

PROJECT REPORT

Table of Contents

Summary	2
Purpose	2
Relevant Evergreen Principles and Goals for Learning	3
Background	3
Why This Project	3
Supporting Research	3
Methods	4
Analysis and Results	5
Definition of “Making Knowledge Collaboratively”	5
Images of Collaborative Learning	5
Quantitative Measures to Check Engagement	6
Quantitative Results	6
Qualitative Analysis To Measure Collaboration	6
Qualitative Results	6
An Additional Analysis	8
Implications for Teaching	8
Teaching Products Related to Thinking, Learning, Writing and Knowledge Making	10
Student Comments	10
Questions for Further Study	11
Sources Cited	13
Additional Sources Consulted	14

Epigraph

I put my mind on paper.

Student comment in response to program evaluation question: "How did writing (specifically, course/program writing assignments including peer responses) impact or shape your learning?"

I loved when people asked me questions that made me question what I originally wrote.

Student comment in response to program evaluation question: "How did reading the responses written by other people, responses to your papers and to those of other students, affect your learning in this program?"

Summary

In this project, I undertook a "scoping" exploration into a subject new to me, that of teaching and assessing collaborative knowledge-making as something different from individual learning. I examined students' peer responses to other students' pre-seminar papers, with the intent of identifying strategies and evidence of collaboration. (The focus of the responses students wrote to other program members' weekly seminar papers was expected to be ideas – that is, paper content -- *not* the writing itself.) The tenor of this project as a whole was investigative: I observed student work and attempted to learn from it, developing a draft typology of their strategies in responding as peers to other students' papers, and a general description of their frequent efforts to find common ground from which to make knowledge non-competitively. During the three quarters the project spanned (academic year 2003-2004), I also developed and used handouts, workshops and assignment prompts intended to affect students' knowledge and practices related to thinking, learning and writing. These products are included in this report.

Purpose

To develop effective ways to support and assess students' written work as they attempt to make knowledge effectively in a collaborative academic setting. To encourage students to see themselves as both sources of knowledge, and partners in making it.

To put this less formally, I'm trying to learn how to create situations in which students first write substantively, and then in responses to such writing by their peers move beyond "Good point." or "That reminds me of one time when I . . ." The goal is genuine written exchange about concepts, ideas and theories -- exchange that fosters pleasure, openness and risk-taking in learning, and uses personal reflection, thought, experience and emotion (whether stated explicitly in the writing or not) in ways that further collective work, on the part of all involved.

Relevant Evergreen Principles and Goals for Learning

Student work assigned and used as data in this project, and the outcome of the project itself, are directly relevant to these Expectations and Foci:

Expectations of an Evergreen Graduate

2. Participate collaboratively and responsibly in our diverse society
3. Communicate creatively and effectively
4. Demonstrate integrative, independent and critical thinking

Evergreen's Five Foci

- Collaboration
- Personal engagement
- Linking theory and practice

Background

Why This Project

As I read through student papers quarter after quarter, it seemed to me that student writers generally engaged directly with program material, but at the same time, often somewhat superficially. They usually summarized well, at times reflected effectively on their personal and emotional connections to texts at hand – but didn't always go farther, into creative intellectual engagement with ideas and theories. In addition, many students seemed to be writing for me as their seminar faculty rather than for their own pleasure and benefit in learning. By widening the audience for their writing, crafting more effective workshops and assignment prompts, and better communicating the scope of what they might take on, I hoped to support a shift toward self-directed substantive inquiry of a sort that will continue into students' civic and professional lives now and after leaving school.

Supporting Research

In the course of designing and conducting this present investigation, I read scholarly articles on these topics: the collaborative and social nature/s of making knowledge (and of scholarly endeavor); peer responses; teaching as dialogue; knowledge making and its assessment; the transfer (or sharing) of knowledge in organizations; and assignments for collaborative knowledge-making. The articles are listed at the end of this report. (Please note that none of this research was exhaustive.) I also participated in David Marshall's 2003-2004 project to conceptualize an Evergreen thinking rubric, and in the Assessing Complex Knowing learning community convened by the Washington Center for Improving the Quality of Undergraduate Education during 2002-2004. Sessions I attended at the AAHE 2003 Summer Academy, and at the Learning Communities and Undergraduate Education Reform conference sponsored by the Washington Center's National learning Communities Project last spring, were also useful.

