

Evaluating an Academic Writing Course-based on an Integrated Model

Li Zhang

Shanghai Jiao Tong University, China

Yue Sheng

Shanghai University of Engineering Science, China

Lan Li

Hong Kong Polytechnic University, China

This paper intends to evaluate an academic writing course for ESL learners with the aid of technology. Such a course is based on an integrated model that draws strength from both the model of writing as a process and as a social construct. Forty-one learners from various Asian language backgrounds attended the course in a large Midwestern American university. Details of how the students completed their research paper during the course are described, and evaluation of the course is done through a questionnaire investigating the students' perceptions about the usefulness of the elements involved in the writing process, a paired samples *t*-test of the students' pre- and post-course writing, and a qualitative analysis of the students' reflective ideas on how the course benefits them. The result of the *t*-test ($t=2.316, p<0.05$) indicates that the students did improve their writing competence as a result of taking the course, and the analysis of the questionnaire shows that most of the students had positive opinions of the course. Therefore, it is believed that the course incorporating the integrated model has achieved the goal of helping ESL learners improve their competence

and confidence in academic writing, which will enable them to cope successfully with future writing tasks in their academic disciplines.

**Keywords: integrated model of writing; academic writing process
course evaluation**

INTRODUCTION

Writing is one of the four basic language skills and the models of writing instruction have demonstrated diversity in its development. The model of writing as a product regards writing as an object that can be separated and analyzed, with its focus on the appropriate use of linguistic knowledge such as vocabulary, syntax, and cohesive devices (Pincas, 1982). But teachers who consider writing to be a product tend to advise learners to deal with every aspect of a text all at once, regardless of how they are involved in the writing process. On the other hand, the model of writing as a process considers writing to be non-linear and recursive in nature (Flower & Hayes, 1981) and greater emphasis is placed on linguistic skills than linguistic knowledge. However, this model ignores the influence of social and cultural factors in the process of writing (Atkinson, 2003). Therefore, the social constructivist model of writing is advocated, which considers writing as a process of cooperation among individuals, and emphasizes the interaction between writers and readers, and the dialogic aspect of communication and learning (Nystrand, 1989).

The continuing development and absorption of technology within the educational sector has facilitated more research on how the Internet can aid the teaching of writing (Greene, 2000; Warschauer, 2007; Groves, 2010). The model of writing that best incorporates technology is an extension of the process and social constructivist models of writing because technology enables writers to consciously experience the process of writing and makes cooperative learning more feasible. Therefore, the current study intends to

describe and evaluate an academic writing course that incorporates the model drawing strength from both the model of writing as a process and that as a social construction, with technology as an aid.

THEORETICAL BACKGROUND

Writing as a Process

The process writing model liberates itself from the confines of writing form and lays emphasis on the process of writing. The early process model merely reflected a hypothetical linear sequence, a series of steps, including writing plan, outline, draft and revision, but did not reflect fully the role of thinking in the writing process (Flower & Hayes, 1980). Flower & Hayes (1981) propose a shift from the traditional linear sequence model to a non-linear process model that reflects the cognitive and recursive nature of writing. This model can be divided into three main parts, “the task environment, the writer’s long-term memory, and the writing processes” (Flower & Hayes, 1981, p. 369). To better represent the recursive nature of revision, Bereiter and Scardamalia (1983) expand this model by developing a *compare, diagnose* and *operate* planning stage. Writers “compare” the text in their mind with the text they have actually written, “diagnose” what needs to be changed and consider revising options before they “operate” the necessary action. Hayes (1996) developed the *task schema* model which promotes greater detailed sub-processes in relation to the revision phase of writing. He proposes a task schema with two categories: one is the fundamental processes including text processing, reflection and text production while the other is resources stored either in working or long-term memory.

However, the *process* model usually emphasizes individual cognition and individual effort, ignoring the influence of social and cultural factors in the process of writing (Atkinson, 2003). Therefore, the social constructivist model of writing is advocated.

Writing as Social Construction

The mid 1980s and 1990s witnessed the initiation and development of the *conversation* and *social constructivist* model of writing (Nystrand, 1989; Anderson & Holt, 1990; Englert, 1992), where the interaction between the individuals and the peer collaborative group in compositional instructions were emphasized (Gere & Stevens, 1985). Beaugrande (1985) argues that text is a communicative event rather than a logical form. Communication starts as an initial collaboration of people's intentions and expectations of the topic. The discourse is largely structured by the people in terms of each other's perspectives on the topic and the discourse itself (Beaugrande, 1985). Therefore, discourse is taken as a progressive modification and expansion of social reality and text is not just the result of writing but a medium of communication (Nystrand, 1989).

The social constructivist writing model considers writing a process of cooperation among individuals. In other words, everyone in the group is involved in the writing process and contributes to the writing product by adding contents, giving feedback or making suggestions. Researchers have found that peer cooperation has positive effects on writing confidence (Fox, 1980; Likkell, 2012); critical thinking (Lai, 2012); revision (Yang, 2011); and attention to prewriting and awareness of writing processes (Nystrand, 1983). Even when writing individually, the writer cannot complete a writing task without reading related materials extensively and deeply understanding the ideas expressed by other writers. S/he has to make it clear where the resources are, which part of the writing is quoted or paraphrased. Therefore, writing is a product that results from the joint effort of a group of people, who directly or indirectly contribute to the final product.

