problem, but they can not solve. → changing They to The Children, indicating the specific subject
8. A: Why do you think like that? → What makes you think like that?
9. A: Talking(to their children) is the best way to correct our behavior.
10. A: But (→and, showing the sequence), I was a naive child.
11. A: Frankly speaking, I also would like to have one boy and one girl but, we do not know our child’s gender exactly → honestly, in small talk using honestly would be preferred
12. A: I can’t assure that whether my financial condition is good or not.
Like examples in Excerpt 4, many participants were interested in writing sentences conveying more natural meaning with various expressions. This can be noticed from Excerpt 5 showing sentences which have been changed with various colloquial expressions such as set off (#1), must have p.p (#2), commit suicide (#3), around the corner (#5), look forward to (#6), feel as if (#7), sure I am (#8), and body part (#9).

Excerpt 5.
1. A: I was hit quite much, because I used set my parents off. ("making them up set"?)
2. A: That (must have) hurt you. must have p.p : considering a past action
3. A: Did you guys have you heard about the boy who is in his high school committed suicide because of punishment?
4. A: Yeah, it is oh my god thing. (→It is horrific thing.)
5. A: Summer vacation is just around (the) corner ....^_^
6. A: ok, I'm looking forward about you. (to your some advice)
7. A: I feel as if I want to wash my hair again
8. A: I sure am ~ → Sure, I am. preferred^^
9. A: and position of the body is important, too → part of the body? (preferred?)

During the peer correction activity, participants also showed their self correction, self-repair (#1–#3) and self-clarification (#4) on their own writing, which can be considered as a second revising work (#1–#3).

Excerpt 6.
1. A: I saw a boy who rode riding an motorcycle was hitted by the bus
2. A: Meanwhile, Whereas, some teachers had a bad poor English skills,
3. A: The job which gives giving us pleasure can help make our whole life happy.
4. A: Writing letters has become a kind of annual few events since I was 20 years old.

Next, many participants were engaged in exchanging their ideas by adding more answers (#1–#4), questioning (#5, #6), and suggesting some ideas (#7–#11) through the peer review activity.

Excerpt 7.
1. A: Until now, I don't know.... how's it going! (he just called at a bad time. ↑, ↑)
2. A: what is the gifticon? :) → (gifticon)? : It means "Gift" &"Icon". It is a new convergence service of SK Telecom in South Korea. You can give a real gift by using instant messenger or mobile data service. You can get a mobile exchange ticket and
can exchange a real product in shop.

A: pejorative 1. disparaging, belittling, or derogatory word or expression.

3. A: I think so. → I think so too. // So do I.

4. A: I like to talk on the phone (over/by) about everything at night

5. A: pejorative? Does it have a negative meaning?

6. A: where is “the other country?” → what country was she staying?

7. A: Yeah, but now I’m confused, because he is likely to like her, also she likes his face, mood, his character, but they didn’t say something more detail. (connecting the sentences–preferred)

8. A: so I paid for her (treated her...)

9. A: I prefer to have both son and daughter.
   → (want) preferred

10. A: now, I little bit agree about(–over, on) the question.

11. A: In my case, I often write a letter for him to give him energy → encourage him?

Apart from these frequently used sentences involving feedback, there were additional support from the peers to make sentences more accurate and clear such L2 translation and using capitalization and punctuation. Last, there were a number of incorrect peer feedback provided participants. For instance, Excerpt 8 shows the suggestions made by the participants regarding the use of conditional sentences and passive voice. However, the suggestion was incorrect and it showed over-generalization of grammatical knowledge of the participant.

Excerpt 8.
1. A: Rather, if they had hit me, I should have disobeyed them. (→when; showing an unfulfilled obligation or sensible action what was neglected)
2. A: Yeah, I remembered being spanked by my parents. →(possible?) I remembered had been being spanked by my parents. (using a gerund when the earlier action is expressed)

2. Perceptions of the Online Writing Activity

The second question of this study was to find out the learner’s perceptions of online writing activities. The students were asked to evaluate various positive factors of conducting the activity as well as negative factors. As we can see in Table–2 (Q1), more than 84% students showed positive interest in online writing activity because of having more opportunities to use language. However, 16–18% of participants were still uncertain about the effect of online writing activity in contrast to the effect of face-to-face writing
In addition, Table 1 shows that more than 55% of students were trying to have more time to think before expressing their own ideas. On the other hand, about 23% of students were in favor of exchanging prompt responses during the online activity (Q3). Next, regarding the improvement of writing ability through the activity, more than 59% students saw positive effects of online collaborative writing activity as a way of building up their writing skills compared to 12% students who held negative views (Q4). We can also notice that many students were highly eager to challenge themselves while engaged in the online writing activities (more than 52%-Q5) despite of the lack of their language competence. However, some of students (33%-Q5) did not want to take more risks while engaged in writing activity. More learners (77%-Q6) saw their positive effects of improving grammar knowledge by participating in online writing experience. Interestingly, more than 43% of participants (Q7) indicated the strong interest in having classroom
writing activity under teacher's classroom instructions. Participants also wanted to have more teacher supportive guidance for online writing activity (82%-Q8) as a part of preparation of on-line interaction. Lastly, about 50% of participants considered online peer-review activity as a way of improving their writing and grammar ability. However, 18% of students saw no relations between performing peer review correction and improvement of writing skills (Q9).

3. The Result of Survey

1) Positive Views on Online Writing and Peer Review Activity

In order to explore participants’ views on online writing, its effect and online peer review activity, more data analysis was conducted throughout the data analysis period. First, many participants expressed their various positive interests on the nature of online writing activities such as participating in the communicative and debatable interaction with other peers and taking the advantage of the time flexibility of the online activity.

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Positive Views on Online Writing &amp; Peer Review Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive attitudes on online writing activity</td>
<td>- experiencing the communicative and interactive debate with others</td>
</tr>
<tr>
<td></td>
<td>- having more time to think and prepare for the discussion</td>
</tr>
<tr>
<td></td>
<td>- exchanging opinions and ideas on a specific topic</td>
</tr>
<tr>
<td></td>
<td>- making effort to complete the task with group members</td>
</tr>
<tr>
<td></td>
<td>- searching words or information while being engaged in the activity</td>
</tr>
<tr>
<td></td>
<td>- reflecting individual ability in language use</td>
</tr>
<tr>
<td>Developing writing skills</td>
<td>- obtaining a new scope of a third person's writing structure</td>
</tr>
<tr>
<td></td>
<td>- the chance to use a daily life spoken and written expressions</td>
</tr>
<tr>
<td></td>
<td>- good opportunity to use a newly acquired grammar rule</td>
</tr>
<tr>
<td></td>
<td>- practicing previous knowledge in writing and grammar</td>
</tr>
<tr>
<td></td>
<td>- meaning focused, not grammar focused while interacting</td>
</tr>
<tr>
<td></td>
<td>- building communicative fluency in writing</td>
</tr>
<tr>
<td>Positive views on online peer review activity</td>
<td>- using grammatical knowledge in peer-corrections</td>
</tr>
<tr>
<td></td>
<td>- exchanging prompt and immediate written feedback</td>
</tr>
<tr>
<td></td>
<td>- practice noticing grammatical errors and mistakes</td>
</tr>
<tr>
<td></td>
<td>- better understanding of the text through the peer support</td>
</tr>
<tr>
<td></td>
<td>- exchanging and experiencing critics from others</td>
</tr>
<tr>
<td></td>
<td>- becoming accustomed to showing individual competence and capacity related to writing to others</td>
</tr>
<tr>
<td></td>
<td>- becoming aware of the correct use of language from others</td>
</tr>
</tbody>
</table>
Through the online writing activity, participants were able to exchange various types of personal opinions and arguments in order to complete their given tasks. In addition, they tried to exchange their opinions on a specific topic by doing the research while being engaged in the activity, which is considered one of the merits of the online activities. Reflecting on their own language competence was also the positive factor in carrying on online writing activity.

Regarding the positive effect of developing language competence, many participants were happy to broaden their scope of writing structure by experiencing other person’s writing performance. While engaged in the activity, learners had chances to be exposed to various types of both spoken and written expressions. Furthermore, it was useful for participants to use newly acquired grammar rules or previous knowledge in writing and grammar, focusing on more meaning and building more communicative fluency in writing.

As for the view on online peer review activity, participants showed their interests in many ways such as applying grammatical knowledge in peer correction stage, exchanging immediate written feedback once finishing writing, noticing grammatical errors and mistakes, and better understanding of the text through the peer support. In addition, the participants were not familiar with exchanging critics on peer writing and showing their linguistic competence related to writing but they felt gradually accustomed to accept and provide critical opinions on the written performance. Therefore, participants became aware of using correct forms of language in their writing and peers’ writing.

2) Negative Views on Online Writing and Peer Review Activity

There were a number of concerns about the online writing activities in terms of constructing the online task such as different individual schedule, lack of controller, supportive instructions and psychological and cultural aspect of online activities and language incompetence. First, in setting up the online writing activity, despite time flexibility, students experienced difficulties in organizing all group members to be logged in at a fixed time. Slow typing speed caused time lag to control the amount of information expressed by all members. Some participants felt that sometimes the online writing activities seemed to be controlled and dominated by a certain number of participants. Students, moreover, expressed the need for appropriate amount of a teacher’s support or specific guidance such as the structure of the online task, feedback on the outcome of the activity, more detail instructions regarding language usage to be used, and basic rule of the activities. In addition, some experienced difficulties in providing feedback to the member of the group because of the fear of the peer pressure and different learning
culture. Regarding the use of language by participants, some students pointed out a tendency to use simple words which are repeated in order to avoid making mistakes and complete the group task given in the activity.

According to Table 2, we can notice that learners are strongly influenced by the facts that they can build up their language writing skill by experiencing other peer’s performance such as written structure, grammar usage and colloquial expressions and so on. In addition, learners had ample opportunities to correct each other’s written forms or discuss ideas expressed by one of the members during the activities. However, some students expressed their doubts regarding the limited effectiveness of linguistic development of the learners considering learners’ limited use of language such as various expressions, vocabulary and grammar. In addition to this, learners had difficulties in explaining, discussing and debating many issues in depth with limited language ability. Therefore, students ended up maintaining simple and monotonous patterns of interaction. This also led to unsatisfactory performance to provide sufficient corrective feedback on other members’ written work, especially justifying the correctness of grammar and written styles. Students felt that they were more exposed to the spoken style of written form rather than formal written styles during the online activities. They expressed the need for learning various styles of written forms. While taking turns, students sometimes not only misunderstood the intention of the writer but were influenced by the incorrect information or opinions suggested by a member of the group which came from limited language use.
3) Other Views on Online Activity

Participants had positive feelings towards online writing activity by mentioning the importance of being honest towards their friends, enjoyment of being collaborative, and the use of different degrees of freedom compared to classroom activities. In addition, even though students had peer pressure on their performance, they expressed high motivation with a feeling of responsibility and duty for their peers. Students presented their willingness to make progress by interacting with native speakers, advanced level students, improving their typing skills to communicate in an effective way, building up more confidence for the activity, and maintaining the online writing activity.

However, many participants showed their preference for direct learning which takes place in the classroom situations. As students experienced their lack of language competence, they felt more need for a teacher’s guidance and language support which can be a useful tool in online activities. The majority of students considered having direct instruction from a teacher effective for future learning and wished to see more connections between online and offline activities.

Participants also wanted to have more feedback on their online activity such as ways of conducting peer corrections, communicating with other participants and maximizing current language ability of each participant. Regarding the tool they use for the activity, some students preferred “e-mail” interaction as an effective tool in many ways such as having easy self-correction, dealing with large amounts of information, and containing various topics with enough time. Others preferred “Online Conference Activity via MSN, NATE-ON, or SKYPE” for different reasons such as speedy exchange of opinions, large amount of writing in a short time, more chances to encounter peers’ errors or language use, and a variety of ideas at one time.

V. CONCLUSION AND DISCUSSION

This study focused on both analysis of particular types of peer review on online writing performance and learners’ conceptions of computer-mediated writing activity and peer review activity. The study suggests that participants were actively involved in peer correction and review activity by scrutinizing peers’ writing performance. Mainly, they paid much attention on the correct use of language such as finding grammatical errors,
which lead to providing correct forms, and further grammatical explanation. In addition, participants were voluntarily paraphrasing and polishing unnatural sentences to the better ones by using appropriate and many colloquial expressions. Furthermore, they showed self-repair and self-clarification by either deleting incorrect parts or adding more information in the necessary parts of the interaction. Participants also translated some Korean words into English and pointed out the incorrect use of punctuations and capitalization. However, sometimes, there were a number of incorrect peer suggestions on the use of language, particularly misuse of grammatical knowledge.

Regarding learners’ perception on online writing and peer review activity, participants generally showed positive attitude by mentioning ample chances to use language, flexible use of time, and influence on language development and so on. However, some participants showed more concern about the limited language competence of group members which may have affected on individual language improvement in online writing and peer review activity. The importance of receiving teacher’s guidance and support for the activity was considered as a main necessary part for participants in order to carry out the activity.

Based on these results, we can assume that online writing and peer review activity can be effectively used to enhance learner’s language development and communicative competence through collaborative interaction. The learner’s output can be stimulated and reformulated through ongoing noticing of gap activity by using and hypothesizing learners’ current linguistic knowledge or testing newly acquired knowledge in various written form during the interaction. This can be closely related to the socio-cultural theory of language learning that focusing and negotiating meanings provide further optimal conditions for language acquisition and mastery of a second language (Long & Porter, 1985).

As Takahashi (1998) suggested, students’ progress can also be made through their mutual assistance and spontaneous responses. Lantolf (2000) put an emphasis on the important link between learning and optimal development in collaborative interaction. In online writing and peer review activity, with the mixed level of learners, students may have more chances to learn from more advanced learners too. The feature of transformation coupled with collaboration can be considered as the basis of the characteristic of development. Therefore, in order to motivate and stimulate more students to participate in online writing and peer review activity, we may need to provide more interesting topics or tasks not only involving various language skills, but leading learners to take part in goal oriented tasks.

In light of the teacher’s role in online writing and peer review activities, the teacher
can be described as a mediator or facilitator for learners’ potential learning. Many students considered the lack of teacher’s support one of the negative factors in online writing activity in maximizing learning. This can be achieved by providing appropriate amount of instruction before and post online writing activity. For instance, teachers may need to have a careful plan for leading students to be engaged in the activity such as setting goals through the discussion with students, designing learning tasks, assessing learning, and providing feedback on the activity. In addition, teachers may need to provide more instruction on generating critical thinking, and exchanging knowledge and personal experience in written form before the activity. Demonstrating how to present opinions or how to collaborate with each other can also be a valuable strategy for experiencing peer pressure in group discussion and solving problems with more confidence. Through these strategies, students may be able to develop a sense of peer contributions, peer scaffolding efforts and peer collaboration.

REFERENCES


Lee, C. H. (2002). What is the most crucial factor in implementing computers into FLT/L?
Collaborative Discussion and Peer Review Activity in Computer-Mediated EFL Writing

Collaborative Learning, 315–337.

APPENDIX

ONLINE WRITING AND PEER REVIEW ACTIVITY – (Open-Ended Questionnaire)
1. What would be the advantages of online writing activity with your peers?

2. What would be the disadvantages of online peer review activity with your peers?

3. What would be the potential usefulness of this on-line writing activity?
4. Do you think you have improved your grammar ability through this activity? Or Did you have any benefits from this activity?

5. Do you think you have improved your motivation on learning English through this activity?

6. Would like to continue this activity if you have free time?

7. What would be the most crucial factors in terms of failing to reach to the high-level of second language proficiency in writing based on your school experience?
8. Which one do you prefer, individual e-mailing or group-writing practice, using MSN or Nate-on? Why? What would be the distinctive features of each method?

9. What kind of feedback you received during the class was most useful in this on-line activity?

10. What kind of support or guide do you want to have from the teacher in order to improve your writing in online activity?

11. Do you feel any differences between online and off-line help or feedback from the teacher?

12. What would be the strong factors in terms of learning and teaching through off-line activity?

Key words: online writing activity, online peer review activity, CMC, CALL, Applicable levels: secondary education and university level

Author: Bong-Gyu Kim (Hankuk University of Foreign Studies); bgk033@yahoo.co.kr

Received: May 15, 2010
Reviewed: July 30, 2010

Twitter is perhaps the most widely recognized social network services (SNSs) worldwide. This study attends to the value of Twitter from the EFL pedagogical perspective. The purpose of this study is to investigate how three Korean English teachers in an elementary, middle, and high school used Twitter for three weeks with their students. The qualitative case study yielded findings particularly with regard to the teachers’ use of patterns, interaction with students, and perceptions on using Twitter for instruction by analyzing the teachers’ tweets, interviews, and their students’ postings. The teachers employed microblogging differently depending on their students’ ages, computer experience, their L2 belief, and perceptions concerning the use of technology in the classroom. Interaction patterns with their students also were noticeably different when using Twitter. However, the three teachers agreed that Twitter enables good writing practice for students of any age and provides a great opportunity for them to use English for authentic purposes spontaneously.

* This study was supported by the 2010 Research Fund of Chung-Ang University.
I. INTRODUCTION

The term, Social Network Services (SNSs) was introduced only a few years ago in Korea, but is no longer considered a new term to the majority of Korean people. Unlike other made-in-Korea Computer-Mediated Communication (CMC) tools, SNSs such as Facebook, Twitter, and My Space1) are considered ‘foreign and uncomfortable’ by many to use in a domestic context. Nevertheless, Koreans are keenly interested in pop culture and associated technology and make concerted efforts to minimize a ‘digital divide.’ Some even warn there is certainly the potential for disaster in SNSs (Young, 2010) or criticize them for “needless sharing” (Ovadia, 2009, p. 202). However, SNSs, like other CMC tools, can provide a good opportunity for L2 learners to connect easily and mingle with other in the target language discourse community. In that sense, SNSs constitute an important research area for L2 educators interested in language learning from a socio-cultural perspective.

Twitter is a recently-recognized microblogging service world wide that allows users to post and read 140 character-messages, called Tweets. These short information packets can be anything from what someone bought yesterday to feedback on a president election. This compressed and quick communication medium intrigues people, and it soon will become the world biggest SNS. What also gets people involved in Twitter is easy access in many different channels through the homepage, other web 2.0 systems, smart phones, or wireless mp3 players and so on. Furthermore, many famous people utilize Twitter for advertising, disseminating news, or leading public opinion, enabling others follow and share their lives and thoughts.

It is, thus, worthwhile to review the value of Twitter also from the EFL pedagogical viewpoint. In particular, since it is teachers who decide whether to use Twitter as an instructional tool, it will be the first step to examine how teachers perceive it, including whether to embed microblogging into students’ language practice or in the school curriculum. If teachers’ belief is negative or conflicting with the pedagogical nature of technology, it cannot be effectively utilized into language learning regardless of its values (Chen, 2008; Honey & Moeller, 1990).

Accordingly, the purpose of this study is to investigate how Twitter can be used in the classroom for instructional purposes. This research views three Korean English teachers in an elementary, middle, and high school teachers who attempted to use Twitter with their students for three weeks. It is a qualitative case study that focuses on the

teachers’ use patterns, interaction with students, and perceptions of using Twitter as an instructional tool in diverse Korean school contexts. In the process, this study seeks answers to the following questions:

- How did the three English teachers use Twitter for their instruction?
- How did they interact with their students when using Twitter?
- After three-week’s use, how do they perceive Twitter as an instructional tool?

II. LITERATURE REVIEW

1. Social Networking Service (SNS)

Social Networking Service (SNS) is globally recognized web-based service to express oneself and to socially interact with people. boyd and Ellison (2007) define the key functions of SNS as follows. They “allow individuals to 1) construct a public or semi-public profile within a bounded system, 2) articulate a list of other users with whom they share a connection, and 3) view and traverse their list of connections and those made by others within the system” (p. 211). The main features of SNS are posts, profiles, links to other profiles, photo or movie file unloading, RSS (Really Simple Syndication), and comments (or replies). What distinguishes SNSs from other existing online communities is that they allow users to make their social networks visible for new networking and to leave a short log or comment (called microblogging) for casual relationship. Many studies highlight the growing evidence that SNS plays a vital role in generating social capital (Ellison, Steinfeld, & Lampe, 2007; Steinfeld, Ellison, & Lampe, 2008) and maintaining friendships (Steinfeld, Ellison, & Lampe, 2008).

The global distribution of SNS is so rapid that Facebook has 400 million users as of February, 2010, and China reached 124 million users of online social networks by the end of 2009. Table 1 shows a list of widely used SNSs in the world. Since these sites were launched after 2004 or later, their growth is phenomenal. In particular, since the majority of Facebook users are youngsters, comprising, for example, over 90% of undergraduates in the U. S, it is not surprising that one strand of recent research has focused on the outcomes of Facebook use from educational perspective (Hargittai, 2007; Hewitt & Forte, 2006; Steinfeld, Ellison, & Lampe, 2008).
Many studies view the value of SNS from pedagogical perspectives. First of all, a SNS is a good communication practice tool available both in synchronous and asynchronous modes among students, between teachers and students, and also between school and parents (boyd & Ellison, 2007; Butler 2010; Greenhow & Robelia, 2009; Mishra & Koehler, 2009). Second, Greenhow and Robelia (2009) indicate that SNS may provide contexts for learning to supplement school–based experiences. They used the SNS, My Space, with high school students from low income families in the USA and revealed that SNS used outside of school helped students to formulate their identity and demonstrate 21st century skills (ISTE 2008) such as digital citizenship. Mishra and Koehler (2009) offer examples of using Twitter 1) to complement face-to-face discussion in a classroom, and 2) to send school news to parents.