It's worth noting that I found only a handful of articles on my topic per se – student strategies in making divergent (open-ended) knowledge collaboratively from first-person and academic readings in the social sciences and humanities. (All but one of these articles were about students responding to student writing, or to literary texts.) I did read results of several investigations into student collaborations to find solutions or answer problems – i.e., to develop convergent

knowledge. While these articles helped me develop analysis approaches for my own data, developing divergent knowledge is my current teaching interest, and seems to me at this point to be a process enough different from developing convergent knowledge to warrant continued investigation.¹

Methods

In programs I taught in during 2003-2004 (*Sport and Society*; *Chronic Illness, Disability and Deafness*), students were required to post their papers to a small group of six to ten other program members on Blackboard, and also to post a brief (250 words in *Sport*, 6 to 8 sentences in *Chronic Illness*) response to another group member's paper at least once a week.² Faculty specifically instructed students to respond to the ideas in the paper they chose to reply to each week, *not* to the writing itself (grammar, spelling, structure, effectiveness of argument). Writing prompts in *Sport and Society* asked for formal critique papers, but in practice students wrote fairly informal pre-seminar papers; as peer responders, students were instructed to "speak to [these paper writers'] explanations of the text" in what faculty explained verbally was to be "low stakes" writing (Elbow). Assignment instructions in *Chronic Illness, Disability and Deafness* asked for informal "writing to learn" (Emig); peer responses in this program were also expected to be low stakes, and to be those "of an interested and respectful colleague." (Peer response instructions for the three project quarters are in Appendix 1.)

Why peer responses, as an assignment and as the data for this project? I did not want this project to involve students in contrived actions. By using pedagogically valuable activities as data, program proceedings were not interrupted. As a learning activity, written peer responses focused on paper content seem to me to have the following strengths. They typically:

- Position peers as a source and authority in terms of thinking and knowledge-making.
- Underscore the open-endedness of divergent knowledge, and the fact that in Evergreen learning communities we are doing something that is more than simply learning to rehearse and explore the products of highly-accomplished producers of knowledge – we are actually constructing knowledge (Lea 170).
- Help situate writing as a mode and site of learning, even collaborative learning
 - Unlike some seminar sessions, everyone "talks," everyone is "heard."
 - The posting of papers and responses in a communal space also allows for reflection on them over time, and creates the possibility of using peers' ideas, etc., in one's own work (collaboration) (Lea 163).
- As a practice, address the notions of elitism held by some students, the assumption that if someone isn't very articulate verbally, or in writing, those who have these skills can dismiss what that person offers. The requirement of taking another student's work

¹ I use the terms "divergent" and "convergent" in their broadest and probably non-technical senses here. I understood the distinction between divergent and convergent knowledge quite late in my research, and so did not include it in background reading.

² This process and the small group format, dubbed "forums," were suggested by my *Sport and Society* teaching partner, Marcella Benson-Quaziena, who had used this approach in previous programs. In *Chronic Illness, Disability and Deafness*, I changed the group designation to "reading circles."

seriously (and in a way that leaves a public record of one's response) can push students to consider what previously-ignored students contribute to communal work.

- Allow people to get a sense of how their peers make knowledge in writing, and a better grasp of the quality of their own work in relation to the ways others write and make knowledge.
- Make knowledge public, "shared and shareable among those allowed, willing, and able to enter the community of knowers" (Minnich 21), underscoring the concept of scholarly work as a conversation and giving students a sense of what it is like to take part (Sargent 41).

In addition, from the researcher's standpoint, seminars and class discussions are ephemeral unless taped in one way or another, and taping requires either transcription or viewing and coding. Working with students' written work requires the much less laborious process of reading.

