Accelerating Learning to Write with Reciprocal Peer Review

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Abstract: The goal of this project is to join the world effort of improving writing skills in colleges and universities. With the Accelerating Writers through Technology-Scaffolded Peer Review (ACCEL) application, we aim to re-shape writing instruction with a familiar but understudied tool, peer review of writing, but in a new way that addresses typical problems associated with peer review of writing. In the demo, we will show the ACCEL system, a web-based, hybrid-intelligent, collaborative learning system supporting the form of reciprocal peer review for writing. Visitors may experience a wide range of ACCEL approaches with poster presentations, top-notch empirical studies, video clips, and actual use of the ACCEL system.

Project Description
The goal of this project is to join the world effort of improving writing skills in colleges and universities. With the Accelerating Writers through Technology-Scaffolded Peer Review (ACCEL) application, we aim to re-shape writing instruction with a familiar but understudied tool, peer review of writing, but in a new way that addresses typical problems associated with peer review of writing.

Russell's (2002) historical review of writing instruction clearly demonstrates that improving undergraduates' writing skills has been a long-standing goal of institutions of higher education for more than a century because writing well is critical for academic and professional success. A great number of college students, however, remain at a lower level of writing ability than is expected by colleges of incoming freshmen (Kamil, 2003). Students are required to complete increasingly complex writing in college, addressing varying disciplinary expectations through the writing they do in different courses, yet they are not adequately prepared to accomplish those tasks.

To address this unfortunate Writing Crisis (Graham & Perin, 2007), and to help students develop the strategies they need to effectively address the different writing tasks they will face in college and beyond, colleges and universities in many countries commit considerable financial and pedagogical resources to offering and administering writing courses with small enrollments per section to substantial numbers of entering first year students. For example, individual universities tend to offer a few hundred sections of first year composition every year and also another hundreds of writing courses for upper level college students in subject matter disciplines.

Although students make considerable progress in these writing courses, one or two courses are not enough to address all the weaknesses that so many students have as writers. Thus, most colleges also have additional writing requirements, typically as part of writing in the disciplines. These courses develop discipline-specific writing skills. But because students are typically still struggling with more general writing problems, these courses must also contribute to general writing development. However, there is often not enough time in the curriculum (or instructor resources) to address both discipline-specific writing issues and general writing issues. Here again, peer instruction can be quite valuable. But again the value of peer review depends on peer review giving and using skills that student have develop. If those skills are strongly developed in writing courses, later peer review experiences will accelerate writing skill development.

Reciprocal peer review gives students many opportunities to improve their reading and writing skills, when they act as writer and when they act as reviewer (Charney & Schunn, 2007). For a student in the role of writer, the first round of a multiple-draft assignment begins with conducting research and writing a draft. But, after receiving comments from a peer, the writer has more to do, reading and considering the feedback and producing a revised draft. It is in these post-review activities that the student-as-writer engages more intensively in tasks related to improving his or her writing, rather than to acquiring content knowledge. In the role of reviewer, a student engages in reading, text analysis, and writing. He or she must carefully read a draft, interpret the evaluative criteria, detect and prioritize problems, make a holistic assessment, and draw on writing skills to formulate comments. Coming to understand the criteria well enough to apply them to another student's paper will have clear benefits for the student's own understanding of the assignment and improve his or her writing and revision activities. More gains are possible through a second round of review, in which the same reviewers evaluate the writers' revised drafts and receive feedback on the helpfulness of their comments. These reciprocal activities help students become more self-sufficient by strengthening their self-regulation of reading and writing activities (Nystrand, 1986; Schunk & Zimmerman, 1997; Zimmerman 2000; Zimmerman & Kitsantas, 1999, 2002; Vygotsky, 1978).
Although peer review strongly supports the development of writing skills (Beach & Friedrich, 2006; Charney & Schunn, 2007; Graham & Perin, 2007a; Hattie & Timperley, 2007; Minchew & McGrath, 2001; Shaw, 2002; Topping, 1998; Zemelman & Daniels, 1988), without a technologically advanced platform, three barriers restrict the maximal advantageous use and adoption of reciprocal peer review in writing and subject matter classes.

**Theme of the Session and Expected Outcomes**

In the demo, we will show the ACCEL system, a web-based, hybrid-intelligent, collaborative learning system in the form of reciprocal peer review for writing. Visitors may experience a wide range of ACCEL approaches with poster presentations, top-notch empirical studies, video clips, and actual use of the ACCEL system.

The demo shows key aspects of the application in supporting writing instruction especially in large courses without sacrificing learning and instruction. The ACCEL demo will provide instructors or researchers with theoretically and empirically guided classroom writing pedagogy that actively engages students in writing and reviewing processes in a way that will help them to learn writing skills. With minimal instructor effort, the system provides more structure for developing good writing and reviewing assignments, enabling more thorough peer reviewing, and providing more accountability at the student, class, and program levels.

We expect visitors to experience how the system supports writing instruction or research for free of charge. Thus we seek international collaborations with instructors and researchers who are interested in writing instruction.

**Session Activities**

The demo consists of three parts running in parallel: poster presentation and flyers, video demo, and visitor participation. With the poster presentation, we will describe the system architecture and its overall interfaces for students, instructors, and administrators. The video demo shows key aspects of the application, focusing on how students and instructors use the system. The other one is visitor participation. Using one of the laptops visitors are allowed to actually use the system.

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**References**

Available upon request