Ryberg and Christiansen (2008) also examines types of learning gained from engaging social networking sites. They chose the Danish social networking site (Mingler.dk) for peer-to-peer learning and development. They analyzed leaning development in SNS by using Wenger’s concept (2007), Community of Practice (COP), and Vygotsky’s (1978) zone of proximal development (ZPD. Community of practice are “group of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly.” (Wenger, 2007 online). This study shows how community members develop learning with each other in the SNS, and also indicates how they draw from other sites and in turn produce resources for other communities. His analysis concludes that learning in the SNS was accelerated in collaboration with other peers.

Some other researchers view activities of SNSs as writing of the self and self–authorship. McBride (2009) refers to the idea of performing identities and boyd (2007)’s “write themselves into being” and holds that the basic features of SNS including
easy communication, exchanging rapid reactions, observing others’ information and updates, enable young age groups to experiment with their identities. Particularly, L2 learners develop new identities in the target discourse community. In this context, the learners take an active role in their learning by creating their own materials and interacting (McBride, 2009).

2. Twitter and Language Learning

Microblogging is a shorter version of blogging. A microblog differs from a general blog in that there is a character limit, mostly 140, and its content is just a short sentence fragment, an image or an embedded video. One of the most commonly recognized microblogging services is Twitter. Users post tweets (text-based messages) that are read by community members (followers). Tweets are mostly personal information to share with friends and family, but they are sometimes used to distribute powerful messages or substantial information to non-specific people. Unlike other web 2.0 technology, Twitter contains limited simple functions, such as ‘replies’ (reacting to a specific tweet), ‘retweets’ (sharing a received tweet to all the followers), ‘direct messages’ (sending a message to a specific member), ‘favorites’ (bookmarking), and ‘search’ (finding information with a keyword). There are no widgets, no font types or color, no html, but only automatic URL links.

The nature of microblogging has been recently reviewed in many facets of L1 and L2 pedagogy. First of all, Twitter provides a favorable environment to increase L2 learners’ authentic input and output, and to have them actively negotiate meaning (Antenos-Conforti, 2009). She attempted to use Twitter with 22 university students in Italian classes and discussed that microblogging via Twitter transformed social networking into education networking. Students who actively used Twitter showed improved confidence in communicating in Italian and an informal meaning-negotiation skill.

Second, Twitter can be viewed as an appropriate writing, editing and revising tool for younger students (Kurts, 2009). After employing Twitter into his writing classes2) for first and second grade students of elementary school, he concludes that the character limit feature provides a powerful way to teach word choice, ideas, and punctuation. Antenos-Conforti (2009) also reports that Twitter enhances university students’ writing accuracy in terms of grammar and vocabulary.

Third, Twitter can be a helpful language research tool (Mishra and Koehler, 2009; Ovadia, 2009). Mishra and Koehler (2009) also show that SNSs such as Twitter provides

2) Room 302 Twitter http://twitter.com/room302
a good content of target phrases that can be found in specialized search engines. Ovadia (2009) explains that most of the search tools are historical by nature because they are searching older information that took some time to assemble, and even Google News does not provide a way to search results chronologically. However, Twitter’s keyword search function finds messages about what is going on at any given moment, so it is more appropriate for capturing “hypercurent information” (Ovadia, 2009, p. 202).

Alternatively, some studies report that Twitter doesn’t seem to be an appropriate channel for sharing in-depth information because of the short nature of the posts (Butler, 2010). Twitter is also characterized as “a kind of needless sharing (I just bought new shoes!)” (Ovadia 2009, p. 202), “non–productive, nonacademic” (Young, 2010, p. 10). Ovadia (2009) states that Twitter is often used “as a shorthand way to represent how self–obsessed and self–involved people have become” (p. 202).

3. New Technology and Teacher Factors

Teacher factors have been considered pivotal in using technology for education, and some studies discuss teachers’ roles in the 21st century classroom. Young (2010) cited a phrase, “from sage on the stage to guide on the side” to explain the changed role of teachers in the technology–enhanced classroom. As an example, he noted a university professor who are using Twitter to exchange Q&A and reported that students, even quiet students, were spontaneously outspoken and loved the opportunity to make their

voices heard. Mishra and Koehler (2006, 2009) insist that it is a teacher’s role that repurposes new technologies for powerful classroom aids and integrates them into their instruction. Therefore, given an educator’s professional knowledge, they suggest a Technological Pedagogical and Content Knowledge (TPACK) framework. According to them, “skill, competencies and knowledge specified in the TPACK framework requires teachers to go beyond their knowledge of particular disciplines, technologies and pedagogical techniques in isolation” (p. 16). Thus, expert teachers need to explore a way to orchestrate current technology, instruction and subject matter for better practice and solution in their classroom.

Early experience with technology affects teachers’ beliefs. Johnson (2008) indicates that the beliefs of pre-service elementary school teachers regarding the use of technology in mathematics class were closely related to their elementary school experience, early experience with technology, and computer ability. Those teachers with positive experience and good computer ability have favorable beliefs about the technology and actively plan to use it.

Another important teacher factor was investigated by Chen (2008). Chen found there was inconsistency between a teacher’s expressed belief and practice in using technology. From Chen’s qualitative research with 12 Taiwanese high school teachers, Chen categorized reasons for the inconsistency: 1) the influence of external factors, 2) teachers’ limited or improper theoretical understanding, and 3) teachers’ other conflicting beliefs.

Honey and Moeller (1990) also examine how teachers’ beliefs and values influence the successful integration of technology within the curriculum. Their semi-structured interviews with 20 teachers were conducted in elementary, middle, and high schools. The finding indicates that the teachers’ educational beliefs play a crucial role in how they choose to appropriate and make use of technologies in their classroom.

III. THE STUDY

1. Participants and Their Schools

The participants in this study are three female English teachers, Miyoung Kim, Hae-Ran Park, and Sumi Lee.4) who are students in a graduate TESOL program. They took a course offered by the researcher, “eLearning and ELT” which introduced diverse web 2.0 tools, SNSs and other CALL resources. They showed particular interest in

4) The teachers’ names are all pseudonyms.
Twitter and selected it for their final group research project. The three voluntarily decided to use Twitter with their students.

1) Miyoung Kim

Miyoung Kim is currently a doctoral student and a high school English teacher. Ms. Kim has been teaching English in public schools for ten years: eight in middle schools, and two in a high school. Her school is located in a small town in Kyunggi-do. Miyoung has experimented with ideas regarding CALL for her instruction. Her M.A. thesis focused on student-centered UCC for content-based learning. This semester, she also introduced to her students a number of interesting websites and CALL software learned from her graduate course.

Ms. Kim had heard of the global popularity of Twitter from the media, so she was curious about this 'culture punch'. After using it for a couple of weeks through the graduate course, she found it appropriate for her students to practice writing because she believed the 140 character limit made it easier for them to try writing in English. She also thought it would be “just fun” for them. Miyoung initially planned to introduce Twitter-based writing as a performance assessment, but the other English teachers in her school did not agree. Accordingly, she gave it as an extracurricular activity. Miyoung visited Twitter each time she used a computer during the project.

2) Hae-Ran Park

Hae-Ran Park, new doctoral student, is a middle school English teacher in a medium-sized city in Kyunggi-do. Her students are from middle class families and study hard till late at night in hakwons (specialised institutes in Korean). She has been an English teacher in middle or high schools for 10 years. Hae-Ran expressed her feeling about computers by saying, “the computer is not my friend.” She used to do Cyworld (a Korean SNS) a little bit in the past, but mainly to check current news regarding friends. Ms. Park has no experience using online communities or blogs, either with her students or for herself, although she enjoys searching for information and reading others’ writings.

The CALL course was very challenging for her. As with Miyoung, what motivated her the most for her project was the 140 character limit like Miyoung. It sounded easy and light to her, and she thought her students would feel likewise. She was also convinced her students would love Twitter more than any other tools because they could follow their favorite celebrities.
3) Sumi Lee

Sumi is another doctoral student and an elementary school English teacher. She has been employed as a conversation instructor in a public school from this semester. Ms. Lee worked for elementary school students in a private institute and in after-school classes for the last three years. Her school is in a wealthy area near Seoul, and the students’ English ability is considerably higher than the national curriculum standard.

Sumi is the youngest teacher and also is an early adopter of new technology. She has actively used Cyworld and Facebook for the last three years and has about 70 people in her friend list. She also uses a wireless MP3 player via which she can do Twitter, but she did not have a Twitter account before taking the course. After exploring Twitter, she liked its simple and neat layout, easy networking with famous persons or celebrities, and short message posting. Accordingly, Sumi actively invited her family and friends to Twitter and suggested Twitter to the other two classmates as their team project.

2. Researcher’s Participation of This Study

I was an active participant (Spradley, 1980) in this study. First, I was the instructor of the graduate course. Twitter was one of the weekly topics. I introduced Twitter and had them create a Twitter account in order to have them explore its functions. Second, I also discussed the aforementioned collaborative project with the three teachers in class. However, it was the three teachers themselves who brought up the idea of using Twitter as an extra activity, and my job was mainly to provide a feedback on their report and questions. Therefore, my interruption did not substantially influence the data of this study.

3. Twitter Activities: Final Project

As the final group project, the three teachers discussed and designed twitter tasks for their students. Basically the same tasks were introduced and used by them with their own students, in three age groups and for three weeks at their school. The planned tasks reported by them are as follows:

- Creating a Twitter account
- Writing profile information
- Following friends and famous people worldwide (e.g., English-using celebrities, role models)
- Posting Public mentions and Replies
• Learning Retweet, Favorites, and Direct messages
• Uploading and describing photos

The data analysis supports that these tasks were mostly completed by the three teachers. Both the teachers and the students had no difficulties in completing the tasks.

4. Data Collection and Analysis

The data were collected mainly from four sources: three teachers’ tweets, teacher interviews, in-class discussion and students’ twitter postings. I also reviewed some of the teachers’ results from their project, such as their students’ replies, twitter use patterns and interactions with the teachers for ample data triangulation.

1) Tweets

<table>
<thead>
<tr>
<th>Name (Student grade)</th>
<th>Teachers’ Total Tweets</th>
<th>followers (Ss)</th>
<th>following (Ss)</th>
<th>Students’ Total Tweets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miyoung Kim (11)</td>
<td>64</td>
<td>27(15)</td>
<td>39(15)</td>
<td>143</td>
</tr>
<tr>
<td>Hae-Ran Park (7)</td>
<td>101</td>
<td>30(15)</td>
<td>50(15)</td>
<td>155</td>
</tr>
<tr>
<td>Sumi Lee (5)</td>
<td>121</td>
<td>39(15)</td>
<td>42(15)</td>
<td>55</td>
</tr>
</tbody>
</table>

I collected all the teachers’ tweets. Since the teachers and I are mutual followers of Twitter, it was easy to access their postings. I copied all the postings from the teachers and saved them individually into the document files. After three weeks tweeting with their students, teachers posted 266 tweets on their accounts. The further information regarding the teachers’ twitter activities are shown in Table 1.

2) Teacher Interviews

I had interviews with the three teachers, one for each one, after the project ended in order to find out their motivations, perceptions, and twitter use patterns and so on. Each interview lasted 50–60 minutes, and most of the questions were open-ended. I have begun grand tour questions such as details of their teaching experience, their computer experience, and their students as Seidman (1991) suggests as a qualitative interview strategy. Examples of interview questions were as follows:
• What attracted you to use Twitter for your students and for your final project?
• Tell me what you have done in Twitter.
• What were your initial expectations when using Twitter for your project? Were they later the same or different? How?
• What strengths and weaknesses have you found in Twitter or from integrating Twitter into your class?
• Do you want to continue tweeting with your students? If so, in what way?

These interviews were all recorded and transcribed in Korean, and the transcripts were saved in separate teacher files. They were later translated into English for citation.

3) Informal Consultation and Students' Tweets

The three teachers and I held informal discussions in class (three sessions, each 10-15 minutes in length) about their projects during the last few weeks of the semester. Most discussion focused on how the project went and how tasks should be designed (twitter activities with their students). I took a brief note of our discussion during or after the class, and later I typed them and digitalized the data.

There are also data from the individual students’ Twitters (See Table I). Fifteen students from each age group participated in this project. Students’ postings were mostly quantitatively reviewed in order to examine how the three teachers interacted with their students when using Twitter.

4) Data Analysis

First, the researcher repeatedly reviewed all the logged and coded data from the three teachers, including multiple readings of the teacher’s tweets and interview transcripts. This process later generated and modified research questions within an analytical framework containing three major components: 1) Twitter use, 2) reaction to students’ tweets, 3) perceptions or beliefs. Each category contained smaller themes that emerged from the data coding, e.g. ‘effective methods’, ‘envisioning future classrooms’, ‘barriers to continued use’, ‘integrating Twitter into the curriculum’ and ‘agreed vs. disagreed’ (within the ‘perception’ category). The three teacher data were analyzed using the framework consisting of more than three thinking units (Ely, Anzul, Friedman, Garner, & Steinmetz et al, 1991) in each category. Data were always triangulated with those from the different sources.
IV. FINDINGS

1. Three Teachers’ Twitter Activities

The three teachers successfully completed their Twitter project. They recruited volunteers from their own classes with no difficulty simply by showing the website for 5–10 minutes in class and asking students if they ever wanted to do Twitter with them. Only Sumi Lee, elementary school teachers created an advertising UCC to attract her students. The three also reported that they encountered no technical difficulty having the students use Twitter and completing their planned tasks over three weeks after short workshops with the participants.

The three actively encouraged their students to use Twitter in many ways, and quickly responded to students’ postings and questions. They visited the website everyday more than once when they came across inactive students at school, both. Sumi Lee and Miyoung Kim sometimes asked them why they did not visit the Twitter.

Most of her students posted at least one tweet a week. Not surprisingly, Miyoung’s high school group whose English was considered better, was the most active. All students posted at least one tweet, and seven actively tweeted and wrote over 10 tweets. The most active student posted 27 tweets. Hae-Ran’s middle school students showed remarkably different participation rates; one student posted 101 tweets for three weeks, while nine students left less than five tweets. Seven in Sumi’s elementary class posted at least one tweet a week while the most active posted 11.

Data analysis also indicates that there were some different tweeting patterns among the teachers. First, the number of the tweets varied widely. Sumi Lee posted almost double (121) postings over Miyoung Kim (64). Ms. Lee replied 93 times, but Ms. Kim replied only 40. Further analysis shows that Ms. Lee visited Twitter at least 5–10 times daily and even sent tweets on her bed using a wireless mp3 player. She said, “...but in Twitter, I can see only what I want to see (unlike Facebook), only the information and people whom I am interested in. So I do Twitter more.”

Second, some teachers initiated topics to lead the conversation while others just reacted to students’ postings. As shown in Table 1, Ms. Lee initiated topics 30 times by sending tweets (publics) to followers. Alternatively, for Ms. Park, 93 postings out of 101 tweets were replies. While both teachers actively tweeted, the way they acted in Twitter were quite different. As Hae-Ran commented, “I did not tweet much. I was too busy to reply to

5) The interview quotes were directly translated from Korean to English, so some discourse may not sound a natural English.
students’ tweets.” That is, some teachers actively led the followers and played a writer’s role, while others remained as observers and information receivers.

Third, some teachers enjoyed microblogging for more private purposes, but others seemed to view Twitter more for school business. Sumi Lee reported that she tries to have their friends and family join and do Twitter together and had 39 followers during the project week. Ms. Lee often tweeted with other followers for her personal business in Korean, more than the other two teachers. Hae-Ran did not tweet for social networking at once, while Miyoung couldn’t do Twitter during the first week due to the accident and rarely used Twitter for other business, other than the project.

In conclusion, Sumi Lee, the most active SNS user, quickly understood the value of Twitter, e.g. easy and effective social networking, so used it more actively for many purposes. Although they were exposed to Twitter for the same period in order to perform their project together, their tweeting behaviors were noticeably different. In effect they used Twitter differently in the given context based on their previous computer experience, use behavior, attitude toward SNS.

![Table 2](image)

<table>
<thead>
<tr>
<th>Name</th>
<th>Teacher Tweet Total</th>
<th>PM</th>
<th>Replies</th>
<th>RT</th>
<th>follower(s)(Ss)</th>
<th>followins(s)(Ss)</th>
<th>Student Tweet Total</th>
<th>Most Active follower’s tweets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miyoung Kim</td>
<td>64</td>
<td>19</td>
<td>40</td>
<td>5</td>
<td>27(15)</td>
<td>39(15)</td>
<td>143</td>
<td>27</td>
</tr>
<tr>
<td>Hae-Ran Park</td>
<td>101</td>
<td>6</td>
<td>93</td>
<td>2</td>
<td>30(15)</td>
<td>50(15)</td>
<td>155</td>
<td>101</td>
</tr>
<tr>
<td>Sumi Lee</td>
<td>121</td>
<td>30</td>
<td>87</td>
<td>4</td>
<td>39(15)</td>
<td>42(15)</td>
<td>55</td>
<td>11</td>
</tr>
</tbody>
</table>

* PM—public mentions  * RT—retweets

2. The Three Teachers’ Interactions with Students

All three teachers tried to interact with their students as much as possible. They quickly reacted to student postings, they encouraged students’ to tweet in their own ways, and they were attentive and responsive even to small trials. They usually gave compliments, “You can say that again!! : )” and asked additional questions to continue the conversation, e.g. “Good boy! Where did you do volunteer work? Tell me more what you did there~~~~~~~* ” However, the analysis of the data also shows different interaction patterns by the teachers, which in turn might influence their students’ participation patterns and ways of viewing Twitter. In effect they each interacted with the students in an individual
manner.

1) Miyoung Kim’s Interaction Style: “Club Members Only”

Miyoung is a topic initiator and open sharer in Twitter. She talked freely about herself, her feelings and opinions. Thirth percent of her postings were public mentions which is the greatest PM rate among the teachers. Data analysis reveals that her topics comprise three categories. First of all, she tweeted about her private life, for example,

- Last night, I threw my exhausted body onto the bed n finally watched “Dream Girls”, which was released looooong time ago. Beyonce is amazing!
- Yesterday was my birthday. went to school, had bibimbap with prof.OOO and classmates, had small dinner with family....and was sick in bed.

[from Miyoung’s Twitter][6]

These kinds of topics are not normally shared in class, especially, in an EFL class. Miyoung also uploaded her son’s Halloween photo, not open to non-Twitter members. As Miyoung said in her interview, “...so I said, ‘Oh, we’re talking about Twitter’, then other students looked envious, felt alienated, there were some students who even said, ‘can I join it now?’ and actively jumped in.” She kept advertising Twitter and her Twitter club to students in class and noticed that her club members felt proud doing Twitter.

Second, she often tried to show commonality between herself and the students by empathizing with her followers. She reacted to or agreed upon her students’ posting by giving her own similar example:

- @ Wow, I didn’t know you’re into Eminem. Long time ago ;) , I was interested in him when he starred in 8mile.
- What a genius guy!! I admire Steve Jobs ;)

[From Miyoung’s Twitter]

Some of her students sent direct messages to her to ask whether her English writing was correct. She exchanged messages with them, sometimes in addition to public Twitter postings.

To sum up, Miyoung seems to have opened herself to her students so they could feel closer to her not as a classroom English teacher, but as a twitter buddy. This strategy

---

6) All the quotes from the teachers’ Twitter were all written in English and were not edited by the researcher.
seemed successful to some degree, as her students tweeted more freely and enjoyed something in common among only club members. Miyoung built a social network with her club members in order to share personal matters.

2) Hae-Ran Park’s Interaction Style: “Virtual Language Class”

Hae-Ran played a role as an English tutor and a learning advisor, and utilized Twitter as part of her lesson. She first had her students attend to form (both their own language and others), becoming aware of tweets as sample data to study, and finally becoming active L2 learners by using Twitter.

- You wrote it as the same as the text of an English textbook. Enjoy tweets!
- Do you use the expression “eat like a horse” that you learned in your English conversation class? You’re always an excellent student!
- Where did you find out this sentence? Next time, how about looking around your followers’ twitters and find sentences?
- You learned a new word! Use twitter as a good tool to improve your English ability
- Next time, visit others’ twitter and find out meaningful sentences!

[From Hae-Ran’s Twitter]

Second, Hae-Ran also provided a negative feedback (Carroll, & Swain 1993) to her students’ writing, as well as simple compliments. She asked her students for clarification of meaning.

- Did you do self-study until 12? For your final exam? These days every student look so tired!
- Do you read his tweets or only hear the news from someone or over the Internet?
- Do you mean a text message?

[From Hae-Ran’s Twitter]

Sometimes, she gave direct correction on the form:

- Where did you find the story? It’s not so difficult. But you didn’t separate some words, so it’s a little difficult to read.

From the interview it is confirmed that this type of interaction was intended by Hae-Ran at the beginning. For example:
His English in his posting was inaccurate... hard for me to understand. I was able to understand the meaning, but I think it is not correct, so at first I copied his sentences with question marks added and corrected his errors... but from my second thought... 'wait, we're doing this for communication. Do I have to do this?'...