Students did not know that their written work might be included in a faculty research project; those whose work I drew from here signed release forms on the last day of class, giving me permission to use their work if presented anonymously. (See Appendix 1 for the form we used.)

Analysis and Results

I performed six analyses on selected peer responses from *Sport and Society* (Fall), three quantitative and three qualitative. My goal as I examined, in some depth, these thirty responses from sixteen students (all of the Week 3 and Week 9 peer responses from members of my seminar who signed a permission form and received full credit for the program) was primarily to understand how students made knowledge collaboratively in them. I also considered the responses in light of the work I had done with students in the program about thinking, learning and writing. All of the papers and peer responses written by two students in *Chronic Illness, Disability and Deafness* during Winter quarter, and the papers their responses linked to, were considered during development of the collaborative strategy categories in the knowledge-making typology.

Definition of "Making Knowledge Collaboratively"

In this exploratory project, I did not define this strictly. I borrowed my initial working concept from Dona Hickey and Donna Reiss:

. . . the ideal dynamic of knowledge-making in the academy: a cooperative and collaborative exchange of ideas within a community of learners who, in response to each other, become increasingly knowledgeable and increasingly aware of other paths to knowledge. (xxv-xxvi)

Images of Collaborative Learning

As part of my research, I decided to collect figurative language images related to collaborative learning, as used in scholarly publications. Several are listed below. (The full set and references can be found in Appendix 1.)

Collaborative learning communities

"rhizome" "communities of practice"

Scholarly work of making knowledge

"conversation"

Process of learning to make knowledge

"midwifery" "at the dining room table"

Faculty role and work as students make knowledge

"conductor" "gardening"

Perhaps the definition of "conversation" put forward by Burbules and Bruce comes closest to describing what I hope to foster as a teacher of the humanities and social sciences, by encouraging student (and student-teacher) interaction related to learning:

Conversation involves . . . discussion in which the aim of intersubjective understanding, rather than the answering of any specific question or problem, is foremost. [23]

Quantitative Measures To Check Engagement

The quantitative measures – word length of the first and the last peer responses of the quarter, number of responses posted, and whether or not the response referred to the paper it was expected to respond to -- I relied on as a rough check of engagement. My intention here was to rule out changes in engagement over the quarter as a factor affecting collaboration; that is, if students remained relatively engaged in the peer response process, my assumption would be that I could rule out engagement as a factor affecting collaboration during the quarter.

QUANTITATIVE RESULTS

- *Response length:* The average response length in Week 3 was 220 words; this rose to 230 words in Week 9. Five of the 14 students who completed both responses dropped their word count in Week 9, the rest increased it.
- *Frequency of response:* All 16 students in the study (students in my seminar who received full credit for the program and signed a research consent form) completed the first response; two did not complete the final response.
- *Whether the response tied directly to the paper:* One response in Week 3 and one in Week 9 did not refer directly to the paper with which they were associated.

Qualitative Analysis To Measure Collaboration

My three qualitative analyses were crafted to investigate three aspects of collaboration in knowledge making: the sources students drew on in writing responses to others' papers, the social aspect of their responses, and the "moves" or "strategies" students used in their responses to others' papers.

QUALITATIVE RESULTS

- *Collaboration as assessed by analysis of sources peer responders drew from:* Specific source categories responders drew from were (in decreasing order of frequency): 1) the paper they were responding to, 2) the reading for that week, 3) responder's personal knowledge or experience of society, and 4) responder's personal knowledge of the program topic, sport.
- *Social aspects of student responses:* This turned out to be a complex issue. As Burbules and Bruce demonstrate at some length, there are many forms of dialogue in

learning environments, and multiple roles and practices to go with them. Most importantly, dialogue – of which the paper-and-peer-response dyad I looked at was just one small part – takes place in context, and here the several contexts of quarter-long reading circles facilitated by electronic communication via a specific interface (Blackboard), face-to-face meetings at class sessions, two specific program learning communities, Evergreen as an institution of teaching and learning, individual students' previous experiences with writing and with these other factors, etc.

