Let's Write Digitally: A Pathway into Future

Bilal Ahmad Qureshi
International Business Languages Department,
Seokyeong University, Seoul, South Korea
underliverpool@gmail.com

ABSTRACT

Writing instructors often face problems when it comes to designing an effective peer-to-peer review interface. Limited contact hours, learners' hesitation to offer criticism in a face-to-face peer-editing session, and writing complexity are the main reasons why most EFL learners fail to make the most of peer-to-peer feedback situations. This study explores the benefits of using online discussion boards to meet these challenges and compares the attitudes of university students in Korea and those in Pakistan towards the use of online discussion boards for writing development. In this age of digital technologies, most students own some sort of smart device, whereas the rest have access to computers or a digital device at their school library. Of the various types of internet resources, microblogging and social networking interfaces have most frequently made their way into ESL education. Feedback comments provided through online discussion boards facilitate substantive improvements in three important aspects: Writing skills, Critical analysis, and Social Interaction. Data was collected in the form of an attitudinal survey, writing samples, and feedback comments for the duration of one academic semester. A mixed method approach was adopted for data collection and analysis. A comparison was performed to see the difference between participants' attitudes towards writing enhancement at a Korean university and a university in Pakistan with 103 and 86 participants respectively. The findings on writing samples and peer feedback from students in both universities supported the conclusion that online discussion boards were helpful for improving students' writing, most likely due to the hesitation in face-to-face encounters to give feedback that could be taken as criticism. In addition, the study offers some recommendations for ESL instructors regarding setting up online discussion boards for effective peer feedback and online communication.

Keywords: Online discussion boards, feedback comments, peer review, writing cycles, control and experimental group.

Introduction

One of the reasons English as a Foreign/Second Language (EFL/ESL) writing is becoming a center of attention for many researchers is that EFL writing is going through a phase of transformation due to the emergence of growing online technologies (Salmon, 2013a). As more and more online resources are developing and becoming an essential part of human life, EFL instructors might feel an obligation to incorporate online technologies into EFL writing instruction as well. The involvement of computer and internet in our daily life is playing a decisive role in designing our future plans and course of actions (Ho & Savignon, 2007). As information technologies have penetrated deeply into human life style, the educators are convinced not to reject them in the education context but to use their strengths for the development of learners' skills and knowledge. In contrast to the rejection towards the use of computer and internet for EFL writing classes as some might consider them a distraction for learners' writing development, the user-friendly features and the pragmatism of online

resources can be utilized as a powerful tool for learners in the classroom generally, and in the EFL context particularly. As Hyland (2003) insisted that the students benefit most from peer feedback in writing classes. The main purpose of this study is to validate the existing studies conducted on the expediency of internet technologies for EFL classrooms in general and EFL writing classes in particular.

This study was conducted using undergraduate EFL learners at two different universities, one in Pakistan the other in South Korea. It specifically examines EFL learners' attitude towards the use of online discussion boards for writing development. The effectiveness of online discussion board communication for both Korean and Pakistani university EFL learners' writing development was also examined. Prior research regarding the use of online discussion boards, especially in English as foreign language acquisition, is reviewed. This study discusses writing as a social practice and an academic skill. It speculates on how online discussion boards might be used to promote higher quality academic writing and support collaborative learning. This study of Korean and Pakistani undergraduates focuses on how writing skills could be improved within shared spaces – discussion boards. It further shows that they might also be used to communicate ideas and generate course specific content. The study also explored how students, through such activities, were able to improve their academic writing skills and engage more critically in learning.

Research Questions
   a) How do the learners respond to online discussion board communication used for peer feedback in the EFL writing context?
   b) Are the writing abilities of both Korean and Pakistani university EFL learners enhanced through online peer feedback?
   c) How successfully do the peer feedback comments, provided in a peer feedback session, lead students to text revision?

Method
This study of a Korean and a Pakistani university undergraduates provided a comparison between online (the experimental group) and face-to-face (the control group) modes of peer feedback for EFL learners' writing development. Experimental group learners at both of the universities mentioned above used online discussion boards for providing feedback to their peers. Control group learners provided feedback to their peers in face-to-face settings. This study further focused on how writing skills could be improved within a context where online discussion boards are provided for peer-feedback and social interaction among writing learners. This study is unique because of its design that enables it to address the most important questions in one setting: e.g. (a) what are learners' feelings of engagement for writing through online discussion boards, (b) how is their EFL writing enhanced through the online interface, and (c) which group, online or face-to-face group, incorporates more peer feedback comments into their text revision.