[From interview with Hae-Ran]

Third, she usually listened and tried to continue her students' topics. For this purpose, she employed her own strategy of 'asking questions' by repeatedly asking additional questions to her students' postings.

- What kind of music do you like? Especially Korean popsongs?
- Is your brother younger than you?

[From Hae-Ran's Twitter]

As shown in Table 2, Ms. Park left only 6 public mentions out of 93, which indicates she avoided initiating topics and wanted to remain as an advisor or a listener.

3) Sumi Lee's interaction style: “Enjoy It As I Do”

Sumi was a good model and active mingler in Twitter. She actively used Twitter for social networking, and followed celebrities and sometimes replied to their PMs. She had casual conversations with friends, classmates, or family, and she used other functions such as photos, favorites, or Korean twitter. Below are what appear to be good examples of her usage.

First of all, Sumi freely expressed personal matters mostly in Korean. She showed her feelings (e.g. Ra la la, la... I feel so good today), her personal schedule (e.g. I will be free tonight.), and conversation between herself and her friend( “ooo, shall we go out for delicious meal?”). In other words, she provided a more authentic SNS context to her students.

Second, like Miyoung Kim, Ms. Lee enjoyed initiating topics, and 24% of her postings were public mentions. She introduced her favorite animation character when she was a child and also later explained the title song and its lyrics. She also explained what she’s now doing or asked her followers what they would do over the weekend. For example:

- Guitar lesson on Thursdays... My left fingers & arms are very tired... Think guitar is much harder than cello. 예구구~3
• Do you have any plan for this weekend? Tell me. ^.^ [From Sumi’s Twitter]

Third, Sumi often called or mentioned the follower’s (her students’) names. She probably wanted to clarify which one she was talking to and also made her students feel relaxed and friendly with their teacher in the new English speaking environment.

3. The Three Teachers’ Perception of Using Twitter

After using Twitter for three weeks, the three teachers mostly had ‘positive’ impressions regarding its usage as a new learning tool. They want to continue doing Twitter with their students, and Miyoung and Hae-Ran have developed a concrete plan to use Twitter with more students after the final exam. Miyoung wanted to design twitter activities for performance assessment and is planning to discuss with a colleague teacher about how to do so. Hae-Ran believes that Twitter activity fits more properly into extra curricular activities, such as club activities on Saturday, while Sumi hoped to have all her students join Twitter in the future.

The teachers found similar strengths and weaknesses when using Twitter for their instruction. However, data triangulation shows that there is some disagreement in perceiving the value of Twitter from a pedagogical perspective. Highlights of these opinions and perceptions are below.

1) Agreements

The most commonly repeated theme is that the teachers perceive Twitter to be an appropriate tool for learning English for any age group. Following the three week experimental periods, they believed that Twitter will be a promising and powerful instruction medium.

① Good for writing practice

First, the teachers agree that Twitter is a good tool for writing practice, noting it is “comfortable,” and “no burden,” so students can easily try it. Sumi Lee explained that Twitter is good writing practice for 5th graders because even a really short message is OK.

As I look at their posting, there are a lot of short...like, “hi~ ㅋㅋㅋ” or “bye” or good night’. But, it doesn’t look too humble in Twitter.
in class. When I asked them to write something freely, the children feel a bit burdened, and also not all the children followed me well, so it’s very difficult (to write) in class. Just one sentence is OK, but they don’t want to write longer than 2–3 sentences. They think it’s too much.

[From Interview with Sumi]

She added that there is not much chance to practice writing since speaking is emphasized much more in elementary English classes. Miyoung Kim also mentioned that her students seemed to try freely what they wanted to say in English. “...and .. just like the way we say in Korean, for example, one student tried ‘Today is tired.’”

Hae-Ran also pointed out that Twitter writing is interactive and meaningful, unlike in-class writing practice which is controlled, individual, and only form-focused. It. She reported that it was good for her writing practice too.

I myself also looked up words from a dictionary when I couldn’t think of any appropriate ones. I also do not have a chance to use English. That was interesting for me... Short writing is also good for me. No pressure... at least at the beginning.

[From Interview with Hae-Ran]

② Spontaneous Use of the Target Language

Another common agreement is that Twitter provides an opportunity for students to spontaneously use the language they learned. For example, Miyoung introduced an interesting case of her student, who actively utilized Twitter when trying to use the vocabulary he memorized that day.

At first, I didn’t know why he was using the words. I just thought it sounded very awkward, so I told him that you said like a character in the Shakespeare play. And he said, ‘you think this sounds strange, but I am just using what I’m memorizing now.’

[From Interview with Miyoung]

Sumi Lee also gave an example of her student who tried to understand what his following celebrity posted and to reply to it by using automatic web translater. She indicated, “Anyway they spontaneously read and understand English texts and leave a message. This type of trial is meaningful, I think.”

Hae-Ran observed that students wrote what they wanted to write regardless of the teacher’s suggestion, which is quite different from normal writing practice in class.
... I said, ‘you may write anything you want, but since we learned in the textbook, introduce yourself and write about your daily life.’ But my students wrote something else they wanted to write.

[From Interview with Hae-Ran]

③ Difficult to integrate Twitter into the regular curriculum

The three teachers feel that it will not be easy to integrate Twitter activities within the regular curriculum. The most frequently emerged theme was that students are too busy to use a computer either in school or at home. Both Hae-Ran and Miyoung mentioned their students did not make time for any extra curricular activities.

...they felt sorry. There were some students saying, ‘teacher, I will try my best from this vacation.’ They want to do it, but there are so many things for them to do.

[Miyoung from the interview]

Another important issue was a perceived lack of understanding from colleagues and parents regarding the use of a computer for learning English. All three teachers assumed that other teachers would not like it if they suggested Twitter-based activities as a performance assessment test. For example:

Old teachers said, ‘well, must be good, but will that be too complicating?’ so they did not know it well, they did not understand the Twitter yet.

[Miyoung from the interview]

We test speaking performance with memorized dialogue script (in my school), so if I suggest this (Twitter), I don’t think they (other English teachers) will like it. In my position... it won’t work.

[Hae-Ran from the interview]

There was one student whose English was very good, so I thought he could probably do Twitter very well, but the student posted only three tweets after all. So I wondered and asked him why, and he told me that his mother did not allow him to use a computer. She thought that he was doing a computer game.

[Sumi from the interview]

For this reason, the teachers mostly agreed they need a more careful plan the next time in order to persuade other teachers and parents. In summary, although the teachers
confirmed that the strong potential of Twitter as a good writing practice tool that provide authentic use of English, they think it will not be easy to use Twitter as part of their regular lessons. This is because of 1) students’ busy schedules and 2) lack of understanding by other teachers and parents.

2) Disagreements

① Integration within the curriculum

The three teachers have different opinions regarding integration of Twitter within the school curriculum. Miyoung believes that Twitter-based writing can be a good medium for performance assessment, and wants to discuss this idea with another English teacher who is also trying video conferencing. As she notes:

If they (students) do video conferencing all of sudden, they will get nervous and puzzled, but if they do Twitters, it gives time to think, and to use a dictionary, so it will be great if they use both together.

[Miyoung from the interview]

Furthermore, she thinks that textbook topics can be easily embedded with Twitter activities:

There is a chapter titled “World heritage” so I asked them to try posting or unloading images to pretend to advertise culture of our country to people in Twitter...and then asked them upload the palace where King Sejong lived.... And also there was food, so some students explained Kimchi or bulgogi..

[Miyoung from the interview]

She also contends that if teachers plan and design the activity systematically, topics in the curriculum can be effectively covered in Twitter:

...it’s not a barrier... students are very sensitive to their grade, so it’s killing two birds with one stone. They start for fun and get a good grade. If it goes this way, I believe it must be effective.

[Miyoung from the interview]

Miyoung thus feels that Twitter can work best when students use it as part of their achievement record. Sumi Lee also believes Twitter can be a good learning tool for
elementary school students; she thinks that every in-class writing lesson can be followed by Twitter activities as a review assignment:

In fact, I would have all the students in my school join Twitter if they permitted me, ...
I can give them an assignment everyday. If they posted, I could give them feedback fast; I am willing to do it if my students did it...

[Sumi from the interview]

In contrary, Hae-Ran thinks Twitter would work better in extra-curricular activities. She is thinking of opening a Twitter club (‘dongari’) in her school. Instead of giving an mandatory assignment that influences the final grade, Twitter activities should be optional so students can spontaneously participate.

② Teacher’s role

The perceived role of the teacher regarding Twitter also differs. Although they believe teachers need to encourage students’ trials, the precise nature of doing so varies. Miyoung, for example, thinks teachers should provide updated information to students, having them use as much as possible. Accuracy is not important:

Once they leave many tweets...I mean instead of accuracy, I might evaluate how much they write, how much they put their effort... as a performance assessment... because I would like to lead them to work actively there.

In practice, Miyoung Kim would not give feedback on the student errors. She would, however, provide news and information through retweeting, uploading videos or pictures. Sumi Lee perceives that English teacher’s role in Twitter is to provide appropriate practice assignments for reviews or reinforcement, and to give feedback later.

I could give them an assignment everyday. If they left postings, I would give feedback..
I could do it rapidly. If they could do it, I would be willing to do it.

Sumi seems to believe that it is more effective to provide structured tasks, preferably ones related to textbook topics. Sumi’s elementary school students had a lot of errors on their tweet postings, but she did not give feedback on their form.

Hae-Ran has a slightly different perception: she wants to highlight both meaning and form on students’ tweets. Although, she is aware of the importance of meaningful
communicative exchanges in Twitter, she seems to believe that teachers should also be concerned about students’ errors. From the data analysis, Hae-Ran perceives the teacher’s role in Twitter is to have them conscious of English sentences and form. She also believes her role to be one of teacher and active adviser.

V. DISCUSSION AND CONCLUSION

This study repeats the research questions here to discuss the findings and draw the conclusion. The first question was “How did the three English teachers use Twitter for their instruction?” It concludes that they enjoyed it, but in their own way. Their Twitter activities varied in terms of the amount, types of tweets, and ways to enjoy microblogging although all three completed the three-week project. At first, all three teachers gave their students similar instruction to access Twitter, to post tweets, and to use the basic functions, but later some teachers led the conversation more actively by initiating topics, whereas some teacher just replied with feedback to the students’ postings. The showed remarkable differences in usage and degree of activeness based on their computer experience, technology use behavior, and attitude toward Twitter activity.

The next question was “How did the teachers interact with their students on Twitter? This also varied greatly. Miyoung seems to have opened herself to her students and acted as a twitter buddy, not a teacher. In essence, she built a social network with her club members to share personal matters. Hae-Ran, however, wanted to remain as an advisor or listener and worked hard to give feedback on her students’ English sentences in her virtual language class. Sumi was a good role model and active mingler in Twitter and actively used it for social networking with her family and friends as well as her students. The differences among the teachers seems to also come from teacher’s beliefs, and perception of using SNS for instruction as well as the target users’ age. However, their interaction type does not seem to critically influence the students’ motivation at least during the first three weeks because no noticeable difference was found in students’ participation pattern. However, this research has focused only on the teachers themselves, so further studies can be expected to explore the connection between teacher–student interaction pattern and students’ motivation.

The last question was concerned with teacher’s perceptions, “After three-week’s use, how do the three English teachers perceive Twitter as an instructional tool?” In response there was agreement on its utility and applicability in an L2 class. After the project, they
perceived Twitter as a potentially effective tool 1) for writing practice and 2) to provide an opportunity to use English spontaneously for an authentic purpose. The teachers' perception of Twitter in a L2 educational environment are well supported by the literature (Antenos-Conforti, 2009; Kurtz, 2009). In addition, the three pointed out that it would not be easy to integrate it within the school curriculum, in part, due to students' busy schedules and a lack of understanding by other teachers. However, their perceptions vary regarding a teacher's role and instructional methods. Some teachers seemed to believe that the teacher should play an advisor's or instructors' role while the others think that teachers should be one of twitter buddies.

It is not easy to evaluate the perception, but since teacher's beliefs of using technology significantly influence the success of learning (Honey & Moeller, 1990; Young 2010), their perception and understanding of using new technology need to be carefully examined from the combined knowledge, such as TPACK (Mishra & Koehler, 2006) or CALL. From the findings of this study, it is concluded that teacher training is necessary before they utilize Twitter for their instruction although they know its basic functions and have positive feeling of it. As the three teachers had shown, teachers might not view a new instructional tool from the similar CALL perspective, which possibly makes their practice inconsistent or even conflicting with the L2 theories. The further research should be conducted to develop an effective teacher education program and combined knowledge about the role of SNS in L2 learning.

REFERENCES


Key words: social network service (SNS), teacher perception, Twitter, teaching writing,
qualitative case study
Applicable Levels: primary and secondary education

Author: Heyoung Kim (Chung-Ang University); englishnet@cau.ac.kr

Received: May 15, 2010
Reviewed: July 30, 2010
While the issues of receptive and productive vocabulary knowledge have been discussed in many vocabulary studies, language learners and practitioners have also tried to reduce the discrepancy between the two types of vocabulary knowledge. At the same time, with the development of new technology of the Internet, web based concordancers became easily accessible for the language learners. However, there has been little research on investigating the effect of the concordancer with empirical data. The current research, therefore, explores the effects of the concordancer, an application of the corpus-based language instruction, on ESL learners’ productive vocabulary knowledge. Korean undergraduate students at an American public university were recruited, randomly assigned to an experimental group (concordancer group, n=10) or a control group (thesaurus group, n=11) for a series of writing practice, and their vocabulary errors in writing samples were statistically compared. The results indicate that the concordancer is an effective vocabulary reference and learning tool, and it is more effective in improving grammar knowledge of vocabulary than the lexical knowledge. The discussion includes suggestions for the future research of corpus-based language learning in assessing ESL productive vocabulary knowledge.

1. INTRODUCTION

It seems vocabulary acquisition is more likely to be mainly an implicit or incidental
process because most human beings have not been taught the majority of words. But when people begin to learn the languages other than mother tongues, the learning process they usually experience would be different—at least they need to memorize words that are different from ones of their native languages. Even though the language learners memorize all the word meanings and grammar components, they may face difficulties in putting words meaningfully. Oftentimes, even though the language learners memorize all the meanings and grammar rules embedded in the vocabulary, they still find it difficult to use the learned vocabulary when they produce it in second or foreign languages. One of the reasons for this unbalanced vocabulary knowledge can be found in the discrepancies of productive and receptive vocabulary knowledge in the learners’ lexicon (Laufer, 1998; Melka, 1997; Nation, 2001). Therefore, teachers and language learners need vocabulary learning methods that would enhance the productive vocabulary knowledge.

As computer technology develops and the Internet resources become more and more available, views on language or approaches have changed. Consequently, instructional tools for language education became diverse to support classroom applications of the views or methods. The use of online dictionaries, which many language learners visit for their vocabulary reference, is a good example. Another example, but relatively less known, is using concordancers, which are now available online for free and provide language learners with words and their contextual usages from a large and structured set of electronically processed texts, i.e., corpus. As an application of the Lexical Approach, which views vocabulary as building blocks of language, and the corpus–based language learning method (Lewis, 1993, 1997, 2000), the concordancer has recently drawn attention in ESL and EFL education fields because of its authentic text use of corpus and easy accessibility of words and contexts (Cain, 2002; Chan & Liou, 2005; Sun, 2000, 2003, 2007; Sun & Wang, 2003; Varley, 2009).

According to the aforementioned studies, the corpus–based language instruction have been positive and promising in language teaching and learning. However, the studies have not been able to show how much effectively the learners have gained vocabulary knowledge from the instruction. Further, studies have not compared the empirical data of the corpus–based language instruction with other vocabulary reference tools, such as the dictionary or the thesaurus. To address the effects of the corpus–based language instruction in vocabulary production, research that evaluates the learners’ performance with actual production samples would be necessary. Given the backdrop of the recent interest in productive vocabulary knowledge and the growing number of applications of corpus–based language instruction, a research question has been formulated as follows:
compared to the online thesaurus use, to what extend and magnitude does the corpus-based language instruction have effect on ESL learners’ productive vocabulary knowledge in writing?

II. LITERATURE REVIEW

1. ESL Writing as Vocabulary Production

It is always one of the burdens for ESL learners to memorize the words to command good language proficiency. Laufer (1990) questioned why there are easy and difficult words for the L2 learners. She argued that there are easy and difficult words because of the similarity and difference of the word meaning and L1 and L2 meaning equivalent but different collocation usages: for example, Hebrew-speaking English learners tend to say “bring examples,” “high education,” or “stand in front of a problem”, simply translating their L1 collocations (pp. 149–150). To deal with the problems of these words, she suggested the teachers to develop strategies for self-learning using guessing in context because they can hardly explain such errors through rules and dictionaries do not necessarily provide all the collocations of vocabulary. The implication of her argument suggests using the context of the words to discern the similarity and difference of the words and to develop the strategies for self-learning.

Although the usefulness of the concordancer in language education was firstly adopted in vocabulary instruction, researchers and practitioners have also recognized its potentials and developed classroom applications in the field of writing instruction. From the learners’ perspective, the concordancer has been welcomed, too. In ESL writing, the corpus-based language learning meets the learners’ needs in that it stimulates the learners’ motivation of learning with authentic examples (Yoon & Hirvela, 2004) through inductive thinking strategies in developing ESL learners’ writing skills (Gilmore, 2009), writing feedback (Gaskell & Cobb, 2004), and transferring learned vocabulary knowledge in writing (Kaur & Hegelheimer, 2005). Addressing the issues of production of learned vocabulary knowledge in writing, the current research explores the effect of the corpus-based language instruction in ESL learners’ productive vocabulary knowledge improvement.

ESL learners who use English as their L2 in an academic setting have vocabulary burden, because, according to Coxhead (2000), academic vocabulary in EAP causes ESL learners much difficult due to the fact that the learners are generally not familiar with the technical vocabulary and the vocabulary is usually words not often used. The simple
definition of vocabulary does not help language learners, especially those who are or have to be at an advanced proficiency level, such as college level ESL learners. For the learners with the academic purposes, therefore, they need to get familiar with the words that are used in the setting frequently and the usage of the words in the context. Further, one who wants to develop the extensive vocabulary knowledge for the literacy purposes needs to receive direct instruction and training, as well as extensive exposure to the target language vocabulary.

2. Vocabulary Knowledge

It is important to keep in mind that vocabulary is one of the essential components of writing. Without the vocabulary knowledge, many learners are unable to develop a full range of L2 writing. However grammar teaching for the L2 writing is not intended to develop the language learners’ overall native-like proficiency (Pica, 1994). For the L2 users, who intend to use it, for example, in the academic writing, the grammar instruction has to take place in tandem with instruction on vocabulary and academic collocations (Hinkel, 2004).

It was common to see grammar and vocabulary as separate areas of language teaching and learning. Many course books have separate sections on grammar and vocabulary and traditional language teaching syllabi present grammatical structures and key vocabulary items separately, and oftentimes grammar and vocabulary are tested separately. Historically, according to the Grammar Translation Method, language courses have been as a set of grammatical points, with vocabulary selected to support the topic of each course unit, that is, grammar is seen as a set of sentence frames with slots, in which appropriate vocabulary fits. By this naïve dichotomy of grammar and vocabulary, language learners and teachers tend to separate two parts from each other and the traditional L2 and FL teaching also reflects the same idea. However, given that L2 and FL learners are not memorizing a list of words but words meanings or lexical knowledge with their possibility of the word combination in the language or grammatical knowledge, we can say that grammar and vocabulary have closer relationship than we expected.

For the L1 speakers, they never acquire grammar and vocabulary separately. They acquire these two language components at the same time. What is new about this observation in L2 and FL education is that the approach does not rely on a distinction between grammar and vocabulary, but rather it provides connections between the two by focusing on patterns of the vocabulary. Hunston, Francis, and Manning (1997) argued that all words can be shown to have patterns, and words which have the same patterns tend
to share aspects of meaning—vocabulary and grammar can be usefully combined in language instruction. Then the question is how the language teachers and learners could deal with the interlaced issues of grammar and vocabulary.

Recently, the importance of vocabulary was widely recognized and the word frequency has been used as an organizing principle of language teaching courses, with grammar brought in as support where necessary—the Lexical Approach (Johns, 1994; Lewis, 1993, 1997, 2000; Tribble & Johns, 1997; Willis, 1990). The Lexical Approach in language teaching refers to one derived from the belief that the building blocks of language teaching and communication are not grammar, functions, notions, or some other units of planning and teaching but vocabulary, i.e., word and word combinations. In fact, students learning English list the particular verbs which are typically followed either by a to-infinitive, a gerund, or both. The learners must learn that the words appear and manage are followed by a to-infinitive only; that the words finish and suggest are followed by a present participle only; that begin and like are followed by either form with roughly the same meaning; but that forget, remember, stop have different meanings when used with each form. When learners, therefore, learn the vocabulary, they should remember not only the meaning of each word, but also the grammatical property of how the words fit in the English grammar. In the line of this reasoning, Schmitt (2000) suggested that lexical knowledge and grammatical knowledge are in extricably interrelated in a kind of lexicogrammar. The view is supported by corpus evidence that shows the extent of lexical patterning in discourse.

In the light of the fact that L2 and FL learning always take place under great time constraints for the teachers and the learners, it is important to maximize the language learning as effective as possible. Using the lexicogrmatical units and getting used to the patterns that frequently occur in the authentic texts are likely to be the better way to obtain the vocabulary as well as the grammatical knowledge.