Students very often acknowledged their awareness of the social environment, in particular, in their responses; of the 28 peer responses I analyzed here (those that responded directly to the related paper by another student), only three did not contain either a statement of agreement with something in the paper being replied to, or a positive response in one form or another. Overall, these positive statements fell into four groupings: 1) acknowledgement of the paper writer's work (primarily by a comment about its effect on the reader); 2) claim of insight from reading the paper; 3) assessment language that responded to the paper or the paper's content (in every case but two, positively); and 4) agreement with the paper writer, stated or strongly implied. (A frequency chart for the various types of social remarks found in peer responses is provided in Appendix 1.)

Although students' heavy reliance on the positive first led me to think they were "making nice" as a substitute for making knowledge, I came to see their reliance on themselves as a source of information about the paper to which they responded as an aspect of active engagement, and their explicit and detailed statements of agreement (in 19 of the 28 papers) as evidence of effort to find non-adversarial grounds from which to respond. That they generally did not rely on their perceptions of agreement to take ideas much farther (in my read of their work) may have been a limitation of the assignment parameters (250 words; 6-8 sentences) rather than an accurate indication of students' knowledge-making skills and motivation. A more detailed discussion of the social in Sport and Society peer responses can be found in Appendix 2.

- *Tentative typology of knowledge-making strategies in a collaborative setting:* I read through all of my seminar's Week 3 and Week 9 peer responses from *Sport and Society* (the Fall program), and developed a draft typology of "moves" or "strategies" students used in their responses to others' papers. Then I refined this typology through in-depth work with all of the papers and peer responses written by two students in *Chronic Illness, Disability and Deafness* (Winter quarter), and augmented it intuitively (that is, I added *possible* responses, whether I had actually observed these possibilities or not). My intent was not to create rigid categories for analysis; instead, I wanted to survey the land, so to speak, in order to better understand what students did and did not do, with the intent of thinking about how better eventually to teach strategies of making divergent knowledge. Two versions of this typology can be found in Appendix 3; the category-only version, and the version with excerpts from student papers as illustration (allowing reader identification of those response categories actually appearing in student work).³

³ This typology of course must be considered incomplete because of the small sample size, but also because of something noted by Geissler, who found changes in her students' peer responses as the academic term progressed. The sampling method I employed – first and last peer responses of the quarter – may have missed intermediate

An Additional Analysis

My own curiosity prompted me to read these peer responses a final time, thinking about what was *not* in them that I had expected to find (Mazzei).

RESULTS: WHAT WAS *NOT* IN RESPONSES, THAT I EXPECTED TO FIND

- Critical reflection exploring tensions or differences between paper writer's and responder's reads of the text and their conclusions from it.
- Exploration of ideas – taking them beyond the bounds of the reading for the week.
- Synthesis, connections, and comparison to other work in the program (readings, speakers, student papers, lectures, etc.).
- Use of examples and personal experiences to help illustrate the responder's points, or to further open out an idea.
- Questions or other invitations to continued engagement.
- I expected responders to draw from these sources they did not: other program readings (three responders mentioned one other program book), and speakers, videos, personal anecdotes (which appeared in just four of the 30 papers).

Implications for Teaching

The exploratory nature of this project precludes firm conclusions. My sense at this very early moment is that some students – certainly many, if not most, of the students whose work I analyzed for this project – might benefit from explicit instruction and practice in working with ideas, specifically directed toward methods of building on another's work in ways that open ideas and theories outward, into broader and deeper thinking. This is something very different, I think, from “how to develop an argument” or “how to write a paper” or even “how to solve a problem,” and perhaps ideally a precursor to each of those activities.⁴ Working with ideas may involve effort toward asking generative questions, it may involve explicit modeling and practice in the many ways to engage with ideas in an academic setting (including the differences between reporting facts and interpreting them) -- *in addition to* competitive or formal argument approaches. (My sense is that students don't often notice consciously the working-with-ideas part of their work, and tend to substitute reporting on a text (i.e., summary), social bonding or personal reactions for actively moving observations of ideas toward interpretation, when they

strategies. In addition, the nature of the response assignment itself limited the data to a first exchange; that is, peer responders worked with a paper in writing their responses, and that was the end of the knowledge-making conversations as it was observed for this project. I did not attempt to capture related simultaneous and subsequent exchanges (written and verbal) outside of the boundaries of the assignment, or the ways in which participants directed class discussion toward further work with the paper writer's ideas.

