

Using Google Documents to Enhance Peer Editing

Gary Waddell, Mahidol University International College, Thailand
Vorodom Viravong, Mahidol University International College, Thailand

The Asian Conference on Society, Education & Technology 2015
Official Conference Proceedings

Abstract

Two common goals of EFL writing instructors are to foster collaborative writing and to encourage students to develop independent peer-editing skills. One of the most commonly cited deficiencies in EFL writing, however, is that students tend to depend too heavily on feedback from their teachers, especially within cultures that are teacher-centered. Also, students often view peer editing as impractical and ineffective since they often have trouble identifying mistakes in their own work. The researchers used Google Documents to conduct action research encouraging students to become more active learners and create a more interesting, practical, and up-to-date approach to the traditional peer-editing process. Google Documents is a cloud based word processing program that allows students to share writing and collaborate in real time via the Internet.

Keywords: education, technology, peer editing, Google Documents, collaborative writing, EFL

iafor

The International Academic Forum
www.iafor.org

Context

The present study used action research to investigate the perceptions of 41 university-aged English language learners in Thailand regarding the effectiveness of using Google Documents as an instructional tool. Currently, teachers are challenged with meeting the needs of contemporary students by providing materials that are not only engaging and up-to-date but also useful tools for instruction. The researchers believe that peer editing in real time is an interesting way for students to improve their language skills, and that it is perceived as more effective than traditional peer-editing, i.e. using pen and paper or a word processing program such as Microsoft Word.

Within Thailand, both the government and members of the private sector invest heavily in education, and the country now has a literacy rate of over 93% (Kirkpatrick, 2012). Furthermore, the majority of students receive more than nine years of schooling, and even as far back as 2007, there were 2.4 million students who completed bachelor degrees and 16,000 who obtained doctorates (Kirkpatrick, 2012).

Also, educators in Thailand widely agree on the importance of English on the economy. Hengsadekul, Hengsadekul, Koul, and Kaewkuekool (2010, p. 25), for example, wrote:

Today, with Thailand's role in the international trade, the English language is needed for Thailand's economic survival. — It is no longer a matter of preference; it is a matter of necessity. Significantly, English is a powerful vehicle for carrying on international business, strengthening the economy and improving technical knowledge.

In response to the need for proficient users of English in Thailand, Mahidol University International College established the Preparation Center for Languages and Mathematics (PC) in 1998. The center has four levels of English language classes that range from pre-intermediate to upper intermediate. The students enroll in ten-week intensive English language classes with class sizes ranging from 18-25 students. Most have recently finished high school and come from a wide variety of educational backgrounds. PC has a modern institution-wide Wi-Fi system, and students are required to bring laptops to all their classes. Furthermore, the center has a Google Apps for Education account that includes unlimited cloud-based storage.

Online collaboration is of crucial importance as a 21st century skill and can be improved with Google Docs. This is an online word processing application that equips users with the abilities to create, share, store and collaboratively edit written documents. In addition, Google Docs allows educators to place comments in real time directly in the body of any text or in the margins of students' assignments. In addition, students can easily share their work with one another for peer editing. Peer editing with Google Docs facilitates teachers' ability to monitor the exchanges that occur between classmates during the entire editing process. As a result, a growing number of teachers are adopting Google Docs in the classroom to encourage a shift towards collaborative writing and increase the depth and frequency of peer review for a variety of assignments.

Previous models of peer editing involved students exchanging hand-written assignments with their peers. Students were given a limited time frame in which to make hand-written or verbal critiques of their partner's work. The benefits of this method were limited as some students lacked the motivation to thoroughly assess their partner's work. The lack of motivation often stemmed from the fact that they were not accurately held accountable for their comments as the feedback was difficult and tedious to track. This out-dated model of peer editing can be measurably improved by integrating Google Docs into contemporary classroom writing. With Google Docs, multiple peers are able to review a document collaboratively as the revisions are visible to all. The benefits of immediate feedback are difficult to ignore as students clearly see the impact of their feedback on their classmates' assignments in real-time. Google Docs automatically records every aspect of each critique, including suggestions, highlights, and comments. Teachers also benefit as they can easily track the accuracy and breadth of each example of feedback, enabling them to ensure greater participation by all students. By requiring multiple drafts, teachers can offer comments at various stages of the writing process. Students are now held more accountable, thereby increasing their level of participation and the quality of feedback each receives.