In addition, this study gains importance since it has been conducted on a comparatively larger number of Korean and Pakistani participants (n-103, 86) that may help to address the issues of its validity and reliability. Some of other existing studies (e.g., Warschauer, 1996. 2013) were conducted on comparatively smaller sample sizes (n=16, 24). A mixed method approach was adopted for data collection for the period of one academic semester (16 weeks). Participants were both males and females at both universities within the age range 18 and 26. Learners were engaged in a four essays writing project with two drafts for each essay. Data was collected in form of the survey result, essay writing samples, and peer feedback samples.

Method Selection in Relation to the Research Questions

In order to justify the selection of research methods adopted and their purpose, a detailed explanation has been provided following each of the research questions.

Research Question 1

(a) How do the learners respond to online discussion board communication used for peer feedback in the EFL writing context?

This research question helps to investigate EFL learners' attitudes towards online discussion board communication in order to provide feedback for peers' writing. A quantitative analysis was conducted using a five point Likert scale survey of 20 items that the participants filled out at the end of the 16-week semester. Quantitative research methods are helpful to analyze data precisely and with statistical accuracy (Burn, 2000). Therefore, for this study, quantitative data was obtained and analyzed according to the required components (See Appendix A). Quantitative analysis was conducted to examine Korean and Pakistani learners' English writing motivation in relation to the use of online discussion boards for writing classes. In addition to the use of quantitative research methods for data analysis, qualitative research methods were also used to interpret learners' interview responses. Instead of a statistical data description, qualitative descriptions offer a more descriptive and narrative style of data (Burns, 2000).

Despite some perceptions regarding the ineffectiveness of online chat rooms and discussion boards in writing classes (Ho & Savignon, 2007), this research question is set to determine learners' clear points-of-view and responses regarding the effective use of discussion boards for peer interaction and peer feedback in writing classes. The first research question attempted to address and satisfy many concerns regarding the use of online resources in EFL writing classes. Additionally, the results of the first research question might provide practitioners with a new approach to be introduced in their writing classes in order to help students enhance their interest and motivation towards computers for developing their writing skills.

Research Question 2

(b) Are the writing abilities of Korean and Pakistani university EFL learners enhanced through online peer feedback?

The second research question is set to determine if learners show any kind of improvement in their writing skills in a context where they have access to online discussion boards for peer-feedback. The data is collected in the form of learners' essay writing samples. For analysis of their writing improvement, both drafts for first and fourth essay of 20 randomly selected participants' were collected at both universities. The data was collected and analyzed based on a quantitative research approach in order to respond the second research question. Writing samples from the 20 participants in each group, experimental and control, were collected for a quantitative analysis. This analysis helped to examine if the learners improved their scores on the final draft in the first and fourth writing cycles. This includes an examination of learners' writing samples by two professional writing raters. The raters examined writing improvement on their essays' final draft in both the first and fourth writing cycles for both the experimental and control group participants. The raters performed analyses on learners' writing samples for determining if there was any improvement in learners' writing in a context where learners have been giving and receiving peer feedback to each other either through online discussion boards or in traditional setting (face-to-face).

Research Question 3

c) How successfully do the peer feedback comments, provided in a peer feedback session, lead students to text revision?

In order to address research question 3, Liou & Peng's (2009) methodology was adopted as a guideline to analyze the effect of feedback comments on their peers' text revision. In order to find whether peer feedback comments help students revise their texts, a systematic procedure was adopted to perform an analysis (See Appendix B). The analysis of peer comments performed in the first and fourth writing cycles (a part of four essay writing project) was based on a rubric originally developed by Liu & Sadler (2003) and later adapted to fit the purpose of the current study. Each feedback comment contained several sentences; consequently, the number of sentences for each feedback comment varied. In order to examine the different types of revision, all peer comments were categorized into three different types, based on their discourse functions: evaluation (comments on the good or bad features of writing), clarification (probing for explanations and justifications), and suggestion (pointing out the direction for changes) (Liu & Sadler, 2003). Another perspective on peer comments is examining whether the comments lead to text revision or not; this is called revision-oriented comments (See Appendix C). Those comments with socializing and communication purposes (chatting and complimentary evaluation) did not lead to text revision are called non-revision-oriented comments. The peer comments in the first and fourth writing cycles were analyzed and compared in terms of discourse functions, focus of text areas, and revision nature (revision-oriented or not).