With the continuous development of computers and the Internet, more and more researchers are exploring how digital technology can serve as an aid to writing (Warschauer, 2007; Herringto, Hodgson, & Moran, 2009; Groves, 2010). Some researchers investigate how Moodle is used in writing instruction (Suvorov, 2010; Brandl, 2005). Some conduct studies on how

search engines such as google can be applied to aid writing (Geluso, 2013; Brodahl, Hadjerrouit, & Hansen, 2011). Others work on how online tools such as Wikis (Chao & Lo, 2011; Li, 2013; Li & Zhu, 2013) and Blogs (Nair, Tay, & Koh, 2013; Liu, Lee, & Ding, 2012; Arslan & Sahin-Kizil, 2010) can help learners develop their writing skills. Researchers also deal with how online corpus (Amador-Moreno, 2012) and online dictionaries (Kuo, 2008) are used in the process of writing. Computers and the Internet enables writers to undergo a better process of writing by supplying resources, arranging tasks and assignments, monitoring steps and performances and storing writing products. As a result, with the help of technology, a model that can balance writing as both a process and a social construction might be realized (See Figure 1).

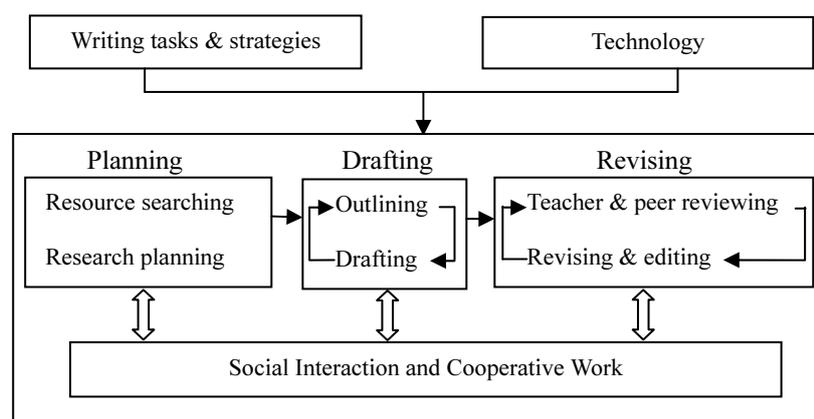


FIGURE 1
The Model of Academic Writing Process with the Help of Technology

This model shows that the academic writing process includes three stages of planning, drafting and revising, each of which can be realized by the use of a number of writing strategies and tasks with the help of technology, and involves much social interaction and cooperative work that can be enhanced by the aid of technology. Writing tasks and strategies include the tasks that

can be assigned to students in each stage of writing, such as information searching, group discussion, note taking, sample analyzing, etc. and the strategies that can be employed by the students to finish tasks, such as brain storming, using mind maps, translating and reconstructing. Technology refers to computer or online tools, websites, workshops, databases, software or search engines that can be used to enhance the outcome of academic writing, such as online forum, Wiki, Moodle and Zotera. These factors in the model interact with each other during the writing process. For example, supported by computers and the Internet, learners in the process of resource searching have to finish such tasks as searching for information, evaluating sources and listing references by using strategies for pooling and gathering information. The model also shows the recursive nature of writing. As is shown in Figure 1, writing and revising are done recursively: outline is followed by draft, which is again followed by a reversed outline¹ to check whether the draft has a logical organization; reviewing is done before revising and editing, which in turn facilitates more feedback to help polish the writing. The social constructivist feature of the model is manifested by social interaction, collaborative work and cooperation among individuals during the process, such as research planning, outlining and peer reviewing.

In order to investigate how the writing model is incorporated in the academic writing course and what effect the model has on students' perceptions of writing course and their actual writing performance, an empirical study was undertaken, which addressed the following three questions:

1. How is the model incorporated in the academic writing course?
2. Have students made progress as a result of the course?
3. How do learners perceive the usefulness of the course?

¹ A reversed outline is written according to the finished draft for the purpose of checking if the draft has covered all the major items or if the draft has a logical organization.

RESEARCH METHOD

Description and Design of the Writing Course-based on the Model

The academic writing course was arranged for ESL learners in a large Midwestern American university. 41 students attended the academic writing course, including 23 male students and 18 female students. 27 students had Chinese as their native language and the remainder spoke Korean, Russian, Spanish and Arabic. Their specialties covered a wide range of disciplines, such as economy, engineering, statistics, history, chemistry, architecture, computer science, electronics, mathematics and psychology. Most students were in their first year of study in the university, but 8 of them were sophomores who had not taken the course in their first year. All participants were volunteers, feeling the course would help them writing the academic reports required by instructors of other subjects they studied in the university. They attended the writing course on a three-day-a-week and fifty-minute-a-day basis, and they were supposed to finish a series of tasks after class. The whole course lasted for 15 weeks, throughout which the Internet and computers were employed to aid writing.

First and foremost, students were asked to take part in an online workshop that prepared them for using the library, searching for and evaluating sources. Moreover, students would learn from online instruction or from each other how to use reference management software, such as Refwork, Endnote or Zotero. Students were supposed to grasp the knowledge at the very beginning of the course so that they could bear in mind the importance of providing sources of information from other authors and avoid plagiarism. They were then required to search extensively on the general topic of “computer games” and keep the sources for future reference.

Secondly, students prepared a plan for their research. Besides giving students guidance in class, the teacher provided students with URL links to websites where students could watch online lessons on how to narrow down the research topic and how to elaborate the research questions. They also

learned to find out the appropriate key terms for searching related information. During this stage, students had to do extensive reading to get relevant information about a certain topic and share their ideas through Chat tool in Moodle to discuss their concerns about the topic in order to get some comments or suggestions from peers. They also negotiated online with the teacher or peers about the terms they could use to search information. All of these efforts helped students narrow down the research topic and specify the research questions. For example, the topic of *Computer Games* can be narrowed down to *Computer Games and Education*, and further to *Computer Games and Its Influence on Behavior*, and finally to *Computer Games and Aggressive Behavior*, with such researchable questions as:

- What is aggressive behavior?
- How do computer games relate to aggressive behavior?
- What can we do to prevent the negative effect caused by computer games?