Literature Review

Vygotsky (1978) argued that development is essentially a socially constructed activity in which a novice develops cognitively through interacting with an expert who guides learners to reach their potential. As noted by Storch (2005), this assistance is most often referred to as scaffolding. He also argues that scaffolding can occur amongst peers when working collaboratively on a piece of writing, and from the viewpoint of a social constructivist, learners should participate in activities in which they can work together to co-construct knowledge (p. 154).

Nicol (2010) posited that "feedback should be conceptualised as a dialogical and contingent two-way process that involves coordinated teacher-student and peer-to-peer interaction as well as active learner engagement" (p. 503). This notion that dialogue is vital to the learning process is widely accepted in educational literature. Building on the work of Pask (1976), Laurillard (2002) developed an influential theory of teaching and learning that she called a "conversational framework" (p. 77). Using this framework, she argued that dialogue must have four characteristics in order to be effective. It should be adaptive, i.e. changing with students' needs; discursive, i.e. filled with two-way communication; interactive, i.e. connected to completing a task or reaching a goal; and reflective, i.e. it should encourage teachers and students to examine the overall learning process (Laurillard, 2002).

However, there are also criticisms associated with collaborative writing. Commonly-cited deficiencies involve inexperience of collaborators, interpersonal conflict, and apprehension due to worries of inaccuracies in editing. (Chisholm, 1990; Nelson & Murphy, 1993). In addition, it may be that the role of the writer in collaborative work remains unclear as the writing process is often viewed as an individual act (Murray, 1992). However, according to Lam and Pennington (1995), it is imperative teachers be patient in order to allow students enough time to adapt to the new skills and expectations of collaborative editing.

As noted by Hughes, Thomas, & Scharber (2006), teachers are in great need of an evaluative framework for assessing the integration of technology and its effectiveness, and even though in-service teachers have a wide range of technologies to choose from, they are lacking in strategies to determine their effectiveness. To this end, Hughes, Thomas, and Scharber (2006) conceptualized the three-point RAT Framework with the following categories: (1) Technology as Replacement, (2) Technology as Amplification, and (3) Technology as Transformation (p. 1616). Within the framework, each instance of technology is examined systematically to measure whether a technology was replaced, amplified, or transformed (p. 1617). Furthermore, specific aspects of three broad themes are used to assure that attention is given to all components of the instructional event in which the technology is employed, (1) instructional methods, (2) student learning process, and (3) curriculum goals. All aspects listed under each theme in Table 1 are evaluated.

Table 1: Aspects of three broad themes for analyzing the use of technology

<i>Instructional Methods</i>	<i>Student Learning Process</i>	<i>Curriculum Goals</i>
Teacher's role	Activity task	"Knowledge" to be gained, learned, or applied
Interaction with students	Thinking process-mental process	"Experience" to be gained, learned, or applied
Assessment of students	Task milieu (individual, small group, whole-class, others)	
Professional development	Motivation	
Preparation	Student attitude	
Administrative tasks		

Methodology

The participants in the study had below 550 TOEFL scores (on the paper based exam) and below 5.5 IELTS. The instructors facilitated students in their learning by explaining the mechanics of using Google Docs and allowed them as much flexibility as possible with their peer editing. Students worked in pairs to write 300- 350 word opinion essays. They then shared their work with two other pairs of students who made peer-editing comments on both the grammar (language control) and the content of the essay. The researchers designed and shared a student peer-editing template in Google Docs (see Table 2 below). The template has a set of instructions along with a grading rubric to give students a starting point for making peer-editing comments. Students were then instructed to identify and make comments on grammatical and content errors such as sentence fragments, weak topic sentences, or unclear support.

Table 2: Student Peer-editing Google Document and instructions

Peer Editing PC 2 Writing

Make a copy of this document and change the title to your nicknames and the title of your document. Then share it with xxxxxxx@gmail.com

Type your first draft in the box below and share it with two other groups.