To examine the revision quality, two expert writing raters read students' first drafts and the revisions (text segments changed based on revision-oriented comments) to determine if the revisions were effective in terms of form and meaning to fit the entire text. The inter-rater agreement was 97% in both the first draft and the final draft of their essays in both the traditional setting (face-to-face feedback) and the online discussion board setting. The revision size (amount/elements of revision required for peer feedback) was classified as punctuation, words, phrases, clauses, sentences, and paragraphs in student essays. The term 'revision size' means the amount of revision based on the above mentioned categories in result of peer-feedback. This shows that a revision-oriented comment (in both settings, face-to-face or online discussion board) may result in several units of revision in the learners' second draft. The purpose of analyzing students' revision quality was to determine if students made successful revisions for their drafts that directly resulted from the peer comments.

Literature Review

With the rapid development in internet technologies, electronic devices (e.g., smartphones, tablet PCs, laptop computers, etc.) are penetrating deeper into human lifestyles across the globe. In Korea, one of the most technologically advanced countries in the world, the rate of using digital devices (e.g., cellular phones) is very high. According to the data provided by *International Telecommunication Union (2014)*, the rate of using mobile phones in South Korea in 2014 was 111%, which means there are more mobile phones than there are people. However, the penetration rate for smart phones among mobile-phone users in the whole country was 82.3% at the end of June 2015, while more than 97% Korean university students possessed smartphones (Choi & Kim, 2015). Similarly, most Pakistani university students possess smart device (e.g. smartphone, tablet, or computer) and the rest have the access to computers at their universities (Javed, 2012). This shows that, in this big global digital devices market, the smartphone is gaining momentum and becoming more and more an essential part of human life, especially for college students.

Following the statistics provided above regarding the emergence of digital devices in both Korean and Pakistani education context, it seems that bringing these digital devices into the EFL context by educating students about their potential usefulness is a reasonable strategy as opposed to offering resistance towards the use of smartphones, considering them distractions to learning. According to the data, an average Korean university student spends 3~4 hours per day using a smartphone for different purposes: e.g., browsing the internet, reading news or accessing social media (Choi & Kim, 2015). Whereas, most Pakistani university students spend 90 minutes to 2 hours per day using digital devices (Javed, 2012). With this greater investment of time associated to digital devices, social scientists in the EFL field (e.g. Warschauer, 2013) are convinced that EFL writing learners need to be encouraged in using digital devices, considering their potential to enhance EFL learning.

A quantitative analysis conducted by Al-Jarf (2004) on 68 university EFL students found that students who received Web based instructions in writing class showed greater improvement in their writing than those of traditional writing class students. Similarly, Warschauer (2013) conducted a mixed method study on 16 EFL university learners to find their attitudes towards the use of online discussion boards for writing. The study found that learners got chances for more equal participation in the computer based writing setting and they used language that was more lexically and syntactically formal in an electronic discussion. A qualitative study conducted by Egbert, Paulus, & Nakamichi (2002) on twenty EFL instructors suggested that teachers who use CALL activities experienced more interaction among students, and students seemed to enjoy writing classes more. Besides various similarly designed studies, a few studies are closely related to that of the current study. This study might propose some recommendations to implement communicative language teaching (CLT) in EFL writing classrooms by introducing a shift of focus from exam based instructions to communicative writing (Salmon, 2013a) with the use of online resources.

Findings

The First Research Question

A survey was given to all students in both universities (n=103, 86) who participated in this study. The survey contained 20 items and was given to participants that responded to the first research question targeted learners' feelings of *empowerment, learning*, and the use of computers for *interpersonal communication*. A hypothetical value 3 was chosen as neutral score for their responses on a 5 point Likert scale. The overall survey results showed that both Korean and Pakistani participants scored an average of 3.86 and 3.79 respectively (which falls between a neutral value 3 and agree value 4) which is higher than the hypothetical neutral score of 3 (significantly higher than a hypothetically neutral score with $p<.05$). One Sample T-Test using SPSS Statistics was performed to analyze the P value which is $P=0.045$, that is smaller value than 0.05. A smaller P value less than 0.05 suggests that the probability of the sampling error in the finding is sufficiently small. That insisted on the significance of statistical results of t-test. This means their motivation for using computers for peer feedback in order to enhance their writing skills is higher than the neutral score ($p<.05$). This also supports the claims of previous research, (including Warschauer, 1996, 2013; Kang 2008, 2009; Bennett, 2011) that EFL learners feel highly motivated to enhance their writing skills when they are provided with an interface where they can access computers for peer feedback and communication.