After planning, students started to work on the outlines of their research papers. The teacher explained to the students how to prepare an outline based on their research questions and provided sample outlines of the research. Then students drafted rough outlines and uploaded them on the Moodle. After the feedback was given by the teacher and their peers, the rough outlines were revised and polished. Students then went on to write the research papers on the basis of the polished outlines. For example:

1. Introduction

Start with my cousin's experience and explain why research on computer games and aggressiveness are important.

State the thesis: Computer games do have effects on people's aggressiveness

2. Body

2.1 What is aggressiveness?

2.2 Theoretical models in relation to aggression.

Arousal theory tells that physiological responses to aggression should initially increase as one engages in a threatening experience.

Social cognitive theory explains that a person can become more aggressive after observing and imitating a model who is acting aggressively.

2.3 Major studies on computer and aggressive behavior

Several examples of results from research which prove that aggressiveness is a bad effect of computer games.

Implicit association tests and results for the relationship between computer games and aggressiveness.

3. (Refutation) Some people have different ideas on this issue.

Some believe this influence is just transient. But it changes a person's entire life.

Some think the key factor is who plays these games.

4. What we can do to improve this situation?

Set limits for the time playing computer games either by parents or by themselves.

Offer them more opportunities to connect with other people and take part in various activities.

5. Conclusion

When students embarked on the process of drafting the research paper, the teacher would give students guidance on how to write the introduction for an academic paper, how to organize ideas in a logical and coherent way, how to write with appropriate academic voice, how to paraphrase and summarize and how to avoid plagiarism. Students were given time to finish their drafts after class. Since a student might not strictly follow the original outline, the teacher would ask him/her to write an outline based on the draft to check whether the organization of the draft was logical. Both the sample outline provided by the teacher and the rough and reversed outlines produced by the students were uploaded on the Moodle site and kept in an e-portfolio of the academic writing class.

When the deadline approached, students were required to upload their drafts to the Moodle site so that the peers could read them and give feedback to the writer according to a guideline using six perspectives: 1) background, audience and focus; 2) organization, analysis and development; 3) paragraph style; 4) reporting language; 5) conclusion; 6) recommendations (See Appendix 1). The online peer review was done in groups of two or three in the form of asynchronous interaction, which was followed by a face-to-face peer review in class. For example, Students A and B posted their review comments online and then started a face-to-face peer review in class.

Online Peer Review

Student A:

The reference is not in the APA format.

There are problems with the in-text citation.

Why write athletic game, how is it related with the theme?

Student B:

The beginning can be more attractive.

There are too many definitions.

Topic sentence and the supporting details seem not quite related.

Face-to-face peer review

A: This is the first problem. The second is that you don't give citation when necessary. For example, from the dictionary, you have to.....

B: I did it afterwards. Here, since the whole piece is from the same resource, I didn't give each citation.

A: Oh. And here, the full stop must be put after the bracket, not in it.

B: Yes, you are very careful.

A: And I think you intend to talk about some positive aspects of video games. But why do you write about athletic games.

B: The reason is that not everyone knows about video games. They know playing basketball or volleyball. But if you talk to a person in 40s or 50s about computer games, I feel it is difficult.

After the peer review, students were supposed to revise their papers and resubmit them for teacher's comments. Each student was given a 40 minute face-to-face conference with the teacher for discussing strengths and problems of the paper both generally and specifically. Based on the feedback from the teacher, students would revise and polish their paper again until it was ready for final submission. The following is an example of the teacher feedback about language expression.

(T-teacher S-student)

Original sentence: As to computer games, they focus more on intrinsic motivation, and this motivation can be enhanced by improving three characteristics of computer games: fantasy, goal and challenge.

T: As to computer games... I see this a lot in Chinese Students' writing. It's not right.

S: Mm, we use it a lot.

T: Sometime we can use the phrase: "with respect to" or "regarding". But you don't necessarily need it. At this point you can just make a statement: computer games focus more on intrinsic motivation.....

During the process of writing, students might go to the SWS (Students Writing Support) center or log in online SWS for some individual guidance on writing whenever they encountered difficulties, such as how to find a topic or write an appropriate thesis statement, how to write a good introduction or a conclusion or how to use writing strategies effectively. Here is an example to show how a student was helped by SWS.

Apr. 14 A helped me with my mind map for research paper. I learned that a good paper needed a focused title, which was a leader for the whole paper. I also learned that paragraphs should connect with each other and all the paragraphs should connect to the title or the thesis.

Apr.16 B helped me with the mind map, too. I learned that whether to introduce an idea to the readers depended on how strong the resources

were. In addition, thesis statement is important to a paper. It reflects the purpose of a writer. And I think the purpose of writing is a question one should think about before writing a paper.

Apr. 24 C helped me with my research paper. I found that some online resources were very useful for writing.

Apr. 28 I had an appointment with D. I learned that a good conclusion was necessary for a paper. A conclusion was not only an ending, it was a reflection of the whole paper and it was where a new possible research topic should present.

Apr. 28 C helped me again. I learned from the experience that there were a lot of differences between the MLA style and APA style. So, I must make sure what the style I am going to use before writing and make sure I follow the rules.

Apr. 28 After an overview of those “big events”, I can easily get the idea that my writing skills are improved through visiting SWS.

In order to have a clearer understanding of how the writing process was undertaken with the application of the strategies of writing, the practice of the tasks and activities, and the support of technology, an analysis was made of the writing process and demonstrated in Table 1.