⁴ I wonder if as faculty we sometimes teach students specific forms in which to present their thinking, before they know how to do the thinking the forms are meant to present (or contain). Open-endedness may be equal in value to argument and problem solution, in knowledge making. We need a model, if one hasn't already been crafted, that addresses the circumstances in which each is most useful (although I suspect that in practice, most people bounce between them). Perhaps, as I have suggested here, divergence comes earlier in the process than the other two, or is a characteristic (in the form of flexibility? Openness?) that should flavor the entire process.

aren't yet aware of what else they might do, or aren't sure of themselves in a divergent (rather than convergent) knowledge-making environment.

Some questions I thought about in relation to my own teaching during the course of this project were

- How do we define and model “knowledge making” and especially collaborative knowledge-making at Evergreen?
- Do we make a distinction between divergent (open-ended) and convergent (close-ended, at least temporarily) knowledge making? Is there a useful distinction to be made?⁵
- How do we teach and model knowledge-making *as a process* to Evergreen students?
- Where in Evergreen programs and courses do students practice knowledge-making?
- How do we assess and evaluate collaborative knowledge-making at Evergreen, especially as distinct from individual learning?
- How can I best script opportunities for response to student writing, presentations and projects in order to further knowledge-making conversations? Who should undertake this response? When? How?
- Who engages in knowledge-making at Evergreen? What are the ways they do so? In what settings does knowledge-making take place? Who does *not* participate in knowledge-making in each of these contexts? What factors keep them from it?

I also reduced my own involvement in direct response to student learning performances during the year, moving from responding weekly to student papers to three times a quarter (since students received weekly responses from peers), and devising ways for students to comment on student presentations. I also attempted to change my seminar facilitation style to one more firmly based in listening. Burbules and Bruce identify a “pedagogical communicative relation” termed IRE -- Initiation-Response-Evaluation -- which they characterize as “the teacher questions, the student replies, the teacher praises or corrects the response” [9]. Of course this is the standard triad of teacher assigns paper, student writes it, teacher reads and critiques so ubiquitous in U.S. education. As these authors note, IRE routes all student response through the teacher, and can thus effectively stifle more independent and flexible patterns of shared knowledge-making [9-10]. This is the opposite of what I am working toward.

I made other changes in my teaching during the course of the project, each quarter developing and using in the classroom new teaching products on the topics of thinking, learning and writing. These grew out of this project in the sense that I was paying particular attention to student work in knowledge-making and doing some experimenting related to that, and so I include them here.

⁵ Obviously I think there is! In the fields across which I usually teach at Evergreen – literature, psychology, sociology and history, in interdisciplinary gender, illness and disability, sport and American studies courses and programs – the goal of intersubjective intelligibility and understanding seems more fruitful generally than problem generation and solution. I want to avoid placing understanding and solution in opposition; the salient differences are the degree of open-endedness in the short term goal worked toward.

Teaching Products Related to Thinking, Learning, Writing and Knowledge Making

Note: All underlined items can be found in Appendix 4.

Fall quarter 2003-2004 (*Sport and Society*) was my first experience of requiring students to post their papers for others to read, and of public and written peer response to student papers. I simply observed. (We did give our students two handouts about writing, but did not discuss these in depth or follow-up on them during the quarter.)

At the beginning of Winter quarter (*Chronic Illness, Disability and Deafness*), the students and I talked about the teaching/learning paradigm or model I would be using in the program, and about a concept key to the majority of assigned papers, that of “thick definitions.” I relied on the language established in these discussions in writing my own feedback to student papers. (We also did a cognitive mapping assignment in the 12 credit module of the program.) Expectations of written assignments in both quarters of this program (Winter and Spring) were crafted around Peter Elbow’s concept of low-stakes writing (Elbow), and Janet Emig’s “writing to learn” (Emig).