Korean participants' data. A breakdown of above result is as follows; an average score for five items from the questionnaire on learners' feelings of *autonomy* when they used computers for peer interaction' was 4.04, an average score for seven items on learners' feelings of their *learning and writing improvement* was 3.58, and an average score for eight items on learners' perceptions toward the use of computers for *interpersonal communication* was 3.81.

Pakistani participants' data. Similarly, Pakistani participants' average score for five items on learners' *feelings of autonomy* when they used computers for peer interaction was 4.09, an average score for seven items on learners' *feelings of their learning and writing improvement* was 3.49, and an average score for eight items on learners' perceptions toward the use of digital devices for *interpersonal communication'* was 3.74.

The Second Research Question

The second research question helped determine whether the participants showed enhancement in their writing skills by making improvements during the treatment session on their writing through peer feedback. Data was collected in the form of learners' first and final drafts and peer reviews for both the first and fourth essays. As mentioned earlier, both the first and the fourth essays were of the expository type requiring students to use their analytical ability to either explain the advantages or disadvantages of a certain given topic in a coherent manner given in the list (see Appendix-D). The average number of words produced by both Korean and Pakistani participants for the first and fourth essays were 263 and 257 words, respectively. Two trained EFL independent raters carefully read 40 participants' sample drafts (20 samples each from control and experimental group) and revisions to analyze any improvement in the essay quality.

Korean Participants' improvement. Results showed that the control group students improved an average of 13.1% and 14.9% respectively on the final drafts of their first and fourth essays through traditional peer feedback (face-to-face). Whereas, students in the experimental group showed an average improvement of 12.23% and 18.96% respectively on the final drafts of their first and fourth essays through online discussion board peer feedback. Further, the results showed that the students in the experimental group received 22.9% more feedback comments than that of the control group students in their fourth cycle.

Pakistani Participants' improvement. Data suggested that the Pakistani control group students improved an average of 12.7% and 14.6% respectively on final drafts of their first and fourth essays through face-to-face peer feedback. Whereas, students in the experimental group showed an average improvement of 12.03% and 18.72% respectively on the final drafts of their first and fourth essays through online discussion board peer feedback. Further, the results showed that the students in the experimental group received 23.6% more feedback comments than that of control group students in their fourth writing cycle.

The Third Research Question

The third research question helped to investigate how useful the feedback provided by peers was, and how much the feedback lead to text revision. To answer this question, the researcher first gathered data from 40 randomly selected students, 20 students from the control group and 20 from the experimental group. The data included both control and experimental group students' first and final draft of targeted essays (the first and the fourth essays) along with the feedback comments they received from their peers. Then the researcher tallied the total number of reviewers' comments and the reviewers' comments writers responded to in the revision of their first draft for both the first and fourth essay. Furthermore, the researcher calculated the percentages by dividing the total number of comments to which the writers responded by the total number of reviewers' comments. This helped to examine how many comments were incorporated successfully into the text revision in both the control group and the experimental group setting.

Korean participants' results. Results showed that a total of 558 comments were provided in both the first and fourth writing cycles during a traditional writing class where peer feedback was provided on paper, only 47.85% (n = 267) of which were incorporated by writers

in revision. In contrast, a total of 613 feedback comments were posted in both the first and fourth writing cycles by the experimental group participants within an online based peer feedback setting, 58.56% (n = 359) of which were incorporated in revising drafts.

Pakistani participants' results. Pakistani participants provided a total of 536 comments in both the first and fourth writing cycles during a traditional writing class where peer feedback was provided on paper, only 49.25% (n = 262) of which were incorporated by writers in revision. In contrast, a total of 643 feedback comments were posted in both first and fourth writing cycles by the experimental group participants in an online based peer feedback setting, 56.45% (n = 363) of which were incorporated in revising drafts.

