Intensive peer review is a method of teaching expository writing developed two years ago by A. N. Doane and now used extensively in freshman expository writing at the University of Wisconsin-Madison. Students meet regularly in groups of four three times a week over the course of the term to share and critique each other's writing. The instructor does relatively little direct instruction, and intervention in these groups is minimal. Students taught by peer review make more progress in writing because they see revision as a matter of reconceptualization rather than editing, view their readers as collaborators in a process of communication rather than as judges, give more emphasis to prewriting, have more positive attitudes about writing, and view their composing process as a process of improvisation and experimentation with ideas and text. Talking about writing can help students learn to write because in a good group there will be (1) a collective examination of written texts, (2) a tendency to dwell on the writer's purpose and its articulation with the resulting focus on the sources of trouble and uncertainties of text, (3) a consideration of higher order writing problems such as structure of argument, (4) presentation of arguments, and (5) paragraph development. Peer review requires careful planning, during which the instructor must help students understand what sorts of group interaction will help students learn to write and what sorts will not. (EL)
LEARNING TO WRITE BY TALKING ABOUT WRITING:
A SUMMARY OF RESEARCH ON INTENSIVE PEER REVIEW IN EXPOSITORY WRITING INSTRUCTION
AT THE UNIVERSITY OF WISCONSIN-MADISON

Martin Nystrand
LEARNING TO WRITE BY TALKING ABOUT WRITING:
A SUMMARY OF RESEARCH ON INTENSIVE PEER REVIEW IN
EXPOSITORY WRITING INSTRUCTION
AT THE UNIVERSITY OF WISCONSIN—MADISON

Martin Nystrand

What is Intensive Peer Review?

INTENSIVE PEER REVIEW is a method of teaching expository writing developed two years ago by Prof. A. N. Doane and now used extensively in Freshman Expository Writing (English 105) at the University of Wisconsin-Madison. Students meet regularly in groups of four, and the same groups meet three times a week over the course of the term for the purpose of sharing and critiquing each other's writing. The instructor assigns few if any topics and gives students no checklists to use in monitoring their discussion. Rather, students keep journals and prepare pieces of exposition from these notebooks for presentation to classmates at every class meeting. Students are required to prepare a new paper or a substantial revision for each class. In their discussion, students must consider the extent to which the writer achieves his or her purpose; they are to avoid checking spelling, punctuation, and usage; and they are required to provide each member of their group with a photocopy of their work for each discussion. Periodically the instructor collects the best papers from each student for evaluation; but he does relatively little direct instruction, and intervention in these groups is minimal.

Though the use of peer review is not new to expository writing instruction (the idea dates back at least to James Moffett's Teaching the Universe of Discourse), its practice has been far more common in elementary and secondary classrooms than in postsecondary settings. Moffett originally justified the method in pragmatic terms as "the only way, short of tutorial, to provide individual students enough experience and feedback." The teacher's role, he said, was mainly to set in motion classroom processes that allow each student to write and receive useful feedback about what he or she has done. These principles are widely accepted as
important foundations for writing instruction. Yet they actually inform precious little expository writing instruction at the university level.

**What Specific Evidence Shows That Peer Interaction Is Effective in Teaching Expository Writing?**

To examine the effectiveness of the Expository Writing Studio, as Prof. Doane describes this arrangement, Prof. Martin Nystrand, assisted by the Freshman Expository Writing faculty and staff at the University of Wisconsin—Madison, has conducted a number of studies since 1983 sponsored by the Wisconsin Center for Education Research and funded by the National Institute of Education. We have compared the achievement and progress of studio and non-studio students. We have investigated the ideas and concepts of writing which students develop in their work with other student writers. And we have videotaped groups of writers at work in studio settings to understand how the quality of student interaction affects the development of writing ability as well as writers' awareness of their own composing processes.