3. Corpus-Based Language Learning

Corpus is a large collection of naturally-occurring language text in a systematic way and it is usually stored and processed electronically. Although corpora existed before computer, but it was the one–million–English–word Brown Corpus, compiled by Francis and Kučera at Brown University between 1961 and 1964 is considered to be a modern computer–readable corpus (Francis & Kučera, 1964). Later in the 1970s, a British counterpart, LOB Corpus, was also compiled (Johansson, 1986). Both corpora were assembled primarily for the purposes of linguistic research and lexicography. Since then,
as technology advances rapidly, not only much larger corpora as big as with several hundred million words, but also the possibilities of using corpora has grown up beyond linguistic disciplines. In language education, corpus has been used for developing dictionaries, such as with Collins COBUILD English Language Dictionary (1987) or ESL and EFL teaching with the computer program, called concordancers. Concordance, as Sinclair (1991) explains, is an index to the words in a text and it gives access to language patterns in a corpus in a systematic way: a program that generates the concordance line is called concordancer. The computer-generated concordance output can be flexible in length or grammatical boundaries, depending on the settings of the program. As the Internet technology develops, some corpora are stored in servers so that concordancers are also available online. Collocation, which is another key concept of the corpus-based language learning, is the occurrence of two or more words within a short span of each other in a text. It is useful in discovering language patterns, such as grammatical patterns of language. A good and straightforward example of collocation is that English verbs and their relationships between to-infinitives and gerunds: certain verbs have preference of certain forms of complement. Depending on the forms of the complement, the verb phrase structures have different meanings (compare stop to walk and stop walking). Figure 1.1 illustrates actual screenshots of collocation from VLC Web Concordancer\(^1\) showing that the verb discuss takes direct objects and the noun discussion takes objects with the preposition of.

\(^{1}\) http://vlc.polyu.edu.hk/concordance/wwwconcappe.htm
The importance of context in vocabulary learning is evident from the observations that a word meaning varies depending on the context and such context provides huge information that the language users pick up the vocabulary knowledge (Nagy, 1997). The unique sorting functions in a concordancer also helps learners systematically uncover grammar rules through the patterns of vocabulary and its contexts. The benefits of using corpus and concordances for L2 and FL education, therefore, include that the language learners can have access to the ample amount of authentic language, which might not be accomplished by a traditional dictionary. In the light of this view, several studies have reported the use of concordancing for the acquisition of a second or foreign language, such as collocation learning (Howarth, 1998; Kita & Ogata, 1997; Sun & Wang, 2003), lexical acquisition (Cobb, 1999), writing (Sun, 2007; Tribble, 1990, 2001), stylistics (Kettemann, 1995; Tribble, 1991), critical literary (Louw, 1997), and grammar (Sun, 2000, 2003).

Corpus-based language learning, in general, relies on words and its concordance lines in vocabulary learning. As many language teachers assert, the role of context in vocabulary learning seems clear because what a word means often depends on the context where it is used, and people pick up much of their vocabulary knowledge from context. Many scholars have hypothesized that a large portion of the vocabulary growth of school children occurs through incidental learning from written context. Krashen (1989) claimed that if a hypothesis that the use of written context reading in vocabulary acquisition of the first language holds the validity, then the hypothesis that vocabulary are developed in second languages through reading is at least reasonable. Therefore, some L2 and FL teachers prefer exposing students to new words within contexts, hoping students would learn the vocabulary through contextual clues, whereas others teachers may explicitly introduce vocabulary with drills and skills.

As the corpus-based language instruction develops, there has been a substantial number of studies of the learners’ attitudes toward using corpus in the classroom for the productive vocabulary knowledge in wiring. Sun (2000) is one of the earliest empirical studies of using corpus-based EFL instruction in a classroom setting. According to her analysis of qualitative and quantitative data with survey and open-ended questions, students expressed positive attitudes toward the use of the online corpus-instruction due to the unique characteristics of authentic language examples. The students also reported their perception of effectiveness of corpus-based language learning. As can be expected from the basic characteristics and functions of corpus-based language learning, the students rated that vocabulary usage and phrases usage are the two most effective areas
of corpus–based language instruction, while grammar and writing being the least effective areas out of seven categories: vocabulary usage, phrases usage, reading comprehension, phrase meaning, vocabulary meaning, grammar, and writing. Later, Yoon and Hirvela (2004) investigated the actual use of corpora and the learners’ attitudes toward the use of corpora in the ESL academic writing classroom. Unlike Sun’s (2000), they reported promising results in using corpora in ESL writing instruction. Based on the analysis of qualitative and quantitative data they reported that the ESL students rated the concordancer as a beneficial tool to develop L2 writing skills and it increased the confidence toward L2 writing. Koo (2006) included a short survey of the attitudes toward using corpus for paraphrasing newspaper articles for 10 Korean ESL students. The descriptive survey results also supported that the concordancing program helped learners gain confidence in their English writing. The results reflected the findings in Yoon’s (2005) study, which also investigated the graduate level ESL students’ attitudes toward the corpus–based writing instruction: writers became more independent and confident when there was increased availability to linguistic resources; by using authentic texts, students became more aware of stylistic issues and are therefore more independent in solving their own linguistic and writing questions. Yoon’s (2008) another qualitative study with six graduate students of ESL academic writing revealed different angles of the ESL writers’ attitude. The learners not only benefited from the corpus–based writing instruction for their linguistic knowledge correction, but also promoted their lexico–grammatical awareness. Further, the students become more independent and confident writers. As previous research has reported, the corpus–based language instruction has pedagogical potential. The instruction, however, still needs empirical evidences to support its classroom application.

III. METHODOLOGY

1. Participants

A total of 21 Korean undergraduate students at a large American mid–western public university voluntarily participated in the research. The majors of the subjects include: business; economics; education; biology; psychology; journalism; and telecommunication. According to their self–rating English proficiency, most of the subjects rated their writing proficiency as good or fair. The average iBT TOEFL score of the participants is 242.06. Subjects were randomly assigned either to an experimental group (concordancer group,
n=10) or a control group (thesaurus group, n = 11). Once the potential subject’s group was decided, the researcher explained the entire process of the research, including the tutorials of using the online concordancer and thesaurus depending on the subject’s group. After subjects agreed to participate in the research, the researcher received the signed consent form and collected their demographic information.

2. Data Collection and Materials

Throughout the research period, each subject wrote seven writing samples (single-spaced and 2/3 page-long; approximately 350–400 words) on different topics with the assigned vocabulary reference tools, i.e., VLC Web Concordancer or MSN Encarta® Thesaurus. The writing topics were carefully modified from the TWE® (TOEFL Writing Essay) topics so that the subjects could write comparisons and opinions about social phenomena. Therefore, they could write about different topics and types of writings on a similar level of difficulty (See Appendix for the complete writing topics).

A total of 147 writing samples were collected from the concordancer group, 70 writings from 10 subjects and the thesaurus group, 77 writings from 11 subjects. To measure the vocabulary error differences between pre-writing and post-writing after a series of writing practices with the online concordancer and online thesaurus, the first topic and the seventh topic writings were asked to write without using of the reference tools. The two writing topics were virtually the same topic as follows: 1) topic 1 “Many Korean students choose to attend schools or universities in the United States. Why do you think they decided to study in the United States? Use specific reasons and details to explain your answer.”; and 2) topic 7 “According to a recent news report, there are 87,000 Korean students in the United States, one of the highest numbers of the international students in the country. Why do you think they choose to study in the U.S.? Use specific reasons and details to explain your answer.”

The writing is also followed by revision writings based on feedback from the researcher and a native English speaker ESL specialist. The purpose of the revision session was to provide vocabulary learning opportunities in writing. It was originally planned that one writing session of the subject’s initial writing, feedback, and revision writing phases would take about a week. However, during the actual data collection process, it usually took more than two weeks to get one writing session completed due to the voluntary subjects’ frequent schedule changes.

2) http://encarta.msn.com/thesaurus/__/thesaurus.html
3. Measurement

The purpose of the current study is to examine the effects of using corpus-based language instruction on vocabulary learning. To achieve this goal, the study examines ESL writers’ writing samples with regard to their correct lexical knowledge of adjectives and grammar knowledge of prepositions. The reason why I chose to measure the grammar knowledge of prepositions and the lexical knowledge of adjectives is that these two vocabulary knowledge types can represent what Schmitt (2000) suggested, the lexicogrammar knowledge and its application in the corpus-based language instruction. To evaluate the vocabulary knowledge, instead of relying on human raters of writing, a statistical model of vocabulary error detection has been introduced. In order to detect vocabulary errors, Mutual Information (MI) scores from a large reference corpus, *The New York Times* corpus from the American National Corpus (Reppen, Ide, & Suderman, 2005), were calculated. The MI scores, according to Barnbrook (1996), represent “the amount of information that each of the two words provide about each other by comparing the observed probability of the co-occurrence with the expected probability, assuming that they were distributed randomly” (p. 98). And conventionally when the MI score of two words is 3 or greater than 3, the two words are considered to closely related. Once the MI scores for all the two consecutive word sets in *The New York Times* corpus are calculated, the scores can serve as a reference of correct word usages.

WordSmith Tools 5.0 (Scott, 2008) calculated the MI scores for all the words in the *New York Times* corpus that are in the span of five words of left and right to each word to extract closely related word combinations in natural language. The results, then, are converted onto a spreadsheet to search possible word combinations effectively. Figure 2 below shows sorted-out examples of possible modifier, i.e., adjectives, of the words, *difference* and *differences*.

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>I</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5601</td>
<td>ANY</td>
<td>2,673</td>
<td>DIFFERENCE</td>
<td>293</td>
<td>4.72</td>
</tr>
<tr>
<td>1</td>
<td>11114</td>
<td>BECAUSE</td>
<td>4,355</td>
<td>DIFFERENCES</td>
<td>139</td>
<td>4.93</td>
</tr>
<tr>
<td>1</td>
<td>12572</td>
<td>BIG</td>
<td>2,007</td>
<td>DIFFERENCE</td>
<td>293</td>
<td>7.04</td>
</tr>
<tr>
<td>1</td>
<td>17020</td>
<td>CAN</td>
<td>6,396</td>
<td>DIFFERENCE</td>
<td>293</td>
<td>4.57</td>
</tr>
<tr>
<td>1</td>
<td>44005</td>
<td>GENETIC</td>
<td>109</td>
<td>DIFFERENCES</td>
<td>139</td>
<td>10.93</td>
</tr>
<tr>
<td>1</td>
<td>50422</td>
<td>HUGE</td>
<td>519</td>
<td>DIFFERENCE</td>
<td>293</td>
<td>7.41</td>
</tr>
</tbody>
</table>

![Figure 2] A Screenshot of Spreadsheet Showing Statistically Appropriate Word Combinations
For the preposition usage, the same error checking strategy was used. Once all the errors of the adjective usages and preposition usages were counted for each initial writing, then the averages scores of error rates were taken and compared between groups and within group: for preposition errors, adjective errors, and total errors. The mean differences of the errors were compared through paired-sample t-tests for within group comparison and independent t-tests for between group comparison. The test results are, then, interpreted into the ESL writers’ vocabulary knowledge gains along with the lexical and grammar knowledge. After the statistical comparisons, the effect size of the concordancer use was calculated to measure the magnitude of the treatment effect.

IV. FINDINGS AND DISCUSSION

1. Overview of the Writing Progress

The error ratio comparisons in the course of the writing practice illustrate that the ESL writers who used the concordancer performed better in reducing vocabulary errors. To have an overview of the vocabulary error changes while using the concordancer and the thesaurus, error rates in 100 words for the adjective errors (i.e., lexical error), preposition errors (i.e., grammar error), and the sum of the adjective and preposition errors (i.e., vocabulary error) were calculated. One of the caveats of comparing data from inhomogeneous groups is considering whether the groups are compared on the same grounds, that is, whether the two groups have the same variables of error rates from the beginning. Without the control of the variables, the error rate comparison is meaningless.

To compensate for any possible discrepancies between the groups, the concept of the error ratio has been introduced for the comparison. The error ratios were calculated from each error rate in topic 1 and topic 7 because subjects were randomly assigned to the concordancer group and the thesaurus group, and consequently the research model was subject to unfair comparison. Therefore, for each group, the error rate of the topic 1 writing samples was set as a baseline and the following writing samples were evaluated in terms of error ratios to control possible discrepancies of writing between the groups: the error ratios can be calculated by simply subtracting the error rate of the first topic from the succeeding writing samples’ error rates. If the calculation yields a negative number, then there is an improvement in reducing the error. If the calculated number is positive, then there is a reverse-improvement of the error. This way, any differences between the topic 1 and topic 7 writings of the concordancer group and the thesaurus
The Effects of Corpus-Based Language Instruction on Productive Vocabulary Knowledge

...group can be controlled to make the comparisons meaningful.

Figure 3, Figure 4, and Figure 5 below are the trends of the lexical, grammar, and vocabulary error ratios represented by preposition errors, and adjective errors, and the sum of the adjective and preposition errors, respectively.

[Figure 3] Comparisons of Grammar Error Ratios (Preposition Errors)

[Figure 4] Comparisons of Lexical Error Ratios (Adjective Errors)
According to Figure 3, Figure 4, and Figure 5 three major findings can be extracted regarding the lexical error changes. First, as can be noticed in topic 2 writing through topic 7 writing results, the concordancer group reduced the preposition and adjective error rates immediately after the subjects used the concordancer. Second, the concordancer seems to be more effective in reducing errors than the thesaurus because the error ratios of the concordancer group is constantly lower than the thesaurus. Finally, and more importantly, in topic 7 writing, the error ratio of the concordancer stays below the baseline, while the ratio of the thesaurus group moves close to the baseline. Given that the writing samples of topic 1 and topic 7 were virtually the same and the subjects were asked to write without the concordancer and the thesaurus. The constantly reduced error ratios of the concordancer group suggests that the concordancer has positive learning effects on the ESL writers along with the function of a useful vocabulary reference tool.

### 2. Comparisons Between Groups and Within Group

The examination of the grammatical knowledge changes based on error ratio analysis, it seems that the concordancer provide positive contribution to reduce ESL writing lexical errors and indicate potential benefits for ESL writers. However, the results should be analyzed more to examine to what extent online concordancer is effective. To investigate the differences between the groups writing performance, preposition error, adjective error, and the total vocabulary error, i.e., the combined error of the preposition error and the adjective error of the concordancer group and the thesaurus group were statistically compared. For each group, then, the improvement ratio was calculated by subtracting the
error ratios of the topic 7 writings from the ones of topic 1. Then the average differences of the improvement ratios between the concordancer group and the thesaurus group were statistically tested.

Table 1, Table 2, and Table 3 show the comparisons of error ratio differences between the groups for the grammar (preposition), lexical (adjective), and vocabulary (preposition and adjective errors combined) error ratios, respectively. Although there seems to be performance differences in the graph analysis in the previous section, the t-test result did not confirm any significance of the effectiveness of using concordancer. The t-test results can only suggest that the improvements of the overall vocabulary error ratios and the preposition error ratios between the concordancer group and the thesaurus group are marginally significant at $p < .05$.

### Table 1 Comparison of Grammar Error Ratio Improvement Between Groups (Preposition)

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>mean</th>
<th>s.d.</th>
<th>t obs</th>
<th>t crit</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concordancer</td>
<td>10</td>
<td>0.2610</td>
<td>0.3467</td>
<td>2.026</td>
<td>2.09</td>
<td>19</td>
<td>.057</td>
</tr>
<tr>
<td>Thesaurus</td>
<td>11</td>
<td>-0.0673</td>
<td>0.3912</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 2 Comparison of Lexical Error Ratio Improvement Between Groups (Adjective)

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>mean</th>
<th>s.d.</th>
<th>t obs</th>
<th>t crit</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concordancer</td>
<td>10</td>
<td>0.2000</td>
<td>0.4650</td>
<td>1.051</td>
<td>2.09</td>
<td>19</td>
<td>.306</td>
</tr>
<tr>
<td>Thesaurus</td>
<td>11</td>
<td>0.0018</td>
<td>0.3988</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 3 Comparison of Vocabulary Error Ratio Improvement Between Groups (Preposition and Adjective Errors Combined)

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>mean</th>
<th>s.d.</th>
<th>t obs</th>
<th>t crit</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concordancer</td>
<td>10</td>
<td>0.4600</td>
<td>0.6701</td>
<td>2.075</td>
<td>2.09</td>
<td>19</td>
<td>.052</td>
</tr>
<tr>
<td>Thesaurus</td>
<td>11</td>
<td>-0.0636</td>
<td>0.4488</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is also important to examine how each vocabulary reference tool, the concordancer and the thesaurus, affected the ESL writers’ vocabulary knowledge. For example, Figure 3 and Figure 4 may suggest that the concordancer helps the ESL writers improve grammatical and lexical knowledge of vocabulary in writings. This can be examined by comparing the differences in pre-writing, topic 1 writings and post-writings, topic 7
writings in each group. Table 4 presents the paired sample t-test of error rates in 100 words in the pre- and post-writing for the concordancer group and the thesaurus group, respectively. According to the analysis of the pre-/post-writings within the concordancer group, there was a significant difference in preposition error rates before and after using concordancer \((p < .05)\). There is also a marginally significant difference in the preposition and adjective combined vocabulary error rate. However, the within group comparison for the thesaurus group does not show any significant differences for the preposition, adjective errors, and the combined errors of the preposition and adjective.

### Table 4: Comparison of Vocabulary Error Rate Within the Concordancer and the Thesaurus Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Error type</th>
<th>Writing</th>
<th>n</th>
<th>mean</th>
<th>s.d.</th>
<th>t obs.</th>
<th>t crit.</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conc</td>
<td>Preposition</td>
<td>Pre</td>
<td>10</td>
<td>0.6420</td>
<td>0.28228</td>
<td>2.381*</td>
<td>2.26</td>
<td>9</td>
<td>.041</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post</td>
<td>10</td>
<td>0.3810</td>
<td>0.29550</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adjective</td>
<td>Pre</td>
<td>10</td>
<td>0.3050</td>
<td>0.27302</td>
<td>1.360</td>
<td>2.26</td>
<td>9</td>
<td>.207</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post</td>
<td>10</td>
<td>0.1050</td>
<td>0.33204</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Combined</td>
<td>Pre</td>
<td>10</td>
<td>0.9460</td>
<td>0.47782</td>
<td>2.170</td>
<td>2.26</td>
<td>9</td>
<td>.058</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post</td>
<td>10</td>
<td>0.4860</td>
<td>0.47952</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thes</td>
<td>Preposition</td>
<td>Pre</td>
<td>11</td>
<td>0.6420</td>
<td>0.5891</td>
<td>-.570</td>
<td>2.23</td>
<td>10</td>
<td>.581</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post</td>
<td>11</td>
<td>0.3810</td>
<td>0.6364</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adjective</td>
<td>Pre</td>
<td>11</td>
<td>0.3050</td>
<td>0.1782</td>
<td>.015</td>
<td>2.23</td>
<td>10</td>
<td>.998</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post</td>
<td>11</td>
<td>0.1050</td>
<td>0.1764</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Combined</td>
<td>Pre</td>
<td>11</td>
<td>0.9460</td>
<td>0.7473</td>
<td>-.441</td>
<td>2.23</td>
<td>10</td>
<td>.669</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post</td>
<td>11</td>
<td>0.4860</td>
<td>0.8109</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: *\(p<.05\), two-tailed. Combined error type consists of the preposition and adjective error.

### 3. Effect Size

Although there is no significant difference of the total error rates between the concordancer group and the thesaurus group, the marginal significance and the mean error ratio graphs have suggested that there might be a positive effect of using concordancer in ESL writing. One of the ways of detecting the effect is to calculate effect size. Effect size is a name given to a family of indices that measures the magnitude of treatment effect (Hinkle, Wiersma, & Jurs, 2003). It is defined as the difference between the means, \(M_1 - M_2\), divided by standard deviation, \(s\), of the either group. It is commonly defined that effect size \(d = .25\) as small, \(d = .50\) as medium, and \(d = 1.0\) or greater as large. Based on the
data presented in Table 1, Table 2, and Table 3, overall improvement of the concordancer group and the thesaurus group, the effect size \( d \) is calculated, respectively:

**Grammar (preposition) error improvement**

\[
\begin{align*}
  d &= \frac{0.2610 - (-0.0673)}{0.34671} \\
  &\approx 0.94
\end{align*}
\]

**Lexical (adjective) error improvement**

\[
\begin{align*}
  d &= \frac{0.2000 - (-0.0018)}{0.46507} \\
  &\approx 0.43
\end{align*}
\]

**Combined vocabulary error improvement**

\[
\begin{align*}
  d &= \frac{0.4600 - (-0.636)}{0.6719} \\
  &\approx 0.78
\end{align*}
\]

The statistical test of the concordancer users’ improvements in vocabulary error did not show significance between the groups. However, the error rate trends of the graphs show that there seems to be visible differences between the groups throughout the experiment. The calculation of the effect size shows there is an effect of using concordancer for reducing overall vocabulary errors around 0.78, which can be interpreted as a closely large effect size. As can be expected from the significance test in Table 1, the effect size for preposition usage for grammar error is \( d = 0.94 \). For the effect size of the adjective for lexical error, it is close to medium effect with \( d = 0.43 \). Based on the effect sizes of the concordancer usage in ESL writing, it is possible to conclude that concordancer helps ESL writers while writing composition and retaining learned vocabulary after using it.