It is important to remember that each student was required to review and provide feedback to at least 3 essays. The data suggests that both Korean and Pakistani participants made almost equal improvement on their final drafts. The results showed that the number of total comments produced and those incorporated into revisions through an online peer review session (experimental group) were significantly higher (by both Korean and Pakistani participants 10.71%, and 11.08% respectively) than those of traditional writing setting (Control group). And as a part of peer feedback training, the goal was to offer useful feedback comments to each other and utilize these comments for the revision of their final drafts. However, it has been noted that they posted lots of communication based comments as well. Communication based comments meaning besides some feedback on their peers' essays, they communicated with their classmates through the class websites as well.

Summary for 3 Research Questions Result

Data for the first research question suggested that both Pakistani and Korean EFL students showed positive attitudes towards the use of online discussion boards for writing classes in order to provide peer feedback. Data for the second research question showed that the experimental group participants in each university showed more improvement than those of the control group, especially, in the final draft of their fourth essay. Lastly, data for the third research question shows that both the above mentioned sets of participants incorporated more than 55% feedback comments into revision to improve their first draft of fourth essay through online peer feedback. Data for all 3 research questions showed that both Korean and Pakistani participants had a positive attitude towards online discussion board peer feedback setting for the enhancement of their EFL writing.

Discussion

Following the result presented above, it can be concluded that both Korean and Pakistani learners showed improvement in their writing and demonstrated positive attitude towards the use of online discussion boards for their writing classes. The grounded theory, the foundation of this study, based on the idea to incorporate online technologies into ESL writing classroom to support learners writing skills (Warschauer, 1996, 2013). The findings of the current study supported Al-Jarf (2004) that examined EFL learners who receive web-based instructions in writing class showed a greater improvement in their writing than those of traditional writing class learners. It has also shown that learners gained equal chances to participate in online discussion board communication. This also helped shy students to be more autonomous in class (Warschauer, 1996, 2013). It has also been examined that learners used language that was more lexically and syntactically formal in an electronic discussion. Findings of this study also corresponded with Egbert, Paulus, & Nakamichi (2002) that reported high level or peer-to-peer interaction among learners. It also stated that learners seemed to enjoy writing classes more when they provided online peer-feedback. In a broader spectrum, this approach of incorporating online technologies can bring a very positive change in ESL

pedagogy that may shift the focus of classroom instructions from exam based writing to communicative writing (Salmon, 2013a).

Conclusion

This study offers a comparison between Korean and Pakistani university EFL writing contexts and suggests that teachers should look to put some traditional methods aside and take a step forward to help learners integrate with available online resources (particularly online discussion boards) for their writing improvement. Another potentially significant aspect which distinguishes this study from the existing ones is its attempt to integrate students' EFL needs (especially EFL writing) with their electronic devices (smartphones, tablet PCs, or computers). This study provides evidence of learners' positive attitudes, enhancement of their writing skills, and higher rates of incorporating peer feedback comments into text revision through online discussion board communication. The format of this study and structured methodology suggests some important findings which support the propositions given below:

1. Most students show positive attitudes towards using computers for their writing development in an EFL context regardless of: gender (male or female), computer skills (skills or unskilled at using computers or typing skills), and experience using computers.
2. There are many skills EFL learners' might gain through the use of computer mediated communication (e.g. discussion boards, blogs, and etc.) including: feelings of autonomy, feelings of improvement (enhancement of learning), and an enhancement of interpersonal communication skills.
3. Not only regarding writing skills, students can also enhance their skills related to the use of computers for EFL purposes. Designing EFL classroom activities through the careful use of computers and requiring students to participate in electronic communication for classroom interaction, receive and provide peer feedback through online discussion boards, and scaffold each other through online discussion boards could provide learners a new set of knowledge about the use of computers for daily life purposes.
4. Most importantly, shy students can get a chance to gain confidence and courage while interacting with their peers. The online interface provides students autonomy and equal opportunities to collaborate. This is not only helpful for their writing skills development, but also for their social relationship development which could be beneficial for them to feel themselves as a part of EFL writing community.

Limitations

With the aforementioned evidence supporting the effectiveness of online discussion board communication for peer feedback in a writing context, there are a few limitations to the study.