In Spring, we briefly discussed two handouts on making knowledge (designed to help students identify ways we would be doing this during the quarter), and I facilitated a workshop on responding to other students’ papers, based in our experiences during Winter. I’ve also included here a handout I developed about “messy” or “ill-structured” problems, as this was part of our teaching/learning work. While I don’t think that it is always useful to visualize either learning or the goal of learning as problem and solution, in this program based in the human services, this was one way for us to consider the constantly-changing, ambiguous nature of professional work in these fields.

In my first program this year (2004-2005), *Art, Words and Women*, I engaged students in a workshop on writing generative questions. Two questions were required as part of the two informal writing assignments each week; I have not assessed these questions as a group, or their effectiveness in fostering continued writing and discussion. (I introduced the idea of generative questions in conjunction with a handout based in S.I. Hayakawa’s Ladder of Abstraction, to demonstrate what I meant by writing about meaning rather than facts. We frequently referred to this throughout the quarter.) While I have no way of knowing the direct effects of this workshop, my co-teacher and I have noticed that in written work and seminars, the students are working unusually effectively and frequently with theory and ideas. Faculty exploration and learning continue.

Student Comments

Since Evergreen’s Human Subjects Review process requires researchers to project possible negative effects on research subjects, I was curious about student response to several aspects of this project. These were gathered during standard 5th and 10th week written program evaluations

in both quarters of *Chronic Illness, Disability and Deafness*, during which students had the option to remain anonymous.

Comments about writing responses to other student's papers

Because our written work was low grade [sic!] writing I feel that I was able to express myself more in my papers. I wasn't as worried about structure and grammar and spelling, instead I was able to just write. I really enjoyed that. So I guess that content based, my writing was much stronger [than in previous college courses and programs].

I valued writing the peer response papers more this quarter (Spring). For each portfolio posting in Searching [one content module of the program], I found there were often several papers that sparked a response in me. I especially enjoyed the papers that asked questions that intrigued me as well, questions that showed the writer was trying to process difficult material. I enjoyed responding to those as it stretched my understanding.

Comment about reading other students responses

I really valued reading the responses to both my own and other students' written work. I think it helped focus our attention to know early on that we would need to quote 3 - 4 other students in our last paper. That required us to look for integrative points among all the thinking and writing posted on Blackboard.

Student comments about the relationship of writing to learning

Writing helped me organize my thoughts and focus my learning.

Writing gave me the chance to put it all out there and take risks. . . . By writing the papers and responses I was able to figure out what my viewpoint or opinion was.

Writing this quarter made me realize how much I learn not only from the course subjects but also from myself and my inner thoughts.

Although I would keep up on readings I wouldn't process things until I would write about them.

Questions for Further Study

- During their work for academic programs and courses, what do students respond to in a text? In another participant's writing? What do they not respond to? How do students' own significant differences and significant differences between the authors involved, affect the answers to these questions?

- How and where do students position themselves as knowers, as they participated in divergent and collaborative knowledge making?
- What role does exploration of common ground play in collaborative knowledge making? What role does disagreement play? What is the role played by meta-discourse (critical analysis) of the text itself? And how would students answer these questions?
- How do student writers respond to a paper author's disclosure of aspects of personal identity such as disability, or to stories of personal experience (use of personal examples, in particular)?
- How does collaborative knowledge-making relate to the tension between assimilation (or colonization) of difference, and "the desire to preserve discrete cultural elements and traditions at all costs" (Burbules and Bruce [43]) ?
- How do students conceptualize knowledge-making? Collaborative knowledge making?
- Who is not taking part effectively in collaborative knowledge-making in Evergreen classrooms, and why?
- What is the relationship between individual thinking, collaborative and divergent knowledge-making, and content of students' academic writing? How does this vary depending on the difference profile of the student?
- How and where and when do Evergreen students participate in the "conversation" of teaching and learning, outside of Evergreen classrooms? What strategies do they employ there?
- How do students learn, and choose from among, collaborative learning strategies in written divergent knowledge making? How can faculty best facilitate collaborative knowledge making that is open-ended? What are the barriers to fruitful learning and interaction here? What are the enablers? How do various diversities (including learning styles) among students affect the answers to each of these questions?
- What role does divergent knowledge-making play in student motivation for learning? For writing? How does this vary from student to student, and why?
- How does explicit knowledge about the importance to individual learning of collaborative knowledge-making, and of possible collaborative strategies in working with ideas, affect student motivation to engage with each other's written ideas and conclusions? How does such information shape their work?
- When is a collaborative approach to learning useful, and when is it not?