One of the writing tasks that students in all classes of English 105 completed as part of this research was a personal essay, both at the beginning and end of the term. All students wrote about some important personal experience and explained its significance. To evaluate these writing samples, we used James Britton's scale of "transactional-informative" (his term for "expository") prose which he outlines in *The Development of Writing Abilities: 11-18* (Macmillan, 1975). For Britton, writing is largely an interpretive activity, and the development of writing ability is the increasing power to conceptualize experience and render the results in clear, explicit prose. The lower level of development, Britton contends, consists of recording and reporting; the middle involves drawing inferences and generalizing; and the highest level involves theorizing, speculating explicitly about one's inferences and generalizations. Britton's categories are based on a theoretical conception of writing ability, one inspired generally by Piaget's ideas on cognitive development and expressed in slightly different terms by James Moffett in his work at Harvard in the late '60s.
Using this conception of writing ability, we found no significant differences among the personal essays written by studio- and nonstudio-students assessed at the start of the term (one-way ANOVA, post hoc: F = 0.079; p > .05). By the end of the term, however, the studio students were significantly ahead of their nonstudio counterparts (one-way ANOVA, post hoc F = 3.018; p = .0023). The mean writing ability scores for the two groups at the end of the term were 2.2 for nonstudio and 2.7 for studio; "2" on this scale indicates report, and "3" indicates generalization.

We also analyzed these results as "gain" against placement and ability test scores. We did this by performing 2 analyses of covariance involving UW English Placement Test (EPT) and College Qualifying Test/Verbal (CQT) scores respectively as the two covariates after a separate ANOVA showed that there were no significant differences among classes on either variable. The results of both tests were positive. In terms of both the EPT and CQT, studio students made significantly more progress in the development of their writing abilities (on the EPT, F = 8.62; p < .0001; on the CQT, F = 2.26; p = .0044).

Why Did Studio Students Make More Progress in Their Ability to Express Abstract Thought More Explicitly Than Their Counterparts?

Part of the reason studio students made significantly more progress than their counterparts in learning the art and skill of exposition, we believe, is related to key differences in how the two groups of students learned to revise. We asked each student to explain how he or she generally writes, and then analyzed these writing samples (which averaged more than 200 words each) for what students said about revision and several other things (see below). We found that, over the course of the semester, nonstudio students came increasingly to see revision as a matter of editing whereas studio students increasingly treated it as a matter of "reconceptualization." Both these changes were statistically significant.
What Other Important Changes Occurred in the Studio Sections?

In addition to ideas about revision, there were significant, positive differences in many attitudes and perceptions of the studio students compared to the non-studio students. We collected these data by asking each student to write for 20 minutes about how he or she generally writes. In the 1983 study, each English 105 instructor read a randomly selected batch of student descriptions of their own writing process. We did not read our own students' papers. We made notes as we read, seeking to capture the most essential aspects of the descriptions. When we were satisfied individually that we had made some sense of them, we compared and pooled our collective perceptions. We then articulated these categories in the form of a "Composing Process Profile" form (Fig. 1), and redistributed all the student composing profiles to the staff for rating. In the 1984 study, 2 additional dimensions were added, and all items were scored on 6-point Likert scales. The 2 readers who evaluated the papers were instructors not involved in the course. Overall interrater reliability, computed as a Pearson product-moment correlation, was $r = .829$ ($F = 583.5; p < .0001$).

To analyze these data, we performed one-way ANOVAs on each dimension of the Composing Process Profile. Post hoc analyses then revealed the following differences between studio and nonstudio sections:

a. As noted above, studio students increasingly treated revision as a matter of reconceptualization (start of term: NSD; end of term: $F = 4.75; p = .0001$) whereas nonstudio students increasingly treated revision as a matter of editing (start of term: NSD; end of term: $F = 10.69; p < .0001$).

b. Over the course of the term, studio students increasingly viewed their readers, not as judges of their writing, their ideas, or them but rather as collaborators in a process of communication. That is, for studio students, their readers were more integral to their composing process (start of the term: NSD; end of term: $F = 10.69; p < .0001$).
c. Studio students increasingly gave more emphasis to prewriting (start of term: NGD; end of term: F = 3.29; p = .0012).

d. Studio students' attitudes about writing became increasingly more positive (start of term: F = 1.89; p = .032; end of term: F = 4.69; p = .0001).

e. Studio students increasingly viewed their composing processes, not as a linear process of "think-write-look it over-and-hand it in" but rather as a recursive, unpredictable process of improvisation and experimentation with ideas and text (start of term: F = 2.84; p = .003; end of term: F = 10.37; p < .0001).