First, the small data size limited the prospects of this study's findings being generalizable for other EFL settings. Second, having different topics for each writing cycle (assignment) could have varied the level of writing difficulty. Learners' writing enhancement could be better verified through providing them with the same topic for the first and the fourth writing cycles. Third, conducting a peer-feedback training session before the first writing cycle could have provided different results than providing learners peer-feedback training after the first writing cycle.

With the given limitations mentioned above, more future studies are needed as an expansion or extension of the current study. For instance, the use of online peer review could be implemented in different contexts (e.g., English for Specific Purposes or Task based

instruction) to foster learners' autonomy, as a more authentic manner of networking among not only university students, but also middle or high school students as well.

Recommendations

Following the above mentioned findings of this study, a few recommendations are made which could help EFL teachers to enhance their students' learning if adopted carefully.

1. Online discussion board communication could be an essential part of writing class instructions; this could be used for writing class peer feedback purposes as well as providing learners a platform to demonstrate their writing skills for socializing (writing messages to their classmates in social context).

2. In the present age, learners' electronic devices (e.g. smartphones, tablet PCs, computers, etc.) are part of their lives; it seems that EFL teachers could make great use of these electronic devices by incorporating them as a part of EFL instructions rather than considering them as a distraction in EFL classes.

3. In order to promote communicative language teaching (CLT) in EFL classes, teachers could encourage students to participate more in online discussion board communication; not only for peer feedback purposes, but also for communicating with each other even outside of the classroom.

References

Al-Jarf, R. S. 2004. The effects of web-based learning on struggling EFL college writers. *Foreign Language Annals*, 37(1), 49-62

Burns, R. (2000). *Introduction to Research Methods*, London, Sage.

Bennett, R. E. 2011. Formative assessment: A critical review. *Assessment in Education: Principles, Policy & Practice*, *18*(1), 5-25.

Choi, S. W., Kim, D. J. and Choi, J. S.2015. Comparison of risk and protective factors associated with smartphone addiction and Internet addiction. *Journal of behavioral addictions*, *4*(4), 308-314.

Egbert, J., Paulus, T. M., and Nakamichi, Y. 2002. The impact of CALL instruction on classroom computer use: A foundation for rethinking technology in teacher education. *Language Learning & Technology*, *6*(3), 108-126.

Hyland, K. (2003). *Second language writing*. Ernst Klett Sprachen.

Ho, M. C. and Savignon, S. J. 2007. Face-to-face and computer-mediated peer review in EFL writing. *CALICO journal*, 269-290.

Javed, S. A. 2012. Internet access and use: A study of undergraduate students in three Nigerian universities. *Internet and Higher Education*, 10 (1), 65-76.

Kang, K. H. 2008. Korea needs long-term English education. *ChosunIllbo*. Retrieved March 17, 2008 from http://www.knowledge.go.kr.

Kang, Y. 2009. The role of phonological awareness in Korean elementary EFL learners' word reading. *English Education, 64*(2), 44-57.

Liu, J., and Sadler, R. W. 2003. The effect and affect of peer review in electronic versus traditional modes on L2 writing. *Journal of English for Academic Purposes*, *2*(3), 193-227

Liou, H. C., and Peng, Z. Y. 2009. Training effects on computer-mediated peer review. *System*, *37*(3), 514-525.

Salmon, G. 2013a. *E-tivities: The key to active online learning*, Second ed. Routledge, New York.

Warschauer, M. 1996. Motivational aspects of using computers for writing and communication. *Tele-collaboration in foreign language learning*, 29-46.

Warschauer, M. 2013. Re-conceptualizing the digital divide. 2002. *First Monday*, 12(3), 23-61.

Appendix

Appendix A

Motivation Survey. Examining Learners' engagement with computers for writing classes.
Year……, Gender….., Department………. Age…… Major……………. Sub Major………….
1=strongly disagree,   2=disagree,   3=neutral,   4=agree, 5=strongly agree
Please rate your typing ability: poor   fair   good   very good   excellent.
Please rate your knowledge of computers: poor   fair   good   very good   excellent
Do you have a computer at home?   yes   no   For how long …………
How you ever used a computer to do the following things?:
Word processing: a lot   a little   never .
E-mail: a lot   a little   never .
MOOs: a lot   a little   never .
World Wide Web: a lot   a little   never .