TABLE 1
Details of Elements in the Writing Model

Process of Writing	Tasks	Strategies	Technology
Step 1: Resource searching	Searching information; Evaluating sources; Listing references; Group discussion; Note-taking	Resourcing ^a ; Pooling information	Online workshop; Library database; Google searching; Reference management software
Step 2: Research planning	Generating ideas; Analyzing samples; Group discussion; Online interaction	Brainstorming; Using mind map; Grouping; Relating new information to prior knowledge; Free writing	Wonder Wheel in Google; Chat tool in Moodle; Moodle online posting; Wiki tool in Moodle
Step 3: Outlining	Group discussion; Individual planning	Translating; Using mind map	Moodle online posting;
Step 4: Drafting	Developing ideas; Organizing ideas; Using cohesive devices Reversing outline	Re-reading; Paraphrasing; Using dictionary; Using Corpus	Moodle online posting; Wiki tool in Moodle; Online corpus
Step 5: Peer and teacher reviewing	Group discussion; Online interaction; Problem-solving; Recognizing plagiarism; Error-finding; Face-to-face conferencing	Modeling comments; Sequencing peer review tasks; Providing incentives; Phrasing criticism as a question; Comparing paper with peers	Moodle online posting; Chat tool in Moodle; Winba voice tool in Moodle
Step 6: Revising and editing	Problem-solving; Adding or cutting information; Revising; Editing	Rereading; Paraphrasing; Using a dictionary; Reconstructing ^b ; Reversing outline; Consulting the writing assistant; Reading aloud; Reading backwards ^c ; Keeping a list of frequent errors; Monitoring progress; Evaluating progress	Uploading on Moodle; Online corpus; Online dictionary

Evaluating an Academic Writing Course Based on an Integrated Model

^a Resourcing: Gathering information from various sources (e.g. libraries, the Internet, and electronic databases)

^b Reconstructing: Constructing a meaningful sentence or longer expression by putting together known elements in new ways

^c Reading the paper backwards: The editing way to force oneself to notice small details so that the focus is the text, not the ideas

Evaluation

A mixed method approach (Tashakkori & Teddlie, 1998) was adopted, which consists of a quantitative approach of a paired sample *t*-test of pre- and post-course writing, a questionnaire investigation, and a qualitative study on data generated from students' reflection essays, classroom observations and interviews.

40 minutes were allowed for both the pre-course and post-course writing tests. At the beginning of the course, students were required to write an essay entitled "Don't Rely Too Much on Computers" while at the end of the course, they were asked to write an essay about their "Views on Online Education". They had to write at least 200 words within the permitted time. The researcher graded the students' essays according to a rating criterion of writing that referred to both the writing rubrics of TOFEL and CET (College English Test), with a range of 0 to 15 points. Each student's essay was graded by two teachers ($r=0.89$) and averaged to get a final score for that essay. The scores for the pre- and post-course writing tests were compared by means of paired samples *t*-test.

The questionnaire was composed of three parts. Part 1 consisted of 20 statements about the activities, tasks and course arrangements in their academic writing class. Part 2 was composed of 12 items about the students' perceptions of their improvement in different aspects of writing after taking the course. Items in these two parts were rated on a 5-point Likert scale. Part 3 was an open-ended question for students' opinion on how the Internet helped them in writing.

The students' opinions were analyzed according to the data generated from these students' reflection essays. In order to elicit more ideas from the

students, questions were asked to guide student reflections:

- 1) How much progress have you made as a result of the course?
- 2) What do you think of the process of writing we practiced in the course (recourse searching, planning, outlining, drafting, peer reviewing, teacher reviewing, revising and editing, etc.)?
- 3) What impresses you most about the writing course?

Classroom observation was made throughout the course and interviews were conducted to get more knowledge of how learners used technology in writing, or to generate explanations for some unusual phenomena occurring in the course. Questions for the interviews were:

- How does technology help you in writing?
- Why do you prefer written feedback to oral feedback?
- What are your feelings towards peer review?

RESULTS AND DISCUSSION

The result of the paired sample *t*-test (See Table 2) for the timed writing tests showed that students had an average score of 8.17 out of the total score of 15 for the writing test at the beginning and an average score of 8.68 at the end of the course. Though the improvement of 0.51 points is not remarkable, the difference is statistically significant ($t=2.316$, $p<0.05$), and a larger sample may demonstrate more convincing result. Actually, it is indicated that students did improve their writing competence as a result of taking the course. The reason for the progress is that the academic writing course helped students generate ideas, form thesis, organize structures, display unity and coherence, enrich contents, edit language, which are necessary considerations in the writing rubrics for the measurement of one's writing proficiency. The integrated model that lays emphasis on the writing process and constructivist work increases students' awareness of each stage of the writing process

(Nystrand, 1983), encourages them to have better revision of their work (Yang, 2011), enhances their confidence in writing (Likkell, 2012) and their ability in critical thinking (Lai, 2012). As is shown in the questionnaire investigation, students improved writing confidence and competence because they could write more accurately, fluently and academically, with better organization of texts, better transition between paragraphs, and more clarity and depth of ideas.