How Can Talking About Writing Help Students Learn to Write?

To gain some understanding of the kind of talk that goes on when students write for each other and discuss this writing intensively, 5 groups were videotaped over the course of a semester, each group once near the start of the term and once toward the end. These videotapes were then transcribed and coded for conversational turntaking and coherence. The analysis, which will ultimately will correlate conversational organization with writing achievement and expressed premises about writing, is not yet complete. Nonetheless, preliminary investigation suggests the following: Effective groups work by collectively examining written texts rather than by merely listening to oral readings by authors. That is to say, some groups proceed by listening to authors read their papers aloud whereas other groups proceed by collectively reading photocopies of the texts which the authors bring to class. This difference between groups listening and groups reading, it turns out, is fundamental to how groups respond to the texts so read. There is an apparent correlation between visually examining (i.e., reading) written texts on the one hand and considering higher order writing problems (such as structure of argument, presentation of arguments, paragraph development, etc.) on the other hand. By contrast, there seems to be another correlation between listening to oral readings of written texts on the one hand and considering lower order writing problems (e.g., word choice, usage, and phrasing) on the other hand. In short,
REVISION AS RECONCEPTUALIZATION

F = 4.8; p = .0001

F < 1; p > .05

REVISION AS EDITING

F = 10.7; p < .0001

F < 1; p > .05
PREWRITING

F = 3.29; p = .0012
F < 1; p > .05

RECURSIVENESS

F = 10.4; p = .0001
F = 2.84; p = .0032
READER AS COLLABORATOR

F=10.69, p < .0001

F=1.63, p > .05

POSITIVE ATTITUDES TOWARD WRITING

F=4.73, p = .0001

F=1.93, p = .03
groups that proceed by listening rather than by reading rarely go beyond sentence-level concerns.

This distinction between oral and written language processes is similar to one made in some developmental research between monitoring production by sight vs. sound (e.g., checking spellings by examining the way words look rather than listening to how the sound). In particular, the use of visual comprehension strategies seems to correlate generally with insights into the possibilities and workings of written text — especially those idiosyncratic features of written language that have no direct equivalents or analogs in the spoken (including homonym distinctions; most punctuation; quotation marks; upper- and lower-case distinctions; conventions of paragraphing; spelling patterns and other morphophonemic regularities; and certain genres of discourse that do not exist in speech, e.g., essays). It is not surprising, then, that studio groups consider different kinds of issues about writing depending on whether they proceed by listening or by reading.

Groups differ significantly in how they deal with writing problems. Some groups seek to identify a single general problem ("You need to be more specific"; "Your focus isn't clear") and consider their tasks complete when they have identified one such problem in summary fashion. The problem is only labeled; it is not discussed in terms of particular parts of text. A curious variation of this same procedure is considering an author's points out of context (as from an outline); the validity of the points is weighed, but their presentation is treated superficially if at all. Other groups are more specific about problems (e.g., "You need to give more examples") but still do not actually examine the troublesources in any detail. Yet other groups are not only specific about key problems but actually work through revisions in some detail.