**V. CONCLUSION**

The current research explored the effect of using the concordancer in ESL writing in reducing vocabulary errors. Given the assumption that the vocabulary knowledge consists of two subset knowledge types, that is the lexical knowledge and grammar knowledge, the current study has investigated the effects of using the concordancer in ESL writing compared to the thesaurus. According to the graphic representations of the concordancer group’s performance (Figures 3, 4, and 5), there were signs of the improvement of the ESL writing quality in reducing vocabulary error: the total vocabulary error, which is the sum of the preposition (grammar) error and the adjective (lexical) error, and individual grammar error and lexical error were reduced immediately from the topic 2 writing. And
the reduced error ratio was still maintained until the topic 7 writing. Unlike the results of the concordancer group, the lexical error ratios of the thesaurus group were not reduced as much as the concordancer group did. Further, for the topic 7 writing, for which the subjects did not use thesaurus, the error ratio back to the one of the topic 1 writing. This indicates that there was no learning effect from the thesaurus. Therefore, it is possible to conclude that the concordancer not only has positive effects of a vocabulary reference tool in writing (Koo, 2006; Yoon & Hirvela, 2004), but also has possibility of being a vocabulary learning tool as previous studies have argued (Sun, 2000).

The statistical significance tests identified that the total vocabulary error improvement in ESL writing between the concordancer group and the thesaurus group was marginally significant at \( p < .05 \). The preposition error improvement was close to marginal significance while there was no significant difference in the adjective error improvement. The effects of using the concordancer was also triangulated through the effect size test. The results of the significance test were interpreted in terms of the magnitude of each treatment, i.e., the effect of the concordancer and the thesaurus in ESL writing for the total vocabulary error, grammatical error, and lexical error.

The pre/post-writing comparison within the concordancer group also showed that after using the concordancer, the ESL writers reduced their preposition error rates significantly at \( p < .05 \) and the total vocabulary error rates, which is the sum of the preposition error and the adjective errors, with marginal significance. The results suggest the possibility of using the concordancer as a vocabulary learning tool as well as a reference tool, because the post-test writing samples were written without the assistance of the concordancer after six writing sessions with the concordancer. The use of the concordancer eventually results in the learned vocabulary being retained in ESL writers' lexicon, and also lower error rates when producing vocabulary knowledge in their last writing samples, even without the assistance of the concordancer.

The effect size of each group showed that magnitude of using the concordancer is large in reducing vocabulary errors in ESL writing. The results of the effect size that the magnitude of reducing preposition error is larger than adjective error suggest that the concordancer would be more effective in handling ESL writers' grammatical errors. The reason why the concordancer may be effective in dealing with this type of errors may be because of the fixedness of the vocabulary usage in natural language. In English, the number of prepositions is limited compared to the number of adjectives. And, virtually, almost any noun can take any adjective as its modifiers—the association of noun and adjective is more flexible. For prepositions, to the contrary, they not only have limited number of words but also their association is rather fixed—certain verbs take certain
prepositions, only and if this association is violated, a grammatical error occurs. The characteristics of prepositions and adjectives are exactly reflected in the function of concordancer. In the concordancer results page of a verb collocations, for example, the instances of the verb with certain prepositions may not be many, but with high number of occurrences of certain prepositions. The instances of a certain noun and the instances of its modifying adjectives may be many, but the number of occurrence of the noun and a certain adjective would not be many enough to be noted. This is why the results found that concordancer is more useful in dealing with prepositions than dealing with adjectives.

The current study shed the light on using the concordancer in ESL writing instruction. However, the study also contains limitations which should be addressed for future research on corpus-based language teaching and learning. First, although the results of the current study were enough to show preliminary analysis of productive vocabulary knowledge improvement in writing, the analysis only counted the occurrences of preposition errors and adjective errors for grammar knowledge and lexical knowledge. It still needs to develop other categories of grammatical knowledge, such as agreement, article, or tense for a full version of lexical improvement of the productive vocabulary knowledge in corpus-based language learning. Second, in terms of the vocabulary knowledge, other types of knowledge, such as discourse knowledge should be included because in each discourse community, language users use their own idiosyncratic vocabulary to maintain the membership of the community. Third, as witnessed in the statistical analysis, the study analyzed the writing samples of 21 subjects. To have more sound statistical analysis models and stronger evidence of using the corpus-based language instruction, enough sample size needs to be secured. Finally, the current research found that the thesaurus does not provide positive effect on vocabulary learning in writing after seven writing practice sessions. Further research on the question with qualitative data may be able to answer why the thesaurus does not show positive effects on productive vocabulary learning.

REFERENCES


APPENDIX

Topic 1: Many Korean students choose to attend schools or universities in the United States. Why do you think they decided to study in the United States? Use specific reasons and details to explain your answer.

Topic 2: Do you agree or disagree with the following statement? Television, newspapers, magazines, and other media pay too much attention to the personal lives of famous people such as public figures and celebrities. Use specific reasons and details to explain your opinion.

Topic 3: What is the difference between the education in Korea and one in the United States? Use specific reasons and details to explain your answer.

Topic 4: Some people say that the Internet provides people with a lot of valuable information. Others think access to so much information creates problem. Which view do you agree with? Use specific reasons and examples to support your opinion.

Topic 5: What is the difference between the culture, such as manners and lifestyle in your home country and one in the United States? Use specific reasons and details to explain your answer.

Topic 6: Do you agree or disagree with the following statement? It is more important for students to study history and literature than it is for them to study science and mathematics. Use specific reasons and examples to support your opinion.

Topic 7: According to a recent news report, there are 87,000 Korean students in the United States, one of the highest numbers of the international students in the country. Why do you think they choose to study in the U.S.? Use specific reasons and details to explain your answer.

Key words: corpus, concordancer, ESL, vocabulary knowledge, writing
Applicable Levels: secondary education, adult education

Author: Nam, Daehyeon (Hankuk University of Foreign Studies); daehyeon.nam@gmail.com

Received: May 15, 2010
Reviewed: July 30, 2010
The Perspectives and Effectiveness of Blended Learning in L2 Writing of Korean University Students*

Seo Young Yoon (Hankuk University of Foreign Studies)
Chung-Hyun Lee (Hankuk University of Foreign Studies)


The purpose of this study is to investigate the students’ perspectives and effectiveness of blended learning in L2 writing. Forty seven university students participated in two L2 writing classes. The data for this research was collected for 16 weeks. Data sources included questionnaire, pre-test, midterm examination, and post-test. The results are as follows: 1) the students’ perspectives for blended learning were positive and the students considered it useful, helpful for improvement, and motivating in general. The students were very satisfied with both technological aspects and pedagogical aspects, particularly with interaction enabled through blended learning; 2) blended learning had positive effects on L2 writing, and there was an overall increase of test scores; 3) blended learning in L2 writing was found to be effective in mechanics, content, organization, and structure; and 4) there were no significant gender differences in general. Based on the findings, it seems that blended learning in L2 writing promotes learner interaction, learner autonomy, and collaborative learning. Follow up researches with more subjects in various levels using the model for Blended Learning in L2 Writing (BLW) is suggested.

* This work was supported by the 2010 Research Fund of Hankuk University of Foreign Studies.
I. INTRODUCTION

The cognitive approach of process writing model, although helpful and quite popular in Korean university setting, is not easy to be carry out effectively for offline classes due to factors like time constraint and limited number of sessions. In order to overcome such constraining factors in writing classes, this study provided blended environments in which learners are able to engage in writing as social practice to examine the effectiveness of blended learning on Korean university students’ writing skills and give suggestions on effective blending of online and offline activities in teaching and learning English writing skills. Therefore, the research questions are as follows: 1) What are the students’ perspectives on blended learning in L2 writing?; 2) Have the students’ writing scores increased through blended learning in L2 writing?; 3) Have the students’ writing scores in mechanics, content, organization, and structure increased through the blended learning in L2 writing?; and 4) Are there significant gender differences in terms of above three research questions?

In this study, the students were expected to write essays on designated topics and provide feedback on peers’ essays both online and offline using Bulletin Board System (BBS), chat program or instant messenger, and face-to-face feedback sessions. The effectiveness of the blended teaching/learning writing model in L2 writing is examined to identify the effects of blended approach in L2 writing as well as the learner perspectives.

II. LITERATURE REVIEW

1. The Process of Writing

The cognitive approach to writing lays out the process of writing in neatly organized sequence of pre-writing, organizing, drafting, and revising and finds its root in the model proposed by Hayes and Flower (1980, 1983). The process of writing in this model is challenged by those who take on the social approach, and they do so by pointing out that writing is more than psychological process. The researchers who take on social approach to writing claim that writing is recursive, dynamic, and contextual (Camps, 2005; Clark & Ivanič, 1997; Currie & Cray, 2004). As social practice, writing does not only involve linguistic ability, but sociocultural values, relations, social identity, personal experiences act as important factors (Scott & Turner, 2009). Such factors need to be appropriately utilized to provide the environment that enables writing as social practice. Clark and Ivanič (1997)
claimed that there are four dimensions of writing process as a social practice and proposed that: 1) the writing process is dynamic and recursive; 2) revising takes place throughout the writing process; 3) practices vary from person to person; and 4) technology can shape the way we write. Camps (2009) endorsed Clark and Ivanić’s (1997) four dimensions of writing process as socially situated practice and suggest a fifth dimension—learners seek assistance from external factors. In order to provide an environment where learners can engage in writing as recursive, dynamic, social practice while continual revision can take place individually as well as socially with the use of technology as suggested by Camps (2009), Clark and Ivanić (1997), Lee (2006), etc., a model of blended learning for L2 writing using online elements such as BBS, chat programs and instant messengers as well as offline classes is developed and implemented in this study.

2. Feedback in L2 Writing

The studies in feedback in L2 writing has had discrepancies regarding the necessity and appreciation of feedback. For example, Truscott (1996) argued that although learners prefer to receive error correction as feedback, there is no need to give such feedback to the learners; on the other hand, scholars such as Brice and Newman (2000) claimed that withholding error correction is less than the optimal teaching strategy since the learners display strong desire to receive such feedback. Stemming from the controversy, many researches were conducted exploring the various aspects of feedback. According to Ferris (2003), consistent implications found in these researches on error correction and feedback are as follows: 1) accuracy in writing is an important factor of effectiveness for L2 writers; 2) teacher feedback is vital and helpful in improving accuracy; 3) comprehensive feedback is preferable to selective feedback; 4) indirect correction is suggested than direct; 5) although learners feel that combination of teacher, peer, and self feedbacks are helpful, they prefer teacher feedback the most; and 6) the learners preferred peer feedback over self feedback.

Also researches by Mendonça and Johnson (1994) and Mangelsdorf (1992) have shown that peer feedback has helped learners in areas of clarifying and developing ideas as well as organization and style, and the learners found peer feedback activities beneficial in L2 writing. Schmid’s (1999) study that replicated Mendonça and Johnson’s study in 1994 reported that 10 out of 12 students enjoyed peer review sessions, 7 out of 12 utilized peers’ comments, and 4 out of 12 would rather receive teacher feedback instead of peer feedback.
According to the learner responses from the researches mentioned above, the studies show that the learners not only prefer but have strong desire to receive feedback. The learners also seem to benefit from peer feedback in areas of organization and content. In this study, both teacher and peer feedback will be given to learners twice a week after each draft both online and offline.

3. Blended Learning

1) Concepts and Definitions of Blended Learning

Blended learning has been defined by many scholars in various ways. Also known as ‘integrated learning’ or ‘hybrid learning’, it refers to combining the attributes of online and offline education. Mantyla (2001), Reay (2001) and others have used the term to refer to using two or more information delivery method to fortify learning content and learner experience. Graham (2006) argued that such broad definitions do not properly serve the purpose of accurately describing blended learning due to vagueness in description, and he defined blended learning as systems which “combine face-to-face instruction with computer-mediated instruction (p. 5).” Dudeny and Hockly (2007) have defined it as a mixture of online and face to face course delivery, and Valiathan (2004) defined it as:

“a solution that combines several different delivery methods, such as collaboration software, web-based courses, EPSS [Electronic Performance Support System], and knowledge management practices. Blended learning also is used to describe learning that mixes various event-based activities, including face-to-face classrooms, live e-learning, and self-paced instruction (Valiathan, 2004).”

Considering the definitions given above, blended learning does not simply mean combining online and offline instructional modalities or instructional tools. In this study, blended learning is defined as bringing together the positive attributes of online and offline education, including instructional modalities, delivery methods, learning tools, etc., in relation to language teaching and learning approaches and methods in order to reinforce learning process, to bring about the optimal learner achievement, and to enhance the quality of teaching and learning. When instructional modalities, methods, tools and positive attributes of online and offline education are appropriately blended, positive outcomes may be expected, such as improved pedagogy, access and flexibility, and cost-effectiveness as mentioned by Graham (2006).
2) Models of Blended Learning

In choosing a model for blended learning, the four critical dimensions of interaction—space, time, fidelity, and humanness, needs to be considered (Graham, 2006). Online and offline educational environments have their strengths and weaknesses in that offline environment have time and space restrictions. For example, where as asynchronous online environment is relatively flexible, but asynchronous online environment tend to be restricted in humanness. On the other hand, offline environment tends to have restrictions with space but no such restrictions in humanness. Therefore, appropriate blending of online and offline instructions can fortify the content and quality of instruction by taking the strengths of one to compensate for the weaknesses of the other.

The practice of blending varies widely depending on factors such as program goals, levels, and others. No singled out model in particular can be claimed to be the panacea for all, but a careful consideration has to take place in choosing the appropriate blending model for the target learners. There are several types of models available based on levels, pedagogical impacts, and learner control.

Blended learning models that address specific levels are as follows: 1) activity level blending where an activity has both online and offline elements; 2) course-level blending where a course has both online and offline elements, which is the most popular type of blending; 3) program-level blending which is used often in degree programs where the learners have the choice of participating in either or both online and offline courses; and 4) institutional-level blending where the institution, including universities and businesses, has developed a model of online and offline course, not just a distance learning division which is separate from the traditional offline instruction (Graham, 2006). For program and institutional levels, the appropriate level specific model of blending is predetermined by the program and the institution, and the instructor’s preference is not a consideration in choosing the model. However, in course and activity levels, instructors may be given the opportunities and freedom to look for and implement appropriate blending in their foreign language classrooms.

Another type of blends are those that address the pedagogical impact. Graham (2006) divided them into three categories of blends and defined them as 1) enabling blends that allows the opportunity through different modalities or provide flexibility; 2) enhancing blends that allows supplementary enhancement to the traditional instruction without causing changes to the pedagogy, and 3) transforming blends through which the learners actively construct knowledge through technology as well as traditional instruction and radical change in pedagogy is required. The blended models in this category can be
chosen by the instructor or the learners based on their needs, preferences, and focus. Although it cannot be said that a particular model out of the aforementioned models are better or worse than the other, the amount and the impact of blending on pedagogy and their effectiveness may differ.

Then there are models based on two different approaches in blended learning suggested by Bersin (2003), and they are focused on the varied level of learner autonomy and control. Program flow approach has set criteria and activities with structured flow and core-and-spoke approach allows learners control with choices of selective learning. Based on these approaches, five basic models of blended learning are presented: self-paced e–learning, self-paced e–learning and instructor lead training, media centered synchronous e–learning, on the job training, and simulation and lab centered models (Bersin, 2003). In Bersin’s suggested models, self-paced e–learning and instructor lead training seems to be focused on appropriate integration of online and offline instruction, whereas in other models, instruction seems to be geared towards appropriate use of technology.

It is important to keep the big picture in mind as well as the numerous factors that needs to be considered in coming up with the appropriate model for the target course and the learners. In foreign language classrooms, choosing an appropriate model of blended learning require consideration of the combination of the above elements and more, such as language skills being taught, content, classroom size, age, and the learner proficiency level. In this particular study, factors such as program size, impact of blending, learner control, and language skills are considered in developing what seems to be the most appropriate model of blending for L2 writing. The level of blending was course–level since the blending occurred within and throughout the course. The category of blending was transforming blending since learners were to actively engage in learning in both online and offline environment; moreover, blending definitely altered the pedagogy while it provided an environment where the learners actively construct knowledge through collaboration. Consequently, online and offline elements presented in the model for blended learning in this study were designed to be more than just supplements of each other or mere additions to preexisting elements. Online and offline elements in the model presented in Figure 1 in the data collection methods and procedures section play an essential role in conducting the study, not to mention that the blending of the elements served as decision making factors on the pedagogical aspect of the L2 writing class. As far as the approach in curriculum and activities are concerned, program flow approach is used, but of the five models that Bersin (2003) suggested, none were applicable to the study due to lack of offline elements in his models.
III. METHODOLOGY

1. Subjects

The subjects for quantitative data consisted of 47 university students in varying school years that participated in a 2 credit hour English writing classes for 16 weeks. The course had two classes of 22 and 25 students each, and 26 were female students and 21 were male. The course was opened to students as an elective, and the students were non-English majors such as French, German, business, and others. The school year varied as well, and there were 2 freshmen, 13 sophomores, 21 juniors, and 11 seniors as presented in Table 1.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Academic years</td>
</tr>
<tr>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Frequency</td>
<td>26</td>
</tr>
<tr>
<td>%</td>
<td>55.3</td>
</tr>
</tbody>
</table>

2. Data Collection Methods and Procedures

To obtain appropriate data for this study, quantitative data were gathered. Data sources include the questionnaire (see appendix), pre-test, midterm examination, and post-test scores. The test scores from the class consisting of 22 students are used to investigate the effectiveness of using blended learning in L2 writing, and their pre-test scores showed that the students in this class were intermediate level.

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Contents Addressed in the Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanics</td>
<td>Sentence structure</td>
</tr>
<tr>
<td>Paragraph format</td>
<td>Simple and compound sentences</td>
</tr>
<tr>
<td>Capitalization</td>
<td>Independent and dependent clauses</td>
</tr>
<tr>
<td>Comma and period usages</td>
<td>Complex sentences</td>
</tr>
<tr>
<td>Apostrophe and question mark usages</td>
<td>Conjunctions</td>
</tr>
<tr>
<td>usages</td>
<td>Run-ons, comma splices, appositives</td>
</tr>
<tr>
<td></td>
<td>Complex sentences with adjective clauses</td>
</tr>
<tr>
<td></td>
<td>Subject pronouns: who, which, and that</td>
</tr>
<tr>
<td></td>
<td>Object pronouns: whom, which, that, and none</td>
</tr>
<tr>
<td></td>
<td>Clauses with when</td>
</tr>
</tbody>
</table>
The other class of 25 students were intermediate in general, but since this course was offered as an elective without specific proficiency requirement, 20% of the students were either native–like or native in their English writing ability; therefore, the test scores from this particular class were not used to investigate the effectiveness. The classes met once a week for two hours per session where the contents provided in Table 2 were addressed. Both of the sessions were taught by one of the researchers.

As presented in Figure 1, the BLW model was implemented in this study, and it took two weeks to finish each process from presentation of topic to discussion. The students were put into groups of 5 or 6, and each group had a group leader.

![Figure 1] The Model for Blended Learning in L2 Writing (BLW)

The students uploaded the first draft on the class BBS three days after the
presentation of topic in class, and two days were given for online peer feedback through tag-line function provided within BBS. During this time, the students were given chances to receive online teacher feedback as well. Based on the online feedback, the students made revisions using web contents such as web concordances, online dictionaries, search engines, etc., and uploaded their second draft on BBS. When the class met again, the students brought a printed copy of their second draft and they were to have read their group members’ second drafts before class in order to prepare for giving quality offline feedback in class. Chat programs or instant messengers were utilized if the face-to-face feedback sessions were not thorough enough, if a group member was absent, or if there was a need to make up for missed face-to-face sessions for any unforseen reasons. If the groups held chat sessions, the chat script were submitted to the instructor. After the class, based on the online and offline feedback from both peers and the teacher, the students were given a week to make revisions and to submit their final draft online on BBS before the class met again. It gave the researchers the time to review the drafts and the tag-line critiques for further explanations or corrections. Then when the class met again, the students shared their final draft as well as the reasons and justifications for the changes they have made in their respective groups and resolved any existing conflicts before the new cycle began with the presentation of topic. After the completion of each process, the students gathered all the feedback received and the changes made to their works and wrote reflective learning journals.

3. The Method of Data Analysis

The data gathered from the quantitative research were analyzed as follows. The quantitative data gathered from the questionnaire was analyzed using SPSS for frequency, Chi-Square and ANOVA on the students’ perspectives on blended learning in L2 writing. The significance level was set at 0.05 \( (p < 0.05) \) to test the null hypotheses of no association and difference between gender in terms of their responses on the questionnaire.

The student produced writings were analyzed by the researchers using the scoring rubric presented in Table 3 to investigate the effectiveness. Pre-test, midterm examination, and post-test were scored using the rubric in four areas of mechanics, content, organization, and structure. For all three writing tests, the students were given 40 minutes of in-class writing time. The topics for the pre-test, midterm exam, and post-test were: 1) describe one of the most memorable experience you have had; 2) describe your favorite restaurant; and 3) describe your favorite hobby and give reasons as to why you enjoy it,
respectively. The researchers used the same rubric to score all three tests. Pearson’s $r$ was employed to examine inter-rater reliability between the researchers. Pearson’s $r$ for the three tests were over 0.9, and Pearson correlation is significant at the 0.01 level. The test scores were analyzed using SPSS for a repeated measures ANOVA on the effects of the blended learning in L2 writing.