TABLE 2
Paired Sample *t*-test of Pre- and Post-course Writing

	Mean	Number	Std. Deviation	<i>t</i> value	df	Sig. (2-tailed)
Pre-course	8.1707	41	2.26829			
Post-course	8.6829	41	2.37107	2.316	40	.026

TABLE 3
Means and Percentages of Learners' Perceptions of the Usefulness of the Course

	Percentage	Mean	Std. Deviation
The overview of the syllabus	75.7	3.95	1.22
Evaluation criteria	73.0	4.08	1.19
Tips and strategies	86.5	4.38	.79
Exercises and tasks	67.6	3.97	.87
The research paper assignment	91.9	4.51	.65
Reading a lot for writing	75.7	4.08	.95
Analyzing the topic	83.8	4.38	.76
Gathering and developing ideas for writing	86.5	4.38	.72
Searching information	86.5	4.46	.73
Evaluating sources for writing	78.4	4.00	.97
Participating in group activities	75.7	4.24	.89
Preparing a research proposal	75.7	4.16	.80
Planning, drafting and polishing an outline	86.5	4.54	.87
Drafting and revising essays/assignments	91.9	4.46	.65
Reversing outline	78.4	4.05	1.20
Peer-reviewing essays and assignments	51.4	3.38	1.16
Getting oral feedback from the teacher	94.6	4.73	.56
Getting written feedback from the teacher	100.0	4.81	.40
Using technology to aid writing	91.9	4.62	.64
The SWS (Students Writing Support)	64.9	3.37	1.24

The analysis of the questionnaire showed that students generally had a high opinion of the course. Among a total score of 5, the range of the means of students' choices for each item was between 3.37 and 4.82. And the percentage of usefulness of the course (including choices of very useful and useful, see Table 2) and agreement of progress as a result of the course (including choices of strongly agree and agree, see Table 3) was mostly above 70. Only a small percentage of the students had negative opinions indicating that some parts of the course were not as helpful for learning as expected. Given the different learning styles, strategies, personalities and preferences, it is understandable that some students responded negatively.

Tasks, Strategies and Criteria

Generally speaking, students liked the course package that the teacher provided. Among all the items describing the usefulness of the course package, students thought that tips and strategies were the most helpful ($M=4.38$, $SD=.79$). They tried to use strategies in their writing process, as some students reflected in their essays: "I did free writing and wrote all the things related to the computer games"; "I never created mind maps before I took this course, but now I think mind maps are useful." In fact, strategies are considered important in writing by a lot of researchers (Graham, 2006; Harris & Graham, 1996; Saddler, Moran, Graham, & Harris, 2004) because writing places extremely high demands on the limited capacity of working memory (Galbraith, 2009), making writers develop effective strategies for managing the writing process so as to avoid cognitive overload (Flower & Hayes, 1980). Harris and Graham (1996) even suggested a self-regulated strategy development model focusing on strategies for successfully completing an academic task.

Students also favored the exercises and tasks in the course package. They liked to finish different kinds of tasks and activities, such as reading, topic-analyzing, idea-generating, source-evaluating, group discussion, etc. One student noted in the reflective essay: "I still remember that you asked us

to color code similar types of words in the paragraph about mobile technology. Although this method of highlighting words cost me a lot of time, the result of it is obvious for me to know where the lack of cohesion will lead to reader confusion. After that class activity, I had an idea about how to check and improve my paper in its cohesion and transitions.”

Students also had a preference to the evaluation criteria provided by the teacher. The reason for their preference for an explicit knowledge of the writing criteria is that when students were clear about the evaluation criteria for writing, they would refer to it while drafting, revising and reviewing so that their final products could be more in accordance with the requirement in the criteria. This is in line with what Martin and Penrod (2006) who stated, “a course with an explicit focus on evaluating writing, one featuring a critical understanding of criteria for writing in diverse contexts, fosters students’ own development as writers” (p. 66).

Writing Process

Students also made progress in writing (See Table 4). Most students thought that the assignment of writing a research paper was very useful ($M=4.51$, $SD=.65$) and the whole process of writing had contributed greatly to the improvement of their academic writing skills. Students appreciated the writing process from topic generating ($M=4.38$, $SD=.76$) and information searching ($M=4.46$, $SD=.73$) to outline formation ($M=4.54$, $SD=.87$), and then to drafting and revising ($M=4.46$, $SD=.65$). They seemed to have a clear picture of the writing process after they were actually involved in it, as one student remarked in reflection: “Writing is actually problem solving. When we want to finish a writing assignment, we should do rough draft, revised draft, and polished draft one by one. The rough draft is actually the process of setting the problems. Being different from other problems, these problems are set by you yourself. Then, revising is the process to solve problems, such as correcting errors you made in the rough draft.”

Among all the items concerning the writing process, oral and written

teacher feedback was liked most by students. All of the students thought that the written feedback ($M=4.81$, $SD=.40$) was either very useful (81.1%) or useful (18.9%), and almost 95% of the students agreed to the usefulness of oral feedback ($M=4.73$, $SD=0.64$). Students felt that teacher feedback was the most helpful for the improvement of their writing skills than any other activities in the whole process of writing, result consistent with Miao et al. (2006) who found that teacher feedback was more likely to be adopted and resulted in greater improvements in writing after they did a study on the comparison between teacher and student feedback in a Chinese university.

Although they liked both written and oral feedback from the teacher, some students preferred written feedback to oral feedback and had no idea whether oral feedback was useful. It was found in the interviews that these students had difficulty understanding what the teacher explained in the form of the oral feedback due to their low listening ability. Therefore, it is better to provide written feedback in addition to oral feedback when teaching writing skills to ESL learners.

Although students liked most of the tasks and activities in writing, the task of peer-review was not so appreciated ($M=3.38$, $SD=1.16$). The high SD shows that students had disparity of opinions for this item. The researcher found from classroom observation that students in some groups were very enthusiastic about peer review. They read their peers' paper very carefully and gave each other a lot of suggestive feedback. However, students in some other groups had no interest in peer review activity. Morris (2014) attributed students' resistance to peer review to three reasons: the difficulty in deciding between conflicting comments from their peers; the lack of assurance of their own adequacy as evaluators of their peers' work; the doubt about the helpfulness of feedback given by peers. The researcher also found from the interviews that the reviewers were hardly able to give suggestive and significant feedback and those subject to the review process lacked trust and interest in the feedback offered. However, peer feedback is usually encouraged in the process of writing because it is associated with a greater degree of student autonomy (Miao, Badger, & Zhen, 2006). Peer review not

only benefits the students who get feedback but also those who give feedback. The student who provides feedback will often be more benefited (Matsuda, 2013) because the process involves intensive thinking about the content, the structure, the language and other features of writing, given that the student has gained the ability of providing effective feedback. Since students may not know how to give good feedback before they come to the class, it is necessary to have peer review training so that they can think more critically and give more constructive feedback to their peers (Zhang & Sheng, 2011). Examples of peer review training can be found in Min (2005, 2006), Liou and Peng (2009) and Zhang and Sheng (2011).