Using the scoring rubric on pp. 268-269 of your writing book, first check the **content** of the writing that was shared with you. Use Ctrl + Alt + M to make comments on a Windows computer and Command + Alt + M in Mac. Leave the comments and corrections to the first and second draft; I want to see them.

However, remove all the comments on the final draft. Make sure that the writers' nicknames, your group number, and the editors' nicknames are on each draft.

First draft

Put your nickname/s and group

number below:

Copy the second draft of your essay in the box below and share it with a new group. (Share the first draft with one group and the second draft with another group.) Check the **grammar** of the second essay that was shared with you.

Second draft

Do one final edit of your essay and copy it in the box below. Print copies of the final draft of your writing for the entire class. Hand them out **before** class begins.

Final Draft

The researchers monitored the online peer-editing process as students made various peer-edits. In the first edit, students were asked to focus on the non-language-related comments by rating the thesis, unity, and overall development of main ideas in the essays. Questions included the following: "How clear is the author's thesis?", "Is there a central idea that is relevant and developed in each paragraph?", and "How interesting is the essay overall?". These questions required students to first look holistically at their assignments before focusing on the more specific aspects of grammar and lexis.

Upon completing their initial edit, students were then asked to edit the grammar, spelling, and punctuation. In the second draft, students analyzed writing for sentence-structure errors like fragments, run-ons, and comma splices. They also looked for grammatical mistakes with countable and uncountable nouns, verb tenses, and subject-verb agreement.

After students completed their final edits, the teacher went through each essay with the entire class pointing out which comments made in the peer-editing process were correct or incorrect. Once all the essays had been marked by the teacher, the students were given a cloud-based Google Form containing seven questions about the peer-editing activity. The form asked them to provide their opinions on a five-point Likert

scale ranging from “strongly agree (1)” to “strongly disagree (5)” (see Table 3 below). The form also included the following open-ended question: “What is your overall impression about peer-editing using Google Docs?”

Table 3: A seven-question survey using a Likert-scale and open-ended questions to ascertain students’ perceptions of the merits of collaborative writing, effectiveness of their feedback, and the overall impact on their writing.

Results:	Mean	SA		A		N		D		SD	
		N	%	N	%	N	%	N	%	N	%
1. Peer editing in Google Docs is more effective than traditional peer editing	1.71	20	49	14	34	6	15	1	2	0	0
2. Peer editing in Google Docs made me a more independent learner	1.90	16	39	17	41	4	10	4	10	0	0
Peer editing in Google Docs helped me to improve my:											
3. ability to accurately spot and correct mistakes in other students’ writing	1.76	21	51	13	32	3	7	4	10	0	0
4. grammar	2.34	10	24	16	39	8	20	5	12	2	5
5. vocabulary	2.39	10	24	11	27	15	37	4	10	1	2
6. overall writing ability	2.59	9	22	8	20	18	44	3	7	3	7
7. creative thinking	2.56	6	15	16	39	10	27	4	14	2	5

Discussion

A summary of the descriptive statistics related to means, frequencies and percentages obtained from the questionnaire are given in Table 3. As evidenced in the table, the three questions that students responded to most frequently with “strongly agree” or “agree” were: 1) “Peer editing in Google Docs is more effective than traditional peer editing.” 2) “Peer editing in Google Docs made me a more independent learner.” 3) “Peer editing in Google Docs helped me to improve my ability to accurately spot and correct mistakes in other students’ writing.” More specifically, approximately half of all respondents “strongly agreed” that peer editing in Google Docs was more effective than their previous experience with traditional peer editing. Fifty one percent of students were in strong agreement that they were able to improve their ability to identify and correct mistakes in their classmates’ work.

Approximately sixty percent of respondents “agreed” or were “neutral” that editing activities on Google Docs improved their grammar and vocabulary. Forty-four percent of respondents had a neutral rating of improvements in their overall writing ability (mean = 2.59). Slightly less than forty percent of participants agreed that they were able to improve their creative thinking.

In analyzing the students’ responses using the RAT framework, it can be seen that the technology “amplified” and “transformed” the process of peer editing overall. This is exemplified in the following student comments: “the most useful part was that I get comment quick.” “I didn’t have to download program. It was on internet.” “I like getting comment from my friend on net.” “I think it is really help me improve my writing.”