IV. RESULTS AND DISCUSSION

1. Students’ Perspectives and Experience of Online and Feedback in L2 Writing Classes

<table>
<thead>
<tr>
<th>[Table 3] Scoring Rubric for Paragraph Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scoring criteria</td>
</tr>
<tr>
<td>Mechanics</td>
</tr>
<tr>
<td>Period, commas, and other punctuations are used correctly.</td>
</tr>
<tr>
<td>Spelling is accurate.</td>
</tr>
<tr>
<td>Title is centered and capital letters are used correctly.</td>
</tr>
<tr>
<td>The first line is indented and font and size are appropriate.</td>
</tr>
<tr>
<td>Content</td>
</tr>
<tr>
<td>The content of the paragraph fits the assigned topic.</td>
</tr>
<tr>
<td>The paragraph is interesting and easily understandable.</td>
</tr>
<tr>
<td>The content is carefully thought out and is related to the topic.</td>
</tr>
<tr>
<td>Organization</td>
</tr>
<tr>
<td>The paragraph has a topic sentence with a topic and one or more controlling ideas.</td>
</tr>
<tr>
<td>The paragraph has supporting sentences with at least one example.</td>
</tr>
<tr>
<td>The paragraph has a concluding sentence.</td>
</tr>
<tr>
<td>The paragraph is organized appropriately according to the content.</td>
</tr>
<tr>
<td>The paragraph has unity and coherence.</td>
</tr>
<tr>
<td>Appropriate transition words are used to show relationship between sentences.</td>
</tr>
<tr>
<td>Structure</td>
</tr>
<tr>
<td>Grammar usage is correct.</td>
</tr>
<tr>
<td>Sentence structure is appropriate.</td>
</tr>
<tr>
<td>Simple, compound, complex, and compound-complex sentences are used correctly.</td>
</tr>
<tr>
<td>The paragraph is free of fragments, run-ons, and comma splices.</td>
</tr>
</tbody>
</table>
1) Students’ Interest in Online Learning in L2 Writing Classes

The students responded positively for interest in blended learning in L2 writing classes. According to Table 4, 95.6% of the participants show interest (very interested, 20.0% and fairly interested, 75.6%) and 4.4% were not particularly interested, showing that students’ interest in online learning in L2 writing is very high. The students’ interest and experience as seen in Table 5 seem to be related. Considering that the majority of the students have not experienced online learning in L2 writing, they seem to have felt that it was a new and challenging way to learn L2 writing which increased students’ interest.

<table>
<thead>
<tr>
<th>Item</th>
<th>Very interested</th>
<th>Fairly interested</th>
<th>Not particularly interested</th>
<th>Not interested at all</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>20.0</td>
<td>75.6</td>
<td>4.4</td>
<td>0</td>
<td>100</td>
</tr>
</tbody>
</table>

The result of testing association for the students’ responses by gender yielded Chi-Square value which is not significant at the 0.05 level of statistical significance ($X^2 = .383$, $df = 2$, Sig. = 0.826). There is no significant relationship between gender and their interest in online learning in L2 writing classes.

2) Students’ Experience of Online Learning in L2 writing Classes

The students responded negatively for students’ experience of online learning in L2 writing classes. 20% of the participants answered that they have used (very often, 13.3% and often, 6.7%) and 46.7% said that they have almost never used online learning in L2 writing classes, showing that few students have experience of using online learning in L2 writing classes as seen in Table 5.

<table>
<thead>
<tr>
<th>Item</th>
<th>Very often used</th>
<th>Often used</th>
<th>Not often used</th>
<th>Almost never used</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>13.3</td>
<td>6.7</td>
<td>33.3</td>
<td>46.7</td>
<td>100</td>
</tr>
</tbody>
</table>

The result of testing association for the students’ responses by gender yielded Chi-Square value which is not significant at the 0.05 level of statistical significance ($X^2 = 1.301$, $df = 3$, Sig. = 0.729). There is no significant relationship between gender and their experience of using online learning in L2 writing classes.
3) Students’ Experience of Feedback in L2 Writing Classes

The students responded negatively for experience of feedback in L2 writing classes. As seen in Table 6, 20% of the participants have received (very often, 0% and often, 8.9%) and 91.1% have not received (not often, 44.4%, and almost never, 46.7%) feedback in L2 writing classes, showing that students’ experience of feedback in L2 writing is minimal. It is surprising that the majority of the students have not often received feedback in L2 writing even though feedback has been emphasized in improving L2 writing.

<table>
<thead>
<tr>
<th>Item</th>
<th>Very often received</th>
<th>Often received</th>
<th>Not often received</th>
<th>Almost never received</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>0</td>
<td>8.9</td>
<td>44.4</td>
<td>46.7</td>
<td>100</td>
</tr>
</tbody>
</table>

The result of testing association for the students’ responses by gender yielded Chi-Square value which is not significant at the 0.05 level of statistical significance ($X^2 = 0.048$, $df = 2$, Sig. = 0.976). There is no significant relationship between gender and their experience of feedback in L2 writing classes.

2. Students’ Perspectives on Blended Learning in L2 Writing Classes

1) Students’ General Perspectives on Blended Learning in L2 Writing Classes

The students’ perspectives on blended learning are positive in all areas as seen in the results provided in Table 7. In particular, usefulness (4.4565) is the most positive, followed by timesaving (4.1522), and improvement (4.0870). It seems that the students found blended learning to be useful, timesaving, and helpful for improvement. In other words, it shows that the students think that blended learning is practical in improving L2 writing.

There is a significant difference between gender in perspectives on usefulness as seen in Table 7. Female students responded more positively (4.7200) on usefulness than males (4.1429). Although there is a significance difference between gender, considering that both male and female students found blended learning very useful, the significant difference does not seem to be worthy of attention. Regardless, the female students seemed to have found blended learning in L2 writing classes more useful and seemed to enjoy the opportunities for social and academic interaction outside the classroom more so than the
male students.

**[Table 7] Learners’ Perspectives on Blended Learning in L2 Writing Classes**

<table>
<thead>
<tr>
<th></th>
<th>Mean (F / M / T)</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usefulness</td>
<td>4.7200/4.1429/4.4565</td>
<td>1</td>
<td>3.802</td>
<td>.026</td>
</tr>
<tr>
<td>Easiness</td>
<td>3.8400/3.0476/3.4783</td>
<td>1</td>
<td>7.166</td>
<td>.095</td>
</tr>
<tr>
<td>Interest</td>
<td>3.9600/3.5438/3.7609</td>
<td>1</td>
<td>2.171</td>
<td>.236</td>
</tr>
<tr>
<td>Motivation</td>
<td>3.6400/3.4286/3.5435</td>
<td>1</td>
<td>.510</td>
<td>.622</td>
</tr>
<tr>
<td>Timesaving</td>
<td>4.2400/4.0476/4.1522</td>
<td>1</td>
<td>.422</td>
<td>.496</td>
</tr>
<tr>
<td>Improvement</td>
<td>4.0400/4.1429/4.0870</td>
<td>1</td>
<td>.121</td>
<td>.754</td>
</tr>
</tbody>
</table>

2) **Students’ Perspectives on the Feedback in Blended Learning in L2 Writing Classes**

Students’ perspectives on the feedback in blended learning in L2 writing classes were very positive in all items as shown in Table 8. ANOVA was performed in order to determine whether there are significant differences between gender and the use of multimedia and feedback. *F* values and the significance levels are also indicated in Table 8. There are no significant differences between male and female students in perspectives on the feedback in blended learning, except for one item, usefulness of peer feedback online.

The students’ perspectives on feedback were positive across the board in both online and offline as well as peer and teacher feedback. It is worth noticing that usefulness (4.4043) was seen to be the most positive, followed by improvement (4.0426) and motivation (3.8936) for peer feedback online, and for peer feedback offline, the same pattern prevails where usefulness (4.0889) was seen to be the most positive, followed by improvement (4.0870) and motivation (4.0435). Also easiness for online (2.9787) and offline (3.2826) were found to be the least positive, regardless of deliverly methods. Teacher feedback was also found to be positive across the board.
Table 8: The Results of Student Perspectives on Blended Learning and Feedback Types

1) Peer feedback online

<table>
<thead>
<tr>
<th>Feedback Type</th>
<th>Mean (F / M / T)</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usefulness</td>
<td>4.6538/4.0952/4.4043</td>
<td>1</td>
<td>3.625</td>
<td>.028</td>
</tr>
<tr>
<td>Easiness</td>
<td>3.0769/2.8571/2.9787</td>
<td>1</td>
<td>.561</td>
<td>.676</td>
</tr>
<tr>
<td>Interest</td>
<td>3.8846/3.5714/3.7447</td>
<td>1</td>
<td>1.139</td>
<td>.389</td>
</tr>
<tr>
<td>Motivation</td>
<td>4.0769/3.6667/3.8926</td>
<td>1</td>
<td>1.955</td>
<td>.185</td>
</tr>
<tr>
<td>Timesaving</td>
<td>3.9231/3.7143/3.8288</td>
<td>1</td>
<td>.506</td>
<td>.504</td>
</tr>
<tr>
<td>Improvement</td>
<td>4.3077/3.7143/4.0436</td>
<td>1</td>
<td>4.091</td>
<td>.051</td>
</tr>
</tbody>
</table>

2) Peer feedback offline

<table>
<thead>
<tr>
<th>Feedback Type</th>
<th>Mean (F / M / T)</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usefulness</td>
<td>4.1250/4.0476/4.0889</td>
<td>1</td>
<td>.067</td>
<td>.840</td>
</tr>
<tr>
<td>Interest</td>
<td>3.5833/4.0000/3.7778</td>
<td>1</td>
<td>1.944</td>
<td>.312</td>
</tr>
<tr>
<td>Motivation</td>
<td>4.0000/4.0952/4.0435</td>
<td>1</td>
<td>.104</td>
<td>.776</td>
</tr>
<tr>
<td>Timesaving</td>
<td>3.8333/4.0000/3.9111</td>
<td>1</td>
<td>.311</td>
<td>.632</td>
</tr>
<tr>
<td>Improvement</td>
<td>4.1600/4.0000/4.0870</td>
<td>1</td>
<td>.292</td>
<td>.619</td>
</tr>
</tbody>
</table>

3) Teacher feedback online

<table>
<thead>
<tr>
<th>Feedback Type</th>
<th>Mean (F / M / T)</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usefulness</td>
<td>4.7200/4.5238/4.6304</td>
<td>1</td>
<td>.439</td>
<td>.251</td>
</tr>
<tr>
<td>Easiness</td>
<td>3.1250/3.0852/3.1111</td>
<td>1</td>
<td>.010</td>
<td>.953</td>
</tr>
<tr>
<td>Interest</td>
<td>3.7917/3.7619/3.7778</td>
<td>1</td>
<td>.010</td>
<td>.927</td>
</tr>
<tr>
<td>Motivation</td>
<td>4.2400/4.1905/4.2174</td>
<td>1</td>
<td>.028</td>
<td>.849</td>
</tr>
<tr>
<td>Timesaving</td>
<td>4.2083/4.2381/4.2222</td>
<td>1</td>
<td>.010</td>
<td>.908</td>
</tr>
<tr>
<td>Improvement</td>
<td>4.4800/4.6190/4.5435</td>
<td>1</td>
<td>.221</td>
<td>.521</td>
</tr>
</tbody>
</table>

4) Teacher feedback offline

<table>
<thead>
<tr>
<th>Feedback Type</th>
<th>Mean (F / M / T)</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usefulness</td>
<td>4.5600/4.7619/4.6522</td>
<td>1</td>
<td>.465</td>
<td>.428</td>
</tr>
<tr>
<td>Easiness</td>
<td>2.8800/3.1905/3.0217</td>
<td>1</td>
<td>1.100</td>
<td>.490</td>
</tr>
<tr>
<td>Interest</td>
<td>3.7600/4.0476/3.8913</td>
<td>1</td>
<td>.944</td>
<td>.355</td>
</tr>
<tr>
<td>Motivation</td>
<td>4.3200/4.1429/4.2391</td>
<td>1</td>
<td>.358</td>
<td>.500</td>
</tr>
<tr>
<td>Timesaving</td>
<td>4.1600/4.0000/4.0870</td>
<td>1</td>
<td>.292</td>
<td>.560</td>
</tr>
</tbody>
</table>
For teacher feedback online, usefulness (4.6304) was the most positive, followed by improvement (4.5435), and timesaving (4.2222), but motivation, with 4.2174, was also quite high. Teacher feedback offline follows the same pattern for peer feedback, where the most positive was usefulness (4.6596), then improvement (4.4043), and motivation (4.0870). Easiness was found to be least positive for both online (3.1111) and offline (3.0217) for teacher feedback. For making revisions after feedback, the result shows that the students considered usefulness (4.6596) to be the most positive, followed by improvement (4.4043) then timesaving (4.0213). Easiness for making revision was 3.0213 which was the least positive. It should to be noted that students’ perspectives on revision does not follow the pattern found for peer and teacher feedback both online and offline, and teacher feedback online deviates slightly from the pattern as well. The students consider peer feedback useful, helpful for improvement, and motivating, while not easy. The teacher feedback is considered useful, helpful for improvement, and motivating for offline, and timesaving for online.

The results show that well-organized blended learning in L2 writing fosters positive perspectives in giving and receiving feedback in both peer and teacher feedback online as well as offline. Taking the positive attributes of both online and offline, blended learning in L2 writing in practice seemed to have provided an optimal environment for various types of feedback through which the students can improve their L2 writing ability.

There is a significant difference between gender in perspectives on usefulness. Female students responded more positively (4.6538) on usefulness than male students (4.0952). It appears that the female students consider peer feedback online more useful than the male students. It is possible that female students enjoy the social aspects of interaction outside of the classroom. However, as seen in perspectives on blended learning in Table 7, the significant difference does not seem to be worthy of attention since both male and female

<table>
<thead>
<tr>
<th></th>
<th>Mean (F / M / T)</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improvement</td>
<td>4.5600/4.1905/4.3913</td>
<td>1</td>
<td>1.558</td>
<td>.205</td>
</tr>
</tbody>
</table>

5) Making revisions after feedback

<table>
<thead>
<tr>
<th></th>
<th>Mean (F / M / T)</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usefulness</td>
<td>4.7692/4.5238/4.6596</td>
<td>1</td>
<td>.700</td>
<td>.110</td>
</tr>
<tr>
<td>Easiness</td>
<td>3.0967/2.9524/3.0213</td>
<td>1</td>
<td>.180</td>
<td>.797</td>
</tr>
<tr>
<td>Interest</td>
<td>3.6154/3.3333/3.4894</td>
<td>1</td>
<td>.924</td>
<td>.511</td>
</tr>
<tr>
<td>Motivation</td>
<td>3.8846/3.5238/3.7234</td>
<td>1</td>
<td>1.512</td>
<td>.336</td>
</tr>
<tr>
<td>Timesaving</td>
<td>4.1538/3.8571/4.0213</td>
<td>1</td>
<td>1.023</td>
<td>.342</td>
</tr>
<tr>
<td>Improvement</td>
<td>4.5769/4.1905/4.4043</td>
<td>1</td>
<td>1.735</td>
<td>.134</td>
</tr>
</tbody>
</table>
students consider it very useful.

3) Reasons for Implementing Blended Learning in L2 Writing Classes

The student’s perspectives for reasons for implementing blended learning in L2 writing classes show in Table 9 that the students considered blended learning to be mostly positive in all areas. Collaborative work and peer feedback with 95.7% in very helpful and fairly helpful had the highest percentage among the reasons for using blended learning in L2 writing, followed by learning management, peer evaluation, and learning to write with 93.5%. Improvement (91.4%), sharing resources (87.0%), teacher–learner interaction (86.9%), motivation (84.8%), and interest (82.6%) followed and showed that all were considered helpful. Among the reasons for using blended learning in L2 writing classes, collaborative work, peer feedback, peer evaluation, learning management, and learning to write were the top 5 reasons, showing that although students considered blended learning helpful in sharing resources, teacher–learner interaction, motivation, and interest. It seems that they considered the practical reasons related to opportunities for interaction as well as learner autonomous aspects of blended learning to be more helpful than affective reasons.

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Very helpful</th>
<th>Fairly helpful</th>
<th>Not particularly helpful</th>
<th>Not helpful at all</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning to write</td>
<td>47.8</td>
<td>45.7</td>
<td>4.3</td>
<td>2.2</td>
<td>100</td>
</tr>
<tr>
<td>Improvement</td>
<td>45.7</td>
<td>45.7</td>
<td>6.4</td>
<td>2.2</td>
<td>100</td>
</tr>
<tr>
<td>Motivation</td>
<td>47.8</td>
<td>37.0</td>
<td>10.9</td>
<td>4.3</td>
<td>100</td>
</tr>
<tr>
<td>Interest</td>
<td>47.8</td>
<td>34.8</td>
<td>15.2</td>
<td>2.2</td>
<td>100</td>
</tr>
<tr>
<td>Collaborative work</td>
<td>53.2</td>
<td>42.5</td>
<td>4.3</td>
<td>0.0</td>
<td>100</td>
</tr>
<tr>
<td>Peer feedback</td>
<td>61.7</td>
<td>34.0</td>
<td>4.3</td>
<td>0.0</td>
<td>100</td>
</tr>
<tr>
<td>Peer evaluation</td>
<td>60.9</td>
<td>32.6</td>
<td>6.5</td>
<td>0.0</td>
<td>100</td>
</tr>
<tr>
<td>T–L interaction</td>
<td>54.3</td>
<td>32.6</td>
<td>13.1</td>
<td>0.0</td>
<td>100</td>
</tr>
<tr>
<td>Learning management</td>
<td>69.6</td>
<td>23.9</td>
<td>6.5</td>
<td>0.0</td>
<td>100</td>
</tr>
<tr>
<td>Sharing resources</td>
<td>60.9</td>
<td>26.1</td>
<td>13.0</td>
<td>0.0</td>
<td>100</td>
</tr>
</tbody>
</table>

The result of testing association for the student responses by gender yielded Chi–Square value which is not significant at the 0.05 level of statistical significance. There is no significant relationship between gender and the reasons for implementing blended learning in L2 writing classes.
4) Student Satisfaction with the Components of Blended Learning

The students’ responses for satisfaction with the components of blended learning were very positive. In particular, satisfaction for using blended learning in teaching is 100% positive (very satisfied, 42.6% and fairly satisfied, 57.4%). Web contents and using BBS as resources for blended learning also shows high learner satisfaction, especially using BBS with 100% (very satisfied, 37.0% and fairly satisfied, 63.0%). The result shows that blended learning in L2 writing classes appears to be user-friendly and easy to use for Korean university students who were enrolled in the classes, and the students seems to be satisfied with the teaching methodology using variety of multimedia resources and activities.

<table>
<thead>
<tr>
<th>[Table 10] Student Satisfaction with the Components of Blended Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Items</strong></td>
</tr>
<tr>
<td>--------------------------------</td>
</tr>
<tr>
<td>Blended learning teaching</td>
</tr>
<tr>
<td>learning</td>
</tr>
<tr>
<td>Web contents teaching</td>
</tr>
<tr>
<td>learning</td>
</tr>
<tr>
<td>Using BBS teaching</td>
</tr>
<tr>
<td>learning</td>
</tr>
<tr>
<td>Peer feedback teaching</td>
</tr>
<tr>
<td>learning</td>
</tr>
<tr>
<td>Teacher feedback teaching</td>
</tr>
<tr>
<td>learning</td>
</tr>
<tr>
<td>Collaborative learning teaching</td>
</tr>
<tr>
<td>learning</td>
</tr>
</tbody>
</table>

The student satisfaction for both peer feedback and teacher feedback were 100% positive in teaching where 39.1% were very satisfied and 60.9% were fairly satisfied for peer feedback. For teaching method using teacher feedback, 50.0% were very satisfied and 50% were fairly satisfied. The result for collaborative learning was very positive as well. The results shows that the students were satisfied with using blended learning for...
teaching and learning in L2 writing classes which allowed both online and offline interaction for feedback and collaboration.

The result of testing association for the students’ responses by gender yielded Chi-Square value which is not significant at the 0.05 level of statistical significance. There is no significant relationship between gender and the components of blended learning.

3. Students’ Perspective on the Appropriate Ratio of Online and Offline Peer Feedback Activities in L2 Writing Classes

The students were asked to write down what they considered to be the appropriate ratio of online and offline peer feedback out of 100. The results in Figure 2 shows that 50 (online peer feedback)/50 (offline peer feedback) ranked to be the most appropriate ratio of blended learning with 31.8%, followed by 70/30 with 18.2% and 60/40 with 15.9%.

It seems that the students prefer 50/50 where the best of both worlds can be utilized. Also it is worth pointing out that the second highest of 70/30 and the third with 60/40 show that the students preferred higher ratio of online elements than offline. It seems that the students have had positive experiences with online activities as well as online learning tools that encourage interaction such as peer feedback and consider them as useful learning tools for L2 writing.

The result of testing association for the students’ responses by gender yielded Chi-Square value which is not significant at the 0.05 level of statistical significance ($X^2 = 16.689, df = 10, Sig. = 0.082$). There is no significant relationship between gender and the most appropriate ratio of blended learning in L2 writing classes.