TABLE 4
Means and Percentages of Learners' Perceptions of Progress as a Result of the Course

	Percentage	Mean	Std. Deviation
I am more confident in writing.	86.5	4.16	.78
I enjoy writing more.	62.2	3.70	.94
I write with better organization of text.	78.4	4.22	.85
I have a better transition between paragraphs.	86.5	4.19	.84
I can write more fluently.	89.2	4.27	.65
I am more grammatically accurate in writing.	81.2	4.00	.71
I have more vocabulary and use more complex sentence structure.	64.9	3.73	.93
I am able to express ideas more freely and clearly.	78.4	4.19	.84
I can express ideas more deeply.	73.0	4.03	.90
I can write academically (academic writing conventions).	81.1	4.32	.78
I develop research skills by writing the research paper.	81.1	4.19	.97
This course helps me complete writing assignments of other subjects.	78.4	4.08	1.09

Technology

When asked whether technology were useful for aiding their writing, almost 92% of the students found it quite useful ($M=4.62$, $SD=0.64$), results consistent with the findings of Warschauer (2007), who maintains that technologies are having a profound effect on all aspects of language use, especially in writing. A student reflected in the essay:

“I used computer and the Internet to find sources, chat with my classmates for ideas and had discussion with teachers and classmates. I even used Endnote to help me in my reference and citation. The Moodle site designed by the teacher was very useful. I can hardly imagine how the classes could be organized well without it. We posted our homework online and got information from the teacher online. A lot of things! I have never used computer so much in a writing class before!”

The open-ended question about technology showed that students favored the Moodle site, where the teacher posted much information and had a lot of communication with the students. They thought it was a good online platform for them to get the learning ideas, know the learning requirements, perform the learning tasks and activities, and gain feedback from their peers and teachers. In the process of writing, technology helped learners to get ideas and find resources, to control and monitor the learning process, to learn collaboratively and to gain scaffolding from teachers, consultants and peers. When students were asked in an interview for details about how technology helped them in writing, the answers were varied. Some of them indicated that they used technology to search resources online, and that reference management software helped ease the complex task of managing and referring to sources. Some found that online materials and courses helped them to learn at their own convenience, and that class management on Moodle was quite useful for setting a suitable pace for learning. Others thought that communication with peers and the teacher were enhanced by the

Internet, and that online guidance provided by the SWS was very helpful.

Progress

Generally speaking, students benefited from the course. A large majority of students held the perception that they became more confident in writing and their writing competence had been improved. They could write more academically (81.1%) and fluently (89.2%), with more accuracy in grammar (81.1%) and better transition between paragraphs (86.5%). Most students found that they could write with better organization of texts and express ideas more freely, clearly and deeply. In addition, 81.1% of the students thought that their research skills were developed by writing the research paper and 78.4% of them considered that the course helped to complete writing assignments of other subjects. As a student mentioned in his essay: “After an overview of those ‘big events’, I could easily get the idea that my writing skills were improved.” Students’ perception about their progress was in agreement with the finding from the pre- and post-course writing tests.

However, complexity of writing did not improve as much as other aspects of writing. For example, the variety of vocabulary or complexity of sentence structures showed little improvement. This could be explained by the fact that clarity is more emphasized in academic writing. The course instructor had informed the students that a clear statement was more important than a sentence with complex structures. Students were encouraged to express themselves clearly rather than writing complex sentences at the cost of clarity in meaning.

CONCLUSION

The research shows that it is possible for the incorporation of the model that draws strength from both writing as a process and as a social interaction, with technology as an aid in an academic writing course. Most students were

satisfied with the activities, tasks and assignments and favored the idea of using computers and the Internet as an aid to writing. They also employed different kinds of strategies for completing the tasks and activities smoothly and successfully and did a lot of cooperative work during the writing process.

The evaluation of the course suggests that the course has achieved the goal of helping learners improve their academic writing competence and confidence, which will enable them to cope successfully with future writing tasks. The limitation of the study is that the number of subjects is not big, and it was conducted over a relatively short period of time. A longitudinal study with more subjects could yield more useful and convincing results.

THE AUTHORS

Li Zhang is an associate professor of second language acquisition. Her recent research covers computer supported language teaching and learning, academic writing and communication, comparative study of English and Chinese. Her recent publications include *The effect of peer review training for online writing* with Sheng (2011) and *The Three-Dimensional Network-featured Online Role Play Activity and Its Influence on The Development of Writing and Thinking Ability* with Gu (2013).

School of Foreign Languages
Shanghai Jiao Tong University
800 Dongchuan Road, Shanghai, China
Zip code: 200240
Tel.: +8613916677602
Email: zhangli@sjtu.edu.cn

Yue Sheng is an associate professor of second language acquisition. His research interests are computer aided language learning and Internet supported writing. His recent publications include *The effect of peer review training for online writing* with Zhang (2011) and *How technology assists*

Evaluating an Academic Writing Course Based on an Integrated Model

college writing instruction – Computer assisted writing in UMN with Zhang (2013).