SOURCES CITED

Burbules, Nicholas C. and Bertram C. Bruce. "Theory and Research on Teaching as Dialogue." In V. Richardson, ed., *Handbook of Research on Teaching*, 4th ed. Washington, DC: American Educational Research Association, 2001. 1102-11. Pre-publication version of chapter accessed November 24, 2004. Available at <<http://www.lis.uiuc.edu/~chip/pubs/dialogue.html>>.

Elbow, Peter. "High Stakes and Low Stakes in Assigning and Responding to Writing." February 4, 2004. WSC Faculty Center for Teaching & Learning, Westfield State College. Accessed November 28, 2004. Available at <<http://www.wsc.ma.edu/facultycenter/High-Low-Basic.pdf>>.

Emig, Janet. "Writing as a Mode of Learning." In Bazerman, Charles and David Russell, eds. *Landmark Essays on Writing Across the Curriculum*. Hermagoras Press, 1994. 89-96. First appeared in *College Composition and Communication* 28, May 1977: 122-128.

Geissler, Kathleen. "Negotiating Authority in Peer Response." In Daiker, Donald A. and Max Morenberg. *The Writing Teacher As Researcher: Essays in the Theory and Practice of Class-Based Research*. Portsmouth NH: Boynton/Cook Publishers, 1990. 267-276

Hickey, Dona J. and Donna Reiss, eds. "Innovation, Instruction and Literary Studies." *Learning Literature in an Era of Change: Innovations in Teaching*. Sterling, VA: Stylus Publishing, 2000. Accessed November 22, 2004. Available at <<http://www.wordsworth2.net/projects/learnlit/intro.htm>>.

Lea, Mary. "Computer Conferencing and Assessment: New Ways of Writing in Higher Education." *Studies in Higher Education*. 26:2. 2001. 163-181.

Li, Qing. "Exploration of Collaborative Learning and Communication in an Educational Environment Using Computer-Mediated Communication." *Journal of Research on Technology in Education*. Summer 2002, 34:4. 503-516.

Mazzei, Lisa A. "Silent Listeners: Deconstructive Practices in Discourse-Based Research." *Educational Researcher* 33:2. March 2004.

Minnich, Elizabeth Kamarek. "Teaching Thinking: Moral and Political Considerations." *Change*. Sept./Oct. 2003. 19-24.

Odell, Lee. "The Construction of Meaning: Practicing What We Preach." In Daiker, Donald A. and Max Morenberg. *The Writing Teacher As Researcher: Essays in the Theory and Practice of Class-Based Research*. Portsmouth NH: Boynton/Cook Publishers, 1990. 220-236.

Penrose, Ann M. and Cheryl Geisler. "Reading and Writing Without Authority." *CCC* 45:4. December 1994. 505-520.

Sargent, M. Elizabeth. "Peer Response to Low Stakes Writing in a WAC Literature Classroom." *New Directions for Teaching and Learning*. No. 69. Spring 1997. 41-52.

ADDITIONAL SOURCES CONSULTED

Brent, Doug. "Knowledge Received/Knowledge Constructed: Principles of Active Learning in the Disciplines." Keynote address at "Teaching and Learning and Writing Across the Curriculum Faculty Development Workshop, Laurentian University, May 1 1996. Accessed November 26, 2004. Available at <<http://www.ucalgary.ca/~dabrent/art/active.html>>.