Reliability analysis for the questionnaire was conducted in addition. Cronbach’s alpha values were over 0.8 across the board for the items in the questionnaire and over 0.9 for standardized items, showing high reliability for the items in the questionnaire.
4. Effectiveness of Blended Learning in L2 Writing

1) Effectiveness of Blended Learning in Overall L2 Writing

The overall scores of pre-test, midterm exam, and post-test from 22 students are presented descriptively in Table 11. The mean for pre-test was 71.5 points, midterm was 78.8 points, and post-test was 84.3 points.

<table>
<thead>
<tr>
<th>Test</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>71.5</td>
<td>11.00531</td>
<td>22</td>
</tr>
<tr>
<td>Midterm exam</td>
<td>78.8</td>
<td>9.16999</td>
<td>22</td>
</tr>
<tr>
<td>Post-test</td>
<td>84.3</td>
<td>7.90049</td>
<td>22</td>
</tr>
</tbody>
</table>

Figure 3 shows there were increases of 7.3 points overall from the pre-test to midterm, and 5.5 points from the midterm exam to the post-test. The increase in the scores shows that appropriate blending of online and offline resources and activities such as using BBS, chat program, instant messengers, and having face-to-face feedback session had positive effects in overall L2 writing ability of the Korean university students.
who participated in this study.

[Figure 3] Overall Scores from Pre-test, Midterm Exam, and Post-test

2) Effectiveness of Blended Learning in 4 Components of L2 Writing

The students' writing scores from pre-test, midterm examination, and post-test were more specifically analyzed using four components of mechanics, organization, and structure in L2 writing as shown in Table 3. According to Figure 4, the means for mechanics has increased 1.4 points from pre-test (6.3) to midterm exam (7.7) and 1.4 from midterm exam (7.7) to post-test (9.1). As for content, from pre-test (21.8) to midterm, there is an increase of 1.8 points and an increase of 2.6 points between midterm exam and post-test. Organization also showed an increase of 1.0 point between pre-test (23.1) and midterm exam (24.1), and 2.3 points between midterm exam (24.1) and the post-test (26.4). Structure, however, does not follow the pattern of steady increase like mechanics, content and organization. The means for pre-test (20.6) and midterm exam (23.4) shows an increase of 2.8 points; on the other hand, there is a decrease of 1.2 points in the mean score between midterm exam (23.4) and post-test (22.2).

Among the four components, the largest increase was found in content with 4.4 points, followed by organization with 3.3. The students appeared to have found the errors in content and organization relatively easy to correct which seemed to have an effect in the increase in the mean scores for content and organization. Mechanics and structure had increases of 2.8 and 1.6, respectively. In comparison to content and organization, mechanics and structure increased little, perhaps because they were more difficult to correct than
content and organization.

A repeated measures ANOVA was performed in order to determine whether there are significant differences among the three tests. $F$ values and the significance levels are also indicated in Tables 12 and 13. There is a significant difference among the three related scores.

**[Table 12] A Repeated Measures ANOVA**

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>$F$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test</td>
<td>Sphericity assumed</td>
<td>1831.727</td>
<td>2</td>
<td>915.864</td>
<td>18.990</td>
</tr>
<tr>
<td>Error (test)</td>
<td>Sphericity assumed</td>
<td>2025.606</td>
<td>42</td>
<td>48.229</td>
<td></td>
</tr>
</tbody>
</table>

**[Table 13] Tests of Within-Subjects Contrasts**

<table>
<thead>
<tr>
<th>Source</th>
<th>Tests</th>
<th>Type III sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>$F$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tests</td>
<td>Level 1 vs. Level 2</td>
<td>1178.227</td>
<td>1</td>
<td>1178.227</td>
<td>15.515</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>Level 2 vs. Level 3</td>
<td>676.545</td>
<td>1</td>
<td>676.545</td>
<td>6.078</td>
<td>.022</td>
</tr>
<tr>
<td>Error (tests)</td>
<td>Level 1 vs. Level 2</td>
<td>1594.773</td>
<td>21</td>
<td>75.942</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Level 2 vs. Level 3</td>
<td>2337.455</td>
<td>21</td>
<td>111.307</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
V. CONCLUSION

The main findings of the study are as follows. First, the students’ perspectives for blended learning were positive and the students found the blended learning in L2 writing useful, helpful for improvement, and timesaving. Feedback was also found to be useful, helpful for improvement, and motivating or timesaving. The students seemed to appreciate the opportunities for interaction and were satisfied with blended learning in L2 writing. In order to produce a well written work, students need sufficient time and repeated opportunities to think, write, explore, and revise, and the students in the study appeared to have been provided such time and opportunities through blended learning. It is also worth noticing that the students considered blended learning to be helpful in that it provided the opportunity to engage in autonomous and interactive learning activities. In addition, they seemed to be very satisfied with blended learning as a whole as well as using BBS and peer feedback in teaching L2 writing, and the result shows that the students prefer at least 50% of the L2 writing classes to have online activities.

Second, blended learning in L2 writing was found to be effective in both general writing ability as well as in mechanics, content, organization, and structure. The scores from pre-test, midterm exam, and post-test have steadily increased, and the scores in mechanics, content, and organization have increased.

Well-balanced online and offline attributes of blended learning, using BBS, online feedback, face-to-face feedback, and instant messengers or chat programs seem to promote learner interaction and collaborative learning while encouraging students to actively engage in process-oriented writing simultaneously. Blended learning also seems to be useful in extending and expanding learner-learner as well as learner-teacher interaction online and offline where various types of feedback and interaction can take place.

In order to effectively apply blended learning in the L2 writing classroom, however, there are factors that need to be taken into consideration. First, students may be displeased if their peers do not provide high quality peer feedback or fail to participate actively. It is recommended that each student group has a student leader to encourage interaction within the group, to send reminders for deadlines, and to organize chat sessions. Second, the instructor, in particular, needs to be aware of the various learner needs and assist the students who may have difficulties in participating in writing as social practice. Finally, teacher training and resources are needed to provide teacher support for successful implementation of blended learning. It is suggested that follow up researches with more subjects for longer period of time in varied levels needs to be
conducted based on the BLW model presented in this study to investigate the effective application of blended learning in L2 classrooms.

REFERENCES


**APPENDIX**

**Questionnaire on teaching and learning writing through blended learning**

**A. General Questions (Please check V next to the appropriate item.)**

1. How interested are you in the use of online learning in L2 writing?
   - Very interested___  Fairly interested___  Not particularly interested___  Not interested at all ___

2. How often have you used online learning in L2 writing?
   - Very often used___  Fairly often used___  Not often used___  Almost never used___

3. How often have you received feedback in L2 writing?
   - Very often received___  Fairly often received___  Not often received___  Almost never received___
4. Please indicate what you think of blended learning by placing a check (V) on the line at the point which best represents your view.

<table>
<thead>
<tr>
<th>Blended Learning</th>
<th>Useful</th>
<th>Easy</th>
<th>Boring</th>
<th>Motivating</th>
<th>Timesaving</th>
<th>Not helpful for improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Please indicate what you think of each of items given below by placing a check (V) in the box which best represents your views.

<table>
<thead>
<tr>
<th>No</th>
<th>Items</th>
<th>Very helpful</th>
<th>Fairly helpful</th>
<th>Not particularly helpful</th>
<th>Not helpful at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Learning to write</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Improvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Motivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Interest</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Collaborative work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Peer feedback</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Peer evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>T-L interaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Learning management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Sharing resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## C. Blended Learning and Feedback Types

6. Please indicate what you think of each of items given below by placing a check (V) in the box which best represents your view.

<table>
<thead>
<tr>
<th>Feedback Type</th>
<th>Useful</th>
<th>Easy</th>
<th>Boring</th>
<th>Motivating</th>
<th>Timesaving</th>
<th>Not Helpful for Improvement</th>
<th>Helpful for Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer Feedback online</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peer Feedback offline</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Feedback online</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Feedback offline</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Making revisions after feedback</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. Please indicate what you think of each of items given below by placing a check (V) in the box which best represents your view.

<table>
<thead>
<tr>
<th>Item</th>
<th>Method</th>
<th>Very satisfied</th>
<th>Somewhat satisfied</th>
<th>Not very satisfied</th>
<th>Not satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blended learning</td>
<td>teaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Web contents</td>
<td>teaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using BBS</td>
<td>teaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peer feedback</td>
<td>teaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher feedback</td>
<td>teaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collaborative learning</td>
<td>teaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Please indicate the appropriate ratio of online and offline peer feedback activities for writing classes.

   Online peer feedback (%) + Offline peer feedback (%) = Total 100%

D. Background Information (Place a check V next to the appropriate items or fill in the blanks.)

   Gender: Male ____ Female ____
   Age: 18-20 ____ 21-23 ____ 24-26 ____ 27-29 ____ 30+ ____
   School year: ___________________ Major: ___________________

Key words: blended learning, L2 writing, feedback, interaction, collaborative learning
Applicable levels: tertiary education

Authors: Yoon, Seo Young (Hankuk University of Foreign Studies): jaminjava@naver.com
Lee, Chung-Hyun (Hankuk University of Foreign Studies): chlee04@hufs.ac.kr
The Perspectives and Effectiveness of Blended Learning in L2 Writing of Korean University Students

Received: May 15, 2010
Reviewed: July 30, 2010
편집위원회 규정

제1장 총칙

제1조 본 위원회는 한국멀티미디어언어교육학회 편집위원회라 정한다.
제2조 본 위원회는 한국멀티미디어언어교육학회 회칙 제13조에 의거하여 학회 내에 둔다.

제2장 구성

제1조 편집위원장은 수석 부회장이 겸임하고, 임기는 부회장의 임기와 같다.
제2조 편집위원은 투고 논문을 세부 전공별로 심사할 수 있도록 각 영역 전문가를 고루 선정하며, 학술 연구 실적이 뛰어난 회원 중에서 학회 회장이 추천하여 이사회의 인준을 얻어 임명한다. 임기는 학회 임원의 임기와 같다.

제3장 기능

제1조 편집위원회는 학회지의 체제, 발간 횟수, 분량, 논문 심사 기준 및 투고 규정을 정한다.
제2조 편집위원장은 학회에 접수된 논문의 심사위원을 선정 의뢰하고, 편집위원회는 심사 결과를 참조하여 논문 게재 여부를 최종적으로 의결한다.
제3조 논문 게재 심사 이외의 편집위원장이 의결한 사항은 이사회의 인준을 거쳐 발효한다.
제4조 편집위원회는 학술지 투고 논문의 심사를 위해 심사위원의 선정과 게재 논문 결정을 위해 학술지 발간 기간에 맞추어 정기적으로 소집한다.
제5조 편집위원회는 편집위원장의 소집과 과반수 이상의 찬성으로 의결한다.

제4장 논문 심사 기준

제1조 내용의 적절성: 논문은 멀티미디어를 활용한 언어교육의 이론과 실제에 관한 비판, 실험 분석, 새로운 제안 등의 내용이어야 한다. 인접 학문에 관한 논문은 멀티미디어를 활용한 언어교육적 내용을 포함한 것이어야 한다.
제2조 내용의 독창성: 논문의 내용은 국내외 학술지에 게재되지 않은 새로운 및 착신한 것이어야 한다.
특히 표절, 연구부정행위 등에 위배되는 내용이 없어야 한다.

제3조 전개의 논리성: 내용의 구성과 전개는 멀티미디어 언어 교육 이론을 근거로 논리적이고 명료해야 한다.

제4조 연구 방법론의 타당성: 논문은 연구 문제 제기, 연구의 활용성 및 효과의 기대성 등에 대한 분석과 과정이 각각의 연구 방법에 적절해야 한다.

제5조 학문적 기여도: 논문의 내용은 멀티미디어 언어 교육의 이론과 실제를 창출하거나 발전시키는 데 기여할 수 있어야 한다.

제6조 형식의 적절성: 논문은 본 학술지 투고 규정에 적합한 형식을 갖추어야 한다.

제5장 심사 절차

제1조 접수: 논문 투고 규정에서 명시한 마감일까지 논문을 접수하고, 편집위원장은 투고 논문 도착 즉시 "접수 확인서"를 작성해서 저자(들)에게 전자우편으로 발송한다. 다만, 논문투고 규정 이나 작성요령을 지키지 않은 논문은 접수하지 않고 반송한다.

발행 예정일: (1) 봄호-4월 30일, (2) 여름호-8월 31일, (3) 겨울호-12월 31일

제2조 심사위원 선정: 편집위원장은 접수된 논문을 언어별, 전공별로 분류하고 회장단 및 편집이사와 협의하여 심사위원을 선정한다. 심사위원은 해당 언어 분야에서 학술 활동이 뛰어난 회원 중에서 3인을 선정한다. 이때 당해호의 투고자는 제외하는 것을 원칙으로 한다.

제3조 심사의뢰: 편집위원장은 해당 심사위원에게 심사 의뢰서, 심사 대상 논문 그리고 논문 심사 서 양식을 보낸다. 이때 논문 투고자의 이름과 소속이 심사위원에게 알려지지 않도록 투고 논문에서 삭제해서 보낸다. 세부 분야가 동일한 논문이 2편 이상 투고 된 경우에는 한 심사위원이 2편 이상을 심사할 수 있다.

제4조 심사: 각 심사위원은 배당된 논문을 심사하고 '게재', '수정 후 게재', '수정 후 재심사', '반송'의 4등급으로 판정하고, 심사평 난에 판정의 근거를 구체적으로 기술한다.

제5조 심사 보고서 제출: 각 심사위원은 심사 결과를 KAMALL 심사보고서 양식에 구체적으로 작성하여 수정이 표기된 파일을 전자우편으로 편집위원장에게 보낸다. 수정을 제의하는 경우에는 수정할 곳과 방향을 구체적으로 지시한다.

제6조 편집위원 회의: 편집위원장은 편집회의를 소집하고 이 편집회의를 통하여 심사내용을 검토한다. 3인의 심사위원 중에서 2인 이상이 '게재' 혹은 '수정 후 게재' 이상을 부여하면 '게재 가'로, 2인 이상이 '반송'으로 부여하면 '게재 불가'로 판정한다. 2인 이상의 '수정 후 재심사'로 판정하면 수정 후에 다시 심사위원의 심사를 받아 '게재 가'의 판정을 받아야 한다.

제7조 결과 통보: 편집위원장은 심사결과 보고서와 수정 요구사항이 제시된 파일을 전자우편으로 투고자에게 송부한다.

제8조 기타: 게재하기로 결정되었거나 게재된 이후라도 다른 학술지에 게재된 적이 있는 논문이나 표절, 연구부정행위가 밝혀진 논문에 대해서는 편집위원회의 의결에 따라 게재를 취소하고 일정 기간 동안 논문 제출을 제한한다.
논문 투고 규정

제정 1997년 4월 23일
개정 2000년 9월 5일
개정 2003년 9월 10일
개정 2008년 2월 20일
개정 2008년 12월 10일

1조 논문의 내용

멀티미디어 언어교육의 이론 및 실제에 관한 내용, 즉 멀티미디어 외국어교육 교과과정, 멀티미디어를 활용한 교수 및 학습 방법, 멀티미디어 외국어교육 수업 모형, 멀티미디어 어학실 구축과 활용 방안, 교사 교육, 코스웨어 및 소프트웨어 설계, 코스웨어 및 소프트웨어 비평 등에 관한 연구로서 교육적인 내용이 함축되어 있어야 한다. 또한 국내외의 학회지에 게재되지 않은 논문으로서 창의적인 내용이어야 한다.

2조 원고 제출

1) 심사용 논문은 "아래아 한글(로ellipsis)"로 작성된 파일을 전자우편으로 편집위원장에게 제출한다. 별지에 투고자의 논문 제목, 성명, 주소, 전화번호(집, 근무처 및 휴대폰), 팩스 번호, 전자우편 주소를 명기한다. 특히, 동일한 내용의 심사용 논문은 국내외 학회지에 중복투고 할 수 없다. 중복 투고가 밝혀진 논문에 대해서는 편집위원회의 의결에 따라 심사를 취소하고 일정기간동안 논문 투고를 제한한다.
2) 수정 보완을 요구한 논문의 최종 본은 "아래아 한글(로ellipsis)"로 작성된 파일을 전자우편으로 편집 위원장에게 제출한다.
3) 최종 교정을 위한 편집 원고는 출판사에서 저자(들)에게 전자우편으로 전송하며, 저자(들)는 이를 인쇄하여 완벽하게 교정한 교정지를 우편으로 경희대 서울캠퍼스에 동기 송달로 우송한다.
4) 논문의 저작권

Multimedia-Assisted Language Learning (MALL) 학술지에 게재되는 모든 논문의 저작권은 한국멀티미디어 언어교육학회가 소유한다.
5) 마감 일자는 다음과 같다.
(1) 봄 학술지: 1월 31일까지
(2) 여름 학술지: 5월 31일까지
(3) 겨울 학술지: 9월 30일까지
6) 원고 보낼 곳:
446-701 경기도 용인시 기흥구 서천동 1번지 경희대학교 영미어학부 성기완 교수 (수석부회장/편집위원장)
3조 논문의 체제

1) 논문의 전체 길이는 학회지 기준 25쪽 이내로 한다.
2) 논문은 A4 용지 크기에 작성한다.
3) 논문의 위, 아래 여백은 42mm로, 왼쪽, 오른쪽 여백은 35mm로 미리말, 꼬리말은 12mm 한다.
   줄 간격은 제목은 130%, 영문 초록은 160%, 본문은 160%, 참고 문헌은 160%로, 각 주는 145 %로 한다. 본문의 장평은 영문, 한글 논문 모두 95%, 자간은 영문 논문은 -2, 한글 논문은 -8 로 한다. 기타 자세한 것은 논문의 체제의 예를 참조한다.
4) 논문의 제목은 건명조 16으로, 장 제목(I, II, III...)은 건명조 13, 절 제목(1., 2., 3., ...)은 중고 딥 11, 소 제목(1, 2, 3, ...)은 중고 딥 10,5. 세부 제목((1), (2), (3), ...)은 신명조 10.5로 한다. 본문과 초록은 신명조 10으로 한다. 상위 제목부터 하위 제목은 아래와 같은 기호로 나눈다.
   예: I., I, 1), (1), ①
5) 논문의 제목 길이는 가급적 2행 이내로 한다.
6) 초록(Abstract)은 영문으로 200단어 이내로 작성한다. (괄호 안에 단어 수를 명기한다.)
7) 모든 제목은 들여 쓰기를 하지 않는다.
8) 본문의 각 문단은 국문 2자, 영문 3자를 들여 쓰기(indentation)를 한다.
9) 참고 문헌, 표, 그림 등은 본 학회가 APA의 양식을 토대로 만든 학회지 양식을 따른다.
10) 한글 논문에는 영어 단어를 혼용하지 않는다. 영어 용어는 논문 전체에서 처음 한번만 괄호 안에 제시한다. 영어 단어나 문장의 예는 이탤릭체로 하고 한글 작은따옴표 (‘ ’)로 표시한다.
11) 영어 논문에 제시되는 국문의 예 및 참고 문헌은 로마자화 한다.
12) 영어 논문에 제시되는 영어 단어나 문자의 예는 이탤릭체로 한다.
13) 한글 논문, 영어논문 공히 논문 마지막에 제시하는 주제어와 적용 수준, 저자 정보 (저자구분
   [제1저자, 제2저자], 소속, 이메일)는 영어로 명기한다.
14) 논문 체제의 예는 다음과 같다.
## 논문 제목

Jerry W. Larson (Brigham Young University)

### Ⅰ. INTRODUCTION

Over the years various techniques and innovations in language testing...
Multimedia-Assisted Language Learning

REFERENCES

APPENDIX

Key words: CALL, Internet-based language learning, text-chat
Applicable levels: secondary education

Author(s): Kim, Cheolsu (Hankuk University, 1st author): ckim@hankuk.ac.kr
Park, Jinju (Gyounggi University, 2nd author): jpark@kyounggi.ac.kr

Received: February 15, 2005
Reviewed: March 20, 2005
논문 투고 규정

4조 기 타

1) 영어 논문 제목에는 이름과 성의 순서(예: Min-Su Kim)로 하며, 영문 초록 및 표지 목차에는 성과 이름 순(예: Kim, Min-Su)으로 통일한다. 단, 논문 투고자의 특별한 요청이 있을 시에는 투고자가 정한 철자법을 따른다.
3) 게재로 결정된 원고의 교정은 투고자가 책임을 지고 행한다.
4) 투고자는 논문 게재 시 소정의 게재료를 납부하여야 한다. 기준 쪽수 초과 시에는 한 쪽 당 1 만원을 추가로 부담하여야 한다.
5) 회원으로 가입한 후 논문을 투고하여 게재할 수 있다.
6) 게재된 논문의 투고자에게는 학회지 3부를 증정한다.
7) 게재 예정 증명서는 편집 위원회에서 ‘게재 가’로 결정된 이후에만 발급 받을 수 있다.
Information for Contributors

Purpose

Multimedia-Assisted Language Learning, the journal of the Korea Association of Multimedia-Assisted Language Learning (KAMALL) is devoted to the application of technology to foreign language teaching and learning. Multimedia-Assisted Language Learning is a refereed journal and publishes articles, research studies, reports, book and software reviews, and professional news and announcements related to media technology, especially Computer-Assisted Language Learning (CALL), Multimedia-Assisted Language Learning (MALL) and Web-Based Instruction (WBI).