Fundamental Studies

Shanghai University of Engineering Science
333 Longteng Road, Shanghai, China
Zip code: 201600
Tel.: +8613816228405
Email: sheng.yue@163.com

Lan Li is an associate professor of second language acquisition. Her research interests include corpus-driven language learning, language in computer mediated communication and English for technical and Web-based writing. Her recent publications include *Collaborative learning in virtual English class: A Hong Kong case study* with Gui and AuYeung (2012) and *English in tiers at workplace: A case study of email usage* with McGregor (2010).

Department of English
Hong Kong Polytechnic University
Kowloon Hong Kong
Tel: 27667978
Fax: (852) 23336569
Email: lan.li@polyu.edu.hk

ACKNOWLEDGEMENTS

The authors would like to express their sincere thanks to Shanghai Municipal Education Commission and Chinese National Social Science Fund for sponsoring this study (Project Number B12005, and 13BYY081). They are also grateful to the reviewers for their industrious work and suggestive

comments.

REFERENCES

- Amador-Moreno, C. P. (2012). A corpus-based approach to contemporary Irish writing: Ross O'Carroll-Kelly's use of like as a discourse marker. *International Journal of English Studies, 12*(2), 19-38.
- Anderson, L., & Holt, M. (1990). Teaching writing in sociology: A social constructionist approach. *Teaching Sociology, 18*(2), 179-184.
- Arslan, R. S., & Sahin-Kizil, A. (2010). How can the use of blog software facilitate the writing process of English language learners? *Computer Assisted Language Learning, 23*(3), 183-197.
- Atkinson, D. (2003). L2 writing in the post-process era: Introduction. *Journal of Second Language Writing, 12*, 3-15.
- Beaugrande, R. (1985). Test linguistics in discourse studies. In T. van Dijk (Ed.), *Handbook of discourse analysis: Vol. 1. disciplines of discourse*. London, Academic Press.
- Bereiter, C., & Scardamalia, M. (1983). Levels of inquiry in writing research. In P. Mosenenthal, L. Tamor & S. Walmsley (Eds.), *Research on writing: Principles and methods* (pp. 3-25). New York: Longman.
- Brandl, K. (2005). Are you ready to "Moodle"? *Language Learning & Technology, 9*(2), 16-23.
- Brodahl, C., Hadjerrout, S., & Hansen, N. K. (2011). Collaborative writing with Web 2.0 technologies: Education students' perceptions. *Journal of Information Technology Education, 10*, 73-103.
- Chao, Y. J., & Lo, H. (2011). Students' perceptions of Wiki-based collaborative writing for learners of English as a foreign language. *Interactive Learning Environments, 19*, 395-411.
- Englert, C. S. (1992). Writing instruction from a sociocultural perspective: The holistic, dialogic, and social enterprise of writing. *Journal of Learning Disabilities, 25*(3), 153-172.
- Flower, L., & Hayes, J. R. (1980). The dynamics of composing: Making plans and juggling constraints. In G. Lee & S. Erwin (Eds.), *Cognitive processes in writing* (pp. 31-50). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Flower, L., & Hayes, J. R. (1981). The cognitive process model of the composing process. *College Composition and Communication, 32*, 365-380.

Evaluating an Academic Writing Course Based on an Integrated Model

- Fox, R. (1980). Treatment of writing apprehension and its effects on composition. *Research in the Teaching of English, 14*, 39-49.
- Galbraith, D. (2009). Cognitive models of writing. *German as a Foreign Language, 2-3*, 7-22.
- Geluso, J. (2013). Phraseology and frequency of occurrence on the web: Native speakers' perceptions of Google-informed second language writing. *Computer Assisted Language Learning, 26*(2), 144-157.
- Gere, A. R., & Stevens, R. S. (1985). The language of writing groups: How oral response shapes revision. In S. W. Freedman (Ed.), *The acquisition of written language: Revision and response* (pp. 85-105). Norwood, NJ: Ablex.
- Graham, S. (2006). Strategy instruction and the teaching of writing: A meta-analysis. In C. MacArthur, S. Graham & J. Fitzgerald (Eds.), *Handbook of writing research* (pp. 187-207). New York: Guilford Press.
- Greene, D. (2000). A design model for beginner-level computer-mediated EFL writing. *Computer Assisted Language Learning, 13*(3), 239-252.
- Groves, C. J. E. (2010). The multimodal writing process: changing practices in contemporary classrooms. *Language and Education, 25*, 49-64.
- Harris, K. R., & Graham, S. (1996). *Making the writing process work: Strategies for composition and self-regulation*. Cambridge, MA: Brookline.
- Hayes, J. R. (1996). A new framework for understanding cognition and affect in writing. In C. M. Levy & S. Ransdell (Eds.), *The science of writing* (pp. 1-27). Mahwah, NJ: Erlbaum.
- Herrington, A., Hodgson, K., & Moran, C. (2009). *Teaching the new writing: Technology, change, and assessment in the 21st-century classroom*. New York: Teachers College Press.
- Kuo, C. H. (2008). Designing an online writing system: Learning with support. *RELC Journal, 39*, 285-299.
- Lai, K. (2012). Assessing participation skills: Online discussions with peers. *Assessment & Evaluation in Higher Education, 37*, 933-947.
- Li, M. (2013). Individual novices and collective experts: Collective scaffolding in wiki-based small group writing. *System, 41*, 752-769.
- Li, M., & Zhu, W. (2013). Patterns of computer-mediated interaction in small writing groups using wikis. *Computer Assisted Language Learning, 26*(1), 61-82.
- Likkel, L. (2012). Calibrated peer review essays increase student confidence in assessing their own writing. *Journal of College Science Teaching, 41*(3), 42-47.
- Liou, H. C., & Peng, Z. Y. (2009). Training effects on computer-mediated peer review. *System, 37*, 514-525.