No		1	2	3	4	5
1	Online Discussion Board (ODB) is a good idea in English classes.					
2	I enjoyed ODB because it is very interactive.					
3	Having been required to participate in the Twitter discussion in this course, I am now more likely to voluntarily participate in future courses					
4	ODB provides an opportunity to use English outside of the classroom.					
5	ODB helped me to overcome my fear for English language.					
6	**I found it difficult to find time for ODB as a medium for online discussion.					
7	Online discussions in English language classes should be compulsory.					
8	ODB provided me with an opportunity to improve my English writing ability.					
9	ODB helped me to become more confident in writing for online discussions.					
10	ODB helped me to develop more effective electronic communication skills in English.					
11	ODB allowed me to use my English writing skills for real world communication.					
12	ODB helped me to get better on my in-class performance.					
13	Use of ODB made me feel English as my friend.					
14	ODB provided me with an opportunity to gain feedback on my opinions from other students					
15	ODB helped me to learn about other students' views/perspectives					
16	ODB helped me to interact with the course instructors.					
17	ODB helped me to provide sense of belonging to a community of learning.					
18	ODB helped me to develop closer relationship with course instructor.					
19	ODB helped me to reduce the feeling of isolation due to my writing skills.					
20	ODB helped me to develop friendships with other students					

ODB is used as Online Discussion Boards.
Adopted by: Warschauer (1996)

Appendix B

Reflection Journal Rubric
Major_____   Block _____   Date_____

Criteria	5	3	1	0
Structure Ideas (x2)	All or almost all of the entries have a connection to structure.	Most entries have a connection to structure.	Few entries have a connection to structure.	None of the entries have a connection to structure.
Feelings and Thoughts (x2)	Feelings and thoughts are revealed in all or almost of the entries.	Feelings and thoughts are revealed in most entries.	Feelings and thoughts are revealed in few of the entries.	None of your feelings and thoughts are revealed in any of the entries.
Format	The proper format has been followed for all of the entries.	The proper format has been followed for most of the entries.	The proper format has been followed for few of the entries.	The proper format has not been followed for any of the entries.

Mechanics	All or almost all of my entries use correct spelling and grammar.	Most of my entries use correct spelling and grammar.	Few of my entries use correct spelling and grammar.	None of my entries use correct spelling and grammar.
Completion	All entries are present, in order, and together.	All entries are present, but are either not together or in order.	All entries are not present, but they are together or in order.	All entries are not present, nor are they together or in order.

TOTAL_____/35

Almost all- 90%
Most- 75% or more
Few- less than 75%

Appendix C

Rubric for classifying peer comments

Examples presented in this table are directly taken from students' peer feedback comments in this study.

Area	Global		Local	
Nature	Revision oriented	Non revision oriented	Revision oriented	Non revision oriented
Type				
Evaluation	I think your topics are good, but you lost the rhythm of details in second paragraph	I think your essay is good to understand easily	I think your title and each topic sentence are very novel! it hook people a lot	I love your hook! But some expression seem wrong
Clarification	Is this about teen smokers?	No example	First sentence in third paragraph. What are "they"	No example found
Suggestion	I think it will be better if you write more transition words.	No example	I think you should change "breakup" in intro to "breakup with".	No example found
Chatting	No example found	You have changed my opinion about teenage smokers. Thx.	No example found	No Example found

Examples can be accessed at http://blog.naver.com/under2water   Under the heading *Essay W Spring 14*
In Lieu and Peng (2009) designed by Liu and Sadler (2003).

Appendix D

List of Topics for Essay Project
List of Topics for Essay-1
1. How can you stay healthy while dining on campus food?
2. What's the best way to choose which college activities to be involved in as a freshman?
3. How has your college been changed over the years?
4. What do you need to do to get ready for a college football game (or other sport) at your school?

List of Topics for Essay-2
1. What's the worst way to study for finals?
2. How can a student survive the first few weeks of college?
3. How can you be a great roommate?
4. What are ways to use the local coffee house to avoid studying?

List of Topics for Essay-3
1. How can you help a suicidal friend?
2. What do you have to do to win a campus election?
3. How to get scholarships for college?
4. How best to decide which college to go to?

List of Topics for Essay-4
1. What is a black hole and why are they important?
2. What causes obesity?
3. What is climate change?
4. Why is there an increase in autism?