General

- Multimedia-Assisted Language Learning is published three times a year, in Spring (April), Summer (August, International Issue), and Winter (December).
  The language of the International Issue is normally English.
- Papers previously published or accepted for publication elsewhere will not be considered.
- Papers should be submitted to the Editor-in-chief:
  Prof. Kiwan Sung
  School of English Language & Culture
  Kyung Hee University
  1 Seocheon-dong Giheung-gu
  Yongin-si Gyeonggi-do, 446-701 Korea
  Email: kamallpublish@hanmail.net

Submission of Manuscripts

- Submission Date: the spring issue, January 31
  the summer issue, May 31
  the winter issue, September 30
- Manuscript Length: No more than 25 double-spaced pages preferred (including abstract, references, notes, figures, and tables).
- Manuscript Format: MS-Word or HWP (Hangul Word-processing) format.
- Submission Requirements: Authors should submit their manuscript including an abstract of no more than 200 words through e-mail. Please include a cover sheet containing the title of the manuscript, name, affiliation, address, home, office, and mobile phone numbers, e-mail address, and key words of the manuscript.
연구 윤리에 관한 규정

제1장 총칙

제1조 (목적) 이 규정은 한국멀티미디어 언어교육학회의 학술지에 학술 연구 결과를 게재하고자 할 때 논문 투고와 심사 및 학술지 편집 과정에 있어서 논문의 저자, 학술지의 편집 위원회 및 심사위원이 지켜야 할 윤리를 규정함을 목적으로 한다.

제2조 (적용 범위) 이 규정은 한국멀티미디어 언어교육학회 학술지인 Multimedia-Assisted Language Learning에 적용된다.

제2장 논문 저자 윤리규정

제1조 (표절) 논문 저자는 자신이 수행하지 않은 연구의 일부분을 자신의 연구 결과인 것처럼 논문에 제시하지 않는다. 타인의 연구 결과를 참조할 경우에는 반드시 출처를 명시해야 하며, 그 일부분을 자신의 연구 결과이거나 주장인 것처럼 제시하는 것은 표절이 된다.

제2조 (연구업적) 저자는 자신이 실제로 수행하거나 공헌한 연구에 대해서만 저자로서 책임을지며 업적으로 인정받는다. 논문 저자의 순서는 연구에 기여한 정도에 따라 정확하게 반영한다. 직책상 이유로 제1저자로서 업적을 인정받거나, 연구에 기여했음에도 공동저자에서 배제되는 것은 정당화될 수 없다.

제3조 (중복 게재) 저자는 국내외를 막론하고 이전에 출판된 자신의 연구물이나 또는 게재 예정이거나 심사 중인 연구물을 새로운 연구물인 것처럼 투고하지 않는다. 이미 발표한 연구 결과를 다른 언어나 다른 독자를 대상으로 다시 출판하기 원하는 저자는 논문을 게재한 학술지에서 프리프레스로 게재하여 동일한 주제에 관련된 논문을 게재하도록 한다.

제4조 (인용 및 참고 표시) 공개된 학술 자료를 인용할 경우에는 정확하게 기술하고 정식에 속하는 자료가 아닌 만큼 그 출처를 명확하게 밝힌다. 논문 및 연구계획 심사 시 또는 개인적인 접촉을 통해 얻은 자료의 경우에도 그 정보를 제공한 연구자의 동의를 얻은 후에만 인용해야 한다. 타인의 글을 인용하거나 타인의 아이디어를 차용할 경우에는 반드시 인용 여부 및 참고 여부를 밝히며, 어디까지가 선행연구의 결과이고 어디서부터 본인의 독창적인 생각이나 해석인지를 독자가 알 수 있도록 해야 한다.

제5조 (연구 자료의 진실성) 논문 저자는 연구 결과에 중대한 영향을 미칠 수 있는 테이터 및 분석 결과를 왜곡 또는 조작하지 않고, 연구 결과를 진실하고 공정하게 제시한다.

제6조 (논문의 수정) 저자는 논문 심사 과정에서 제안된 편집위원과 심사위원의 의견을 가능한
한 수용하여 논문에 반영되도록 노력해야 하며 이들의 의견에 동의하지 않을 경우에는 그 근거와 이유를 상세하게 적어서 편집 위원회에게 알리어야 한다.

제3장 편집위원회 윤리규정

제1조 편집위원회는 투고된 논문의 게재 여부를 결정하며 결정 과정에서 저자의 인격과 학자로서의 독립성을 존중한다.

제2조 편집위원회는 투고된 논문을 심사하는 데에 있어서 저자의 성별, 나이, 소속 기관, 선입견, 친분관계와 무관하게 오로지 논문의 질적 수준과 논문 심사 규정에 근거하여 공정하게 취급해야 한다.

제3조 편집위원장은 투고된 논문의 심사를 해당 분야의 전문적 지식과 공정한 판단 능력을 지닌 심사위원에게 의뢰하여 가능한 한 객관적인 평가가 이루어질 수 있도록 노력해야 한다.

제4조 편집위원장은 투고된 논문의 게재가 결정될 때까지는 저자에 대한 사항이나 논문의 내용을 공개해서는 안 된다.

제4장 심사위원 윤리규정

제1조 심사위원은 학술지의 편집위원장이 의뢰하는 논문을 심사규정이 정한 기간 내에 성실하게 평가하고 평가 결과를 편집위원장에게 통보해야 한다. 만약 자신이 논문의 내용을 평가하기에 적임자가 아니라고 판단할 경우에는 편집위원장에게 지체 없이 그 사실을 통보한다.

제2조 심사위원은 논문을 개인적인 학술적 신념이나 친분관계를 떠나 객관적 기준에 의해 공정하게 심사해야 한다. 심사 대상의 논문을 충분히 검토한 다음 심사해야 하며, 충분한 근거를 자세하게 명시하여 심사 보고서를 작성해야 한다.

제3조 심사위원은 전문 지식으로서 저자의 인격과 독립성을 존중해야 한다. 심사 보고서에는 논문에 대한 자신의 판단을 밝히되 수정 보완이 필요하다고 생각하는 부분에 대해서는 상세하게 설명해야 한다. 가급적 정중하고 부드러운 표현을 사용하고 저자를 비하하거나 모욕적인 표현은 삼간다.

제4조 심사위원은 심사 대상 논문에 대해 비밀을 지켜야 한다. 논문 게재가 최종적으로 결정되기 전에 논문을 다른 사람에게 보여주거나 논문 내용에 대해서 다른 사람과 논의하지 말아야 한다.

제5장 윤리규정 시행 지침

제1조 (윤리규정 서약) 한국멀티미디어 언어교육학회 학술지의 Multimedia-Assisted Language Learning에 논문을 투고하는 모든 사람은 윤리규정의 발효시 윤리규정을 준수하기로 서약
연구 윤리에 관한 규정

한 것으로 간주한다.

제2조 (윤리규정 위반의 보고) Multimedia-Assisted Language Learning 발행 학술지 게재논문
에서 이중출판, 이중계제, 표절, 조작, 모방 등과 같이 연구 윤리 규정 위반 사례가 드러날 경우 즉시 학회 임원회에 보고하여 사실 여부를 확인한다.

제3조 (학회 임원회의 권한) 임원회는 윤리규정 위반으로 보고된 연구 논문에 대하여 충분한
검토와 절차한 조사를 실시한 후, 윤리 규정 위반이 사실로 판명된 경우에는 회장에게 적절
한 제재 조치를 건의할 수 있다.

제4조 (임원회의 조사 및 심의) 윤리규정 위반으로 보고된 논문 저자는 임원회에서 행하는 조사
에 협조해야 한다. 또한 윤리규정 위반으로 보고된 논문 저자에게 충분한 소명의 기회가
주어져야 한다. 학회의 최종적인 징계 결정이 내려질 때까지 임원회는 해당 논문 저자의
신원을 외부에 공개해서는 안 된다.

제5조 (징계의 절차 및 내용) 회장은 임원회를 소집하여 징계 여부 및 징계 내용을 최종적으로
결정한다. 연구 윤리 규정을 위반했다고 판명된 논문 저자에 대해서는 경고, 해당 논문 게재
취소 (내용 첨가), 회원자격 정지 내지 박탈 등의 징계를 할 수 있으며 이 조처를 다른 기관
이나 개인에게 알려 놓 수 있다.

제6조 (윤리규정의 수정) 윤리규정의 수정 절차는 본 학회 회칙 개정 절차에 준한다.

제7조 (윤리규정의 공포) 모든 윤리규정은 학회 회원들에게 공지적으로 공포한다. 비정기적으
로도 윤리규정의 개정 및 필요에 따라 학회 회원들에게 공포한다.
한국멀티미디어언어교육학회지 중요 양식 안내


1. 본문 속에서의 인용이나 괄호 안의 문헌 표기

   1) 직접 인용 1: They stated, “The meanings of ‘audience’... tend to diverge in two general directions: one toward actual people external to a text, the audience whom the writer must accommodate; the other... listeners” (Kirsch & Roen, 1990, p. 14).

   * 위와 같이 인용문은 “ ” 안에 넣고, 그 안에서 다시 인용이나 강조를 할 때는 ‘ ’를 쓴다. 인용의 문장이 끝나도 마침표는 괄호(참고 문헌의 정보)가 끝난 후에 찍는다. 괄호 안에는 보기처럼 저자, 연도, 쪽수를 쉼표로 분리하여 표기하고, p.(한 쪽의 경우) 혹은 pp.(여러 쪽의 경우) 뒤에 한 칸을 띄고 쪽수를 쓴다. 한글 논문도 이에 준한다.

   2) 직접 인용 2: Kirsch and Roen (1990) pointed out that “The meanings of ‘audience’... tend to diverge in two general directions: one toward actual people external to a text, the audience whom the writer must accommodate; the other... listeners” (p. 14).

   3) 직접 인용 3:

   According to Kirsch and Roen (1990):

   The meanings of ‘audience’... tend to diverge in two general directions: one toward actual people external to a text, the audience whom the writer must accommodate; the other... listeners (p. 14).

   * 위와 같이 직접 인용한 문장은 본문 기준으로 왼쪽 및 오른쪽 각각 “5 ch” 들여쓰기를 한다.

   4) 간접 인용:

   (1) 한글 논문: 조세경과 이충현(1998)은 멀티미디어는... 멀티미디어는 외국어 교수 및 학습에서 ... (조세경, 이충현, 1998).

   (2) 영어 논문: Ellington (1998) stated that multimedia is defined as ...

   Multimedia is defined as ... (Ellington, 1998)

   5) 1명의 저자: Ellington (1998) stated that multimedia is defined as ...

   6) 2명의 저자: 본문이 영어이면 “and”로, 한글이면 “과/와”로 연결하고, 영어는 괄호속에서 “&”를 사용한다.
한국멀티미디어언어교육학회지 중요 양식 안내

1) 한글 논문: Tomlinson과 Henderson(1995)은 그들의 선행연구(Tomlinson & Henderson, 1991)에서 ...

2) 영어 논문: Tomlinson and Henderson (1995) reported that their previous study (Tomlinson & Henderson, 1991) showed ...

7) 3~5명의 저자: (1) 처음 언급할 때는 모든 저자의 이름을 표기하고, (2) 그 다음부터는 영어 논문에는 “et al.”로, 한글 논문에는 “등”이나 “외 3인”이라는 식으로 표기한다.

(1) 한글 논문: Ahmad, Corbett, Rogers, 와 Sussex(1985)는 ...
   영어 논문: Ahmad, Corbett, Rogers, and Sussex (1985) found that ...

(2) 한글 논문: Ahmad 등(1983)은 컴퓨터는 ... 혹은 Ahmad 외 3인(1983)은 컴퓨터는 ...
   영어 논문: Ahmad et al. (1985) stated that computers should be used for ...

8) 6명 이상의 저자: 처음 언급할 때부터 영어 논문에는 “et al.”로, 한글 논문에는 “등” 혹은 “의 5인”으로 표기하고, 참고 문헌(References)에는 이름을 모두 표기한다. et al.은 라틴어 et alii (and others)의 약어이므로 al.에만 점을 사용하고, 이탤릭체로 표기하지 않는다.

9) 여러 저자를 괄호 안에 소개: 여러 저자를 소개할 경우, 알파벳순으로 배열하고, 세미콜론(;)으로 분리한다. 동일 저자의 것은 연대순으로 배열하고, 쉼표로 분리한다.
   Hill (1988, 1990, 1995) reported that some research studies (Ahmad et al., 1985; Bangs, 1987; Higgins, 1988; Windeatt, 1990) dealt with a network-based ...

10) 동성 이명(同姓異名)의 저자들: 본문에서는 이름의 약자를 사용하여 혼동을 피한다. 비록 연도가 다르더라도 이름의 약자를 사용하여 표기한다.

(1) 외국인 저자: F. R. Jones (1993) and G. Jones (1986) pointed out that ...

(2) 한국인 저자: 한국인들은 성만으로는 혼동이 많으므로, 원 저자의 영문 이름 표기 방식에 따라 성 앞에 이름의 머리글자(Min-Su Kim ⇒ M-S. Kim)를 쓴다. 한글 논문에서 한국인 저자는 성명을 다 쓴다.

2. 표(Table)나 그림(Figure) 자료를 그려 넣는 경우

표나 그림 자료는 편집하는데 제한점이 많이 있으므로 다음 크기에 준하여 넣는다.

1) 표: 한 면에 넣을 수 있는 표의 최대 한도의 가로 크기는 14cm, 세로의 크기는(표의 타이틀을 포함하여) 20cm로 한다. 표의 제목(태고딕 9.5, 줄간격 150%)은 표의 위쪽 중앙에 위치하여 다음 표기와 같이 쓴다.
2) 그림이나 출력 화면: 한 면에 넣을 수 있는 그림의 최대 한도의 가로 크기는 14.5cm, 세로의 크기는(그림의 타이틀을 포함하여) 21cm로 한다. 그림의 제목(트레이터 9.5, 줄간격 150%)은 그림의 아래 중앙에 위치하며 아래 보기와 같이 쓴다.

<table>
<thead>
<tr>
<th>Cognitive strategies</th>
<th>Experimental</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word level strategies</td>
<td>61</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>38.36%</td>
<td>52%</td>
</tr>
<tr>
<td>Comprehension level strategies</td>
<td>98</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>61.63%</td>
<td>48%</td>
</tr>
</tbody>
</table>

3) 영상 자료: 영상 자료는 컴퓨터에서 편집이 안 되므로 가장 화질이 좋은 것으로 별도로 출력하여 수정본과 함께 제출하여야 한다.

3. 참고 문헌 목록(References) 표기

참고 문헌에는 논문에 언급된 것만을 빠짐 없이 저자 성의 알파벳 순으로 싣는다. 한글 논문의 참고 문헌 목록에 한글 문헌과 영어 문헌을 싣을 경우, 한글 문헌을 먼저 가나다순으로 싣고, 영어 문헌을 저자 성의 알파벳 순으로 싣는다. 한국어 참고 문헌 목록은 영어에 준한다. 단 논문을 영문으로 쓰 경우, 참고문헌에 싣을 한국어 저작은 필자와 논문 및 책제목을 Yale 표기법의 로마자로 표기하고 [ ] 안에 영어로 번역을 넣는다.
1) 학술지의 논문 (Journal Article)


2) 책 (Book)


번역서 (Translation)


3) 편집된 책에 실린 논문이나 장 (An Article or Chapter in an Edited Book)


Stevens, V. (1989). A direction for CALL: From behavioristic to humanistic courseware. In M. C. Pennington (Ed.), *Teaching languages with computers* (pp. 31-44). La Jolla: Athelstan.


* 책 혹은 논문의 저자, 연도, 제목 등은 저널이나 책에서의 표기 방법과 같다. 그러나 편 저자
(Ed., 혹은 Eds.)의 성명은 책 혹은 논문의 저자의 표기 방법과는 달리 이름의 약자를 먼저 쓰고 성을 뒤에 쓴다.

4) 잡지(Magazine Article)
* 잡지 기사는 월간일 경우에는 출간 달까지 표기하고, 주간일 경우에는 두 번째 보기와 같이 달과 일까지 표기한다.

5) 뉴스레터(Newsletter)

6) 신문기사(Newspaper Article)
* 신문 기사의 날짜까지 표기한다. 또한 기사가 비연속적으로 분리된 경우에는 위와 같이 해당 면을 표기한다.

7) 연구 보고서(Report)
* 보고서의 제목을 이탤릭체로 한다. 연구보고서를 ERIC에서 입수한 경우 위와 같이 ED 번호를 괄호 안에 둘러표기한다.
8) 학회 발표 논문(Proceedings of Meetings and Symposia)


* 발표 논문집이 출간된 경우 논문 제목은 보통체, 논문집의 이름은 이탤릭체 표기한다. 이와 반대로 미 간행 발표 논문집일 경우에는 논문 제목은 이탤릭체, 논문집의 이름은 보통체로 표기한다.

9) 학위 논문(Doctoral Dissertations and Master’s theses)


10) 인터넷 자료(Internet Resources)

(1) 온라인 저널(On-line Journal)


Lunn, F. (1996, June 18). Summary of responses to request for CALL lab info. *TESLCA-L [Discussion list]*. Retrieved December 18, 1996, by e-mail: listserv@cunyvm.cuny.edu

Lunn, F. (1996, June 18). Summary of responses to request for CALL lab info. *TESLCA-L [Discussion list]*. Retrieved December 18, 1996, by e-mail: listserv@cunyvm.cuny.edu


* 인터넷 자료는 자료를 수집한 년, 월 및 일자까지 표기한다. 그리고 URL을 표기한 후 마침표를 넣지 않는다.

11) 컴퓨터 프로그램, 소프트웨어 혹은 프로그래밍 언어(Computer program, Software, or Programming language)


* 컴퓨터 프로그램, 소프트웨어 혹은 프로그래밍 언어는 이탤릭체로 표기하지 않는다. 이름 뒤 대괄호([ ])에 [컴퓨터 소프트웨어] ([Computer software])라고 표기한다. 저자가 없는 경우에는 컴퓨터 프로그램 명을 저자의 위치에 표기한다.
한국멀티미디어언어교육학회
The Korea Association of Multimedia Assisted Language Learning (KAMALL)

446-701 경기도 용인시 기흥구 서천동 1변지
경희대학교 영문학부 이상민(총무이사)
Tel: 031-201-3632, CP: 010-3455-7537
Email: kamallinfo@gmail.com 홈페이지: http://www.kamall.or.kr
※홈페이지에서 온라인으로 가입할 수 있습니다.

■ 입회비: ₩20,000 (연회비 ₩20,000) ■ 평생회비: ₩300,000
우리은행 1005-101-615565 한국멀티미디어언어교육학회

회원 입회 원서

<table>
<thead>
<tr>
<th>성</th>
<th>영문</th>
</tr>
</thead>
<tbody>
<tr>
<td>주민등록번호</td>
<td></td>
</tr>
</tbody>
</table>

근무처
직위

주소
직장
전화
FAX

자택
전화
FAX

Email
휴대폰

최종 학력
국 내
국 외

연구/관심분야

<table>
<thead>
<tr>
<th>인터넷</th>
<th>CD-ROM Titles</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) 활 용</td>
<td>(1) 활 용</td>
</tr>
<tr>
<td>(2) 연구 개발</td>
<td>(2) 연구 개발</td>
</tr>
<tr>
<td>(3) 교육 Workshop</td>
<td>(3) 교육 Workshop</td>
</tr>
</tbody>
</table>

멀티미디어언어교육학회 활동목적에 동의하여 회원입회원서를 제출합니다.

201 년 월 일

신청인:

한국멀티미디어언어교육학회장 귀하
The Korea Association of Multimedia Assisted Language Learning (KAMALL)

Prof. Sangmin Lee, Secretary General
School of English Language & Culture, Kyung Hee University
1 Seocheong Giheung-gu Yongin-si Gyeonggi-do 446-701, Korea
Email: kamallinfo@gmail.com Homepage: http://www.kamall.or.kr
※ Membership application is available online.

MEMBERSHIP APPLICATION FORM

<table>
<thead>
<tr>
<th>Name in Korean</th>
<th>Name in English</th>
<th>First</th>
<th>Last</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Security Number</td>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affiliation</td>
<td>Position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>Home</td>
<td>Phone</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Office</td>
<td>Phone</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>FAX</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>FAX</td>
<td></td>
</tr>
<tr>
<td>email</td>
<td>Cellular</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Phone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Degree Granted</td>
<td>In Korea</td>
<td>In foreign country</td>
<td></td>
</tr>
</tbody>
</table>

Check (√) your interested field.

<table>
<thead>
<tr>
<th>Computer</th>
<th>Use</th>
<th>CD-ROM</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td></td>
<td></td>
<td>Research</td>
</tr>
<tr>
<td>Teacher Training/Workshop</td>
<td></td>
<td></td>
<td>Teacher Training/Workshop</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Internet</th>
<th>Use</th>
<th>Others:</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td></td>
<td></td>
<td>Research</td>
</tr>
<tr>
<td>Teacher Training/Workshop</td>
<td></td>
<td></td>
<td>Teacher Training/Workshop</td>
</tr>
</tbody>
</table>

I hereby agree with the goals of KAMALL and submit this application.

Applicant’s Signature: ___________________ Date: ___________________

Membership Fees
* New membership fee: $40 including annual fee, $20
* Overseas membership fee: $40
* Life-time membership fee: $250
* Library membership fee: $100

The payment should be made to Woori Bank account 1005-101-615565, and a copy of the receipt must be mailed to the Secretary General with this application form.