- Liu C. L., Lee, C. H., & Ding B. Y. (2012). Intelligent computer assisted blog writing system. *Expert Systems with Applications*, 39, 4496–4504.
- Martin, D., & Penrod, D. (2006). Coming to know criteria: The value of an evaluating writing course for undergraduates. *Assessing Writing*, 11, 66-73.
- Matsuda, P. K. (2013, October). *Reflections on the 2013 symposium on second language writing and a look at 2014 and beyond*. Paper presented at the 12th Symposium on Second Language Writing, Jinan, Shandong, China.
- Miao, Y., Badger, R., & Zhen, Y. (2006). A comparative study of peer and teacher feedback in a Chinese EFL writing class. *Journal of Second Language Writing*, 15, 179-200.
- Min, H. T. (2005). Training students to become successful peer reviewers. *System*, 33, 293-308.
- Min, H. T. (2006). The effects of trained peer review on EFL students' revision types and writing quality. *Journal of Second Language Writing*, 15, 118-141.
- Morris, G. (2014). *Using peer review to improve student writing*. University of Michigan, Center for Writing: Retrieved from <http://www.lsa.umich.edu/UMICH/sweetland/Home/Instructors/Teaching%20Resources/UsingPeerReviewtoImproveStudentWriting.pdf>.
- Nair, S. S., Tay, L. Y., & Koh, J. H. L. (2013). Students' motivation and teachers' teaching practices towards the use of blogs for writing of online journals. *Educational Media International*, 50(2), 108-119.
- Nystrand, M. (1983). The context of written communication. *Nottingham Linguistic Circular*, 12(3), 55-65.
- Nystrand, M. (1989). A social-interactive model of writing. *Written Communication*, 6, 66-85.
- Pincas, A. (1982). *Writing in English 1*. London: Macmillan.
- Saddler, B., Moran, S., Graham, S., & Harris, K. R. (2004). Preventing writing difficulties: The effects of planning strategy instruction on the writing performance of struggling writers. *Exceptionality*, 12, 13-17.
- Suvorov, R. (2010). Using Moodle in ESOL Writing Classes. *The Electronic Journal for English as a Second Language*, 14 (2), Retrieved from <http://www.tesl-ej.org/wordpress/issues/volume14/ej54/ej54m1/>.
- Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.
- Warschauer, M. (2007). Technology and writing. In C. Davison & J. Cummins (Eds.), *The international handbook of English language teaching* (pp. 907-912). Norwell, MA: Springer.
- Yang, Y. F. (2011). A reciprocal peer review system to support college students'

Evaluating an Academic Writing Course Based on an Integrated Model

writing. *British Journal of Educational Technology*, 42, 687-700.

Zhang, L., & Sheng, Y. (2011). The effect of peer review training for online writing. *Contemporary Foreign Languages Studies*, 363, 32-36.

APPENDIX

Research Paper Peer Workshop

Put *your name* on your peer's essay. Read the paper once as a believer/doubter, making reaction notes as you read. Then read the directions below so that when you read your peer's paper a second time, you know what to do. With this second reading, write your comments in the margin and on the back of your peer's essay. Explain your comments when necessary.

Background, audience, & focus

1. So what? Who cares?

- Do you feel you have enough starter information to know why this topic matters?
- Has your peer adequately prepared the reader for the focus presented in the thesis statement? If not, what needs to be changed?
- Does the writer move you smoothly towards a narrowed focus?

2. Circle the thesis statement.

- Does the thesis statement make a claim that can be argued and supported?
- Does the thesis statement give you a sense of why the information is important how the paper will be organized?

Organization, analysis, & development

3. Reflect on what your opinion about this topic was *before* you read your peer's paper and then after. Keep in mind the rhetorical triangle with its appeals to character of the writer, to logic, and to emotion.

- Note arguments that you find particularly persuasive. Likewise note arguments that were not very convincing, where you found yourself saying "yes, but..." or "no way!"
- Explain so that your peer knows what is working and what s/he should perhaps do differently to be more persuasive.
- Are there arguments that you think your peer overlooked?

4. Look at places where the arguments build particularly well or are hard to follow. Analyze the strength or weakness.

- If you are following the argument easily, is it due in part to good use of transition and cohesion techniques?

Evaluating an Academic Writing Course Based on an Integrated Model

- If the argument is hard to follow, is it due in part to weakness in transition and cohesion?
 - Is it clear who is saying what? Is it accurate? Integrated? Is your peer's own voice/opinion clear (even if "I" is not used)? Explain.
 - Are the ideas presented in a logical order? If not, explain.
5. Over the whole essay, was the order of the arguments and points what you expected, easy to follow? If not, explain what was confusing.

Paragraph Style

6. Underline the topic sentence in each paragraph (after the introduction).
- Is the rest of the paragraph related to the topic sentence? If not, point out which sentences are not related. Do you think they still belong in the paragraph? Why or why not?

Reporting language

7. Look at the various *they say* voices from all the sources.
- Is it clear who is saying what (this involves both reporting verbs and citation)?
 - Does what is reported seem reasonable?
 - Are the *they say* voices integrated and in conversation with one another or is the mixing of voices choppy? Draw your peer's attention to strengths and weaknesses.
 - Is your peer's own voice (when making commentary) clearly distinguishable from the voices they say, or are you sometimes confused by who is "talking"?
 - Do you think your peer is applying APA citation correctly?

Conclusion

8. Compare the thesis statement and the conclusion.
- Do they emphasize the same controlling idea? If not, which do you think is the true thesis of the essay?
9. A good conclusion brings a sense of closure to a paper.
- Does this paper's conclusion seem to make the discussion feel finished? Explain.
 - Do you see strengths or problems with the conclusion? Explain.

Recommendations (put these on Moodle, too)

10. What 2 things do you think your peer should focus on when revising? *Do not say English or punctuation, etc. Focus on content, style, and organization.*