Good groups engage in extensive collaborative problem solving. This can range from collaborative conversational repairs (where the speaker searches for a word and the group actively enters into the search) to joint revision of a troublesome paragraph. Their discussion ranges from general
characterizations about both strengths and weaknesses of particular texts to detailed discussions about reworking problem sections. There is an intricate lacing of high-level concerns (such as purpose and organization) with text-level representations (such as paragraphing and development). When peer groups work well and writers confront their readers regularly to review their papers, the groups tend to "gravitate" to those parts of the texts that are unclear or troublesome in some way. As long as groups do not engage in excessive "copy editing" but dwell instead on understanding the writer's purpose and its articulation, the discussions focus mainly on trouble sources and uncertainties of text. More to the point, these groups have a keen sense of what problems need solving. They identify key troublesources and deal concretely with how particular text structure addresses them. These troublesources, which range from ambiguities of purpose (What's the purpose of this?), genre (What sort of text is this?), topic (What's this about anyway?), and comment (What's the point?) constitute the subject matter of these sessions. In effect, the discussion becomes a continuous set of rhetorical problems, which the group collaborates in solving. Hence, by intensively identifying and resolving rhetorical problems, they shore up, flesh out, and sustain just those parts of their papers that otherwise would be weak and unclear. In addition, after several weeks of such work, students are able to anticipate potential troublesources as they write. Indeed, students involved in peer review often say about half way through the term that they can anticipate their readers during the composing process. That is, they develop and internalize an "editor," which effectively enables them to monitor and manage their writing, a result we suspect is the chief long-term benefit of instruction.

In Vygotskian terms, we may regard intensive peer review as a formative social arrangement in which writers become consciously aware of the functional significance of composing behaviors, discourse strategies, and elements of text by managing them all in anticipation of continuous reader feedback. This is not to argue that writers in peer groups come to control their rhetorical problem-solving efforts by somehow conducting the same conversations "in their heads" that formerly were carried out in their groups. Rather, it means that the composing
processes and discourse strategies that writers take from their groups largely emerge on the basis of reflective and regulative processes that can be observed to occur first in the social interaction of peer review.

It is precisely this process of intensive rhetorical problem solving that defines the effectiveness of intensive peer review. Peer review is not just a method of teaching writing. Used intensively, it creates an environment, somewhat like the social context of initial language acquisition, where the learner can continuously test hypotheses about the possibilities of written text.

What Can Instructors Do To Set Their Classes Up For Effective Peer Review?

Peer review, like any well implemented classroom method, requires careful planning. It will not work — at least not very well — by merely putting students in small groups and telling them to "talk about their writing." It will also not work if the instructor starts it halfway into the term after student expectations for instruction and the instructor have been established. Intensive peer review works best when the instructor carefully establishes it at the beginning of the term.

To establish effective peer review, the instructor must help students understand what sorts of group interaction will help students learn to write and what sorts will not. Instructors can do a lot by explaining procedures explicitly on the first day of class at the same time that they explain why they have chosen to use peer review. The instructor should help students anticipate possible anxiety they may have about working closely with strangers and sharing their writing with each other; this anxiety typically passes after a few class periods. The instructor should also explain the importance of photocopying all drafts for purposes of group discussion. The instructor may establish no small measure of accountability in the group discussions by (a) announcing and enforcing a strict attendance policy from Day One and (b) requiring students to keep copies of all drafts and final copies for use in writing conferences later on.
Probably the single most important thing the instructor can do, before groups actually begin, is view and evaluate with the class a videotape of other groups discussing papers. After each fifteen minute segment of tape, the instructor can pause and ask the class "How useful is this discussion to the author?", "What specific comments and questions are most useful to the author?", "What sorts of comments and questions are not helpful?" This exercise is useful because students actually see other students engaged in the process, and discussion of the tape raises their consciousness about key aspects of effective group interaction.

The instructor can also help groups get off the ground by assigning some pieces of writing to be completed by the time the groups actually meet. For example, on the first day of class, one instructor has students write an impromptu personal essay in which they recount some important personal experience and explain its significance. For the second class period, which the class spends viewing and discussing the videotape of other groups, students write an argumentative essay about some current political or social issue. By the third class period, when they actually meet in groups for the first time, they have plenty of writing to discuss, and they then have a couple different sorts too.

On the first few days that students meet in groups, the instructor can help the discussions by halting groups 10-15 minutes before the end of the period and asking students to reflect on their work with each other. Useful questions include "Did everyone in your group get a turn to discuss a paper?", "Did any group run out of things to talk about?", "Did you get at least one specific idea about improving your paper? — How are you going to revise your paper?"