Furthermore, the researchers feel that using Google Documents is beneficial in terms of *instructional methods* since it deemphasizes the role of the teacher allowing him or her to act more as a facilitator rather than a purveyor of knowledge. In addition, the researchers noted that *the student learning process* was enhanced in terms of the thinking process since students gained confidence as they made more comments. “At first I was not confident, but I think my comment got better.” However, a few participants demonstrated hesitation and lack of confidence as shown by the following remarks: “Sometimes my friend complained about me that I had made a mistake when I not.” “I worry my comments were wrong.” “I didn’t want to tell my friend too many mistake.” “I was scared my friends will take my comments wrong way.” Finally, the researchers feel that this action research project fit well with the overall *curriculum goals* to build student confidence and empower learners in a student-centered environment.

Conclusion

Overall, the researchers feel that the RAT framework was quite useful for evaluating the project. The authors are not advocating replacing traditional paper-based peer editing solely with online collaborative editing. However, the results of this action research demonstrate that students believe that Google Docs is able to enhance their awareness of common mistakes that they and their classmates frequently make, especially in the areas of content and grammar. The students claimed that by using Google Docs in real-time, they grew more confident in their ability to accurately edit a piece of writing.

It is hoped that further research will provide teachers and students greater confidence to begin incorporating more online collaboration into their lesson plans. Teachers can take advantage of the numerous pedagogical options afforded them through the use of online technologies. Subsequent research should be done to determine how best to make use of peer feedback, with its high level of interaction between writer and reader to not only enhance learners motivation and interest, but also improve writing proficiency.

References

- Chisholm, R. M. (1990). Coping with the problems of collaborative writing. *The Writing Across the Curriculum Journal*, 2, 90–108. Retrieved from <http://wac.colostate.edu/journal/>
- Ede, L., & Lunsford, A. (1990). *Singular texts/plural authors: Perspectives on collaborative writing*. Carbondale: Southern Illinois University Press.
- Hallinger, P., & Bryant, D. A. (2013). Synthesis of findings from 15 years of educational reform in Thailand: Lessons on leading educational change in East Asia. *International Journal of Leadership in Education*, 16(4), 399-418.
- Hallinger, P., & Lee, M. (2011). A decade of education reform in Thailand: broken promise or impossible dream?. *Cambridge Journal of Education*, 41(2), 139-158.
- Hughes, J., Thomas, R., & Scharber, C. (2006, March). Assessing Technology Integration: The RAT–Replacement, Amplification, and Transformation-Framework. In *Society for Information Technology & Teacher Education International Conference* (Vol. 2006, No. 1, pp. 1616-1620).
- Kessler, Greg, Dawn Bikowski, and Jordan Boggs. "Collaborative writing among second language learners in academic web-based projects." *Language Learning & Technology* 16.1 (2012): 91-109.
- Kirkpatrick, Robert. "English education in Thailand: 2012." *Asian EFL Journal* 61 (2012): 24-40.
- Lam, F. S., & Pennington, M. (1995). The computer vs. the pen: A comparative study of word processing in a Hong Kong secondary classroom. *Computer Assisted Language Learning*, 8, 75–92. Retrieved from <http://www.tandf.co.uk/journals/titles/09588221.asp>
- Laurillard, D. (2002). *Rethinking university teaching: A conversational framework for the effective use of learning technologies*. 2nd ed. London: Routledge Falmer.
- Nelson, G. L., & Murphy, J. M. (1993). Peer response groups: Do L2 writers use peer comments in revising their drafts? *TESOL Quarterly*, 27(1), 135–141.
- Nicol, D. (2010). From monologue to dialogue: improving written feedback processes in mass higher education. *Assessment & Evaluation in Higher Education*, 35(5), 501-517.
- Pask, G. (1976). Conversational techniques in the study and practice of education. *British Journal of Educational Psychology*, 46(1), 12-25.
- Storch, Neomy. "Collaborative writing: Product, process, and students' reflections." *Journal of second language writing* 14.3 (2005): 153-173.
- Vygotsky, Lev. "Interaction between learning and development." *Readings on the development of children* 23.3 (1978): 34-41.