Fischer, Katherine M. "Wingdams: Piloting New Channels in Writing about Literature." 3-17. In Hickey, Dona J. and Donna Reiss, eds. *Learning Literature in an Era of Change: Innovations in Teaching*. Sterling, VA: Stylus Publishing, 2000.

Fulwiler, Toby. "Writing Back and Forth: Class Letters." *New Directions for Teaching and Learning*. No. 69. Spring 1997. 15-25.

Honeycutt, Lee. "Comparing E-Mail and Synchronous Conferencing in Online Peer Response." *Written Communication* 18:1. January 2001. 26-60.

King, Alison. "Structuring Peer Interaction to Promote High-Level Cognitive Processing." *Theory into Practice*. 41:1. Winter 2002. 33-39.

Kroll, Barry M. "Observing Students' Reflective Thinking: A Teacher-Research Project." In Daiker, Donald A. and Max Morenberg. *The Writing Teacher As Researcher: Essays in the Theory and Practice of Class-Based Research*. Portsmouth NH: Boynton/Cook Publishers, 1990. 237-246.

Lewis, Barry. "Generative Criticism in the Seminar Room: Applying Lateral Thinking to the Study of Literary Theory." In Hickey, Dona J. and Donna Reiss, eds. "Innovation, Instruction and Literary Studies." *Learning Literature in an Era of Change: Innovations in Teaching*. Sterling, VA: Stylus Publishing, 2000. 38-49.

Mansilla, Veronica Boix and Howard Garner. "What Are the Qualities of Understanding?" In Wiske, Martha Stone, ed. *Teaching for Understanding: Linking Research with Practice*. San Francisco: Jossey-Bass, 1997. 161-196.

Mazzei, Lisa A. "Silent Listeners: Deconstructive Practices in Discourse-Based Research." *Educational Researcher* 33:2. March 2004. 26-34.

Nonaka, Ikujiro and Noboru Konno. "The Concept of 'Ba': Building A Foundation for Knowledge Creation." *California Management Review*. 40:3. Spring 1998. 40-54.

O'Dell, Carla and C. Jackson Grayson. "If Only We Knew What We Know: Identification and Transfer of Internal Best Practices." *California Management Review*. 40:3. Spring 1998. 154-174.

Palincsar, Annemarie Sullivan and Leslie Rupert Herrenkohl. "Designing Collaborative Learning Contexts." *Theory into Practice*. 41:1. Winter 2002. 26-32.

Perkins, David. "What Is Understanding?" In Wiske, Martha Stone, ed. *Teaching for Understanding: Linking Research with Practice*. San Francisco: Jossey-Bass, 1997. 39-57.

Reiss, Donna. "Epistolary Pedagogy and Electronic Mail: Online Letters for Learning Literature." In Hickey, Dona J. and Donna Reiss, eds. *Learning Literature in an Era of Change: Innovations in Teaching*. Sterling, VA: Stylus Publishing, 2000. 18-30.

Shulman, Lee S. "Toward a Pedagogy of Substance." *AAHE Bulletin*. June 1989. 8-13.

St. Pierre, Elizabeth Adams. "The Call for Intelligibility in Postmodern Educational Research." *Educational Researcher*. 29:5. June-July 2000. 25-27.

von Krogh, Georg. "Care in Knowledge Creation." *California Management Review*. 40:3. Spring 1998. 133-153.

Wallace, M. Elizabeth Sargent. "'Errors and Expectations'; or, How Composition Scholarship Changed the Way I Ask for and Respond to Student Writing." *ADE [Association of Departments of English] Bulletin*. 109. Winter, 1994. 23-34.

Wolf, Thia. "The Teacher as Eavesdropper: Listening in on the Language of Collaboration." In Daiker, Donald A. and Max Morenberg. *The Writing Teacher As Researcher: Essays in the Theory and Practice of Class-Based Research*. Portsmouth NH: Boynton/Cook Publishers, 1990. 277-289.