Plymouth State College
Journal on
Writing Across the Curriculum

Volume 8

*Retrospective Issue*

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Dedication

To Dick Chisholm

whose prolific output of articles and editorial energy extraordinaire has, over the last eight years, been a mainstay of this journal’s life.
Editor's Introduction

The idea to publish this retrospective ("Greatest Hits") volume of the journal materialized during a WAC Task Force meeting in the Fall of 1996. The group felt that over the eight years of publishing an annual journal many fine pieces had been written that warranted reprinting, both to facilitate rereading by veteran faculty and to give newcomers an opportunity to read influential articles published years ago. The group also felt that it would be useful if authors shared how they now feel about the WAC ideas they published years ago, and thus the form of this volume was found.

Invitations to be a part of the retrospective issue were sent to all authors who are still at PSC, putting into motion, in the spirit of WAC, a process of self-selection that, as expected, resulted (with just occasional arm-twisting from the editor) in this collection of the most popular articles of the last eight years.

Enjoy the read!
Plymouth State College
Journal on
Writing Across the Curriculum

Volume 8, August 1997

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Strategies and Techniques
Using Drafts in History 231: American Economic Development

William L. Taylor

When first confronted with the concept of using drafts in history courses, I believed that it would result in much more work for me and only limited results for students. After attending the first Writing Across the Curriculum workshop, I was willing to take a chance and try it in the critique assignment required in HI 231: American Economic Development.

What convinced me to experiment and continue after the first effort in the classroom? In the workshop conducted by Toby Fulwiler, concepts discussed and experiences shared persuaded me that the potential extra effort would be more than offset by the final results. First, instructors did not necessarily have to read entire drafts, but only the first page or, depending on length, pages. Second was the likelihood that students would be willing to work on improving their writing. Third was that second or subsequent drafts by students would prove far more literate than the first.

My original concept in assigning a critique was to encourage students to improve their writing and analytical abilities which are so essential in a world ever more dependent on those able to understand and to convey information. Frustration in grading this assignment occurred regularly because of the seemingly wasted
effort of correcting and commenting on papers at the end of the semester. Despite extensive commentary, I had the distinct feeling that the comments were ignored and that all of my efforts went in the “circular file.” Upon altering the process a couple of years ago, I had a quite different sense of the consequences of my efforts. Now students could use my comments and suggestions in their revisions with the result that the final effort would incorporate thoughtful revisions and careful review of what the student sought to achieve.

The overall conclusion from this effort over the past two years is not only positive but also reinforces my sense that students have recognized the benefits for themselves. Course evaluations conducted in December 1988 confirm this observation. What seems to occur is the sense that writing can be done initially without incurring any penalty. This reduces anxiety and allows students to take risks without any immediate fear of failure.

The final results are usually much improved—sometimes after two, even three, revisions. When I grade the final submission, I retain a sense that my efforts have resulted in positive reactions which brought about actual efforts to improve the writing. The students seem to recognize that they have the opportunity to improve their work and do so in a non-threatening environment.

I do not wish to imply that this format is less work than the old way of only commenting and grading a “final copy.” What makes it worthwhile is the sense that students become motivated to improve their work and that my comments and efforts are used in a way that enhances the learning process. Isn’t that why we sought a career in teaching?
I witnessed the effectiveness of Taylor’s responding techniques while working with his students in the writing center. Minimalist response focused entirely on the thoughts being conveyed. Just a few words. An occasional word of encouragement when an interesting idea was pursued. A suggestion for major change when someone was off track. Taylor’s response said a lot in the fewest possible words, launching the students into thought, but never doing the thinking for them. The students were being prodded to think and write like historians, but within those broad limits they were encouraged to think for themselves.
A Professor and Her Student Respond to Academic Journals

Mary-Lou Hinman and Beth A. Loring

The professor begins.

Several years ago students in my Introduction to Literature class were debating spiritedly about a Robert Frost sonnet when one student turned to me, seeking arbitration. “What is the tone?” she asked. I shrugged, wanting the class to work through their own understanding of the poem. “Well,” the student demanded in exasperation, “look it up in the Teacher’s Manual.”

I remember the incident with both amusement and sadness because it clearly shows how often the American education system emphasizes “the right answer” over the process that teaches students to find their own answers. In the interest of helping students find that process, I began using academic journals in my literature courses five years ago.

The journals were a substitute for the essay quizzes I had given for years in an attempt to force students to read the assigned material. But quizzes (at least ones I gave) had built-in problems. Students didn’t like to take risks with material that would be graded. Instead of reading the literature, they tried to read my mind, to write on the quiz what they thought I wanted to read.
As I thought about incorporating journals into my classes, I could see that they, too, might have built-in problems. What would keep students from writing fifteen entries all at once instead of writing individual entries after each reading assignment? What would the quality of the writing and thinking be if I didn’t grade each entry? Would the students consider the journals busy work rather than a legitimate academic endeavor? I knew I didn’t want to read “diary entries”; could I convince students to go beyond gut-feeling to serious and reflective critical thought? I assigned the first journals with some real doubts.

Five years later I view journal writing as one of the most important and challenging aspects of my courses. I know journals are not universally loved by students; some of them are quite blunt about their feelings on course evaluations. But over eighty percent of my students endorse the concept of journal writing—some begrudgingly, most enthusiastically. All students view journals as more work, but most see the work as productive, pertinent, and helpful. I wondered, however, what a student who had written academic journals for a variety of professors in a variety of modes might say about the benefits and pitfalls of this kind of writing. I approached one of my ex-students, Beth Loring, who agreed to collaborate with me on an article assessing journals as a pedagogical tool.

Professor and student find areas of agreement.

Beth and I were able to agree on a list of positive benefits derived from the use of academic journals in classes I had taught and she had taken:

- First of all, students learn the important thing is to think, not necessarily to be right. They are able to explore ideas in their journals without being penalized and are there-
fore more apt to take risks.

- Second, because students are more often right than wrong in their assessments of what they read, their confidence increases when they understand that they can read critically. When they begin to believe in their own abilities to read and think, students are more apt to challenge their teachers’ assumptions. Therefore, classes are livelier and more productive for students and professor.

- Third, student retention of material increases dramatically. If journal entries connect with class discussions, other assignments, and examinations, students understand more and retain material more effectively. Students seldom forget material they have worked through on their own and become increasingly adept at separating the important from the unimportant.

- Fourth, students have to think about the material before they come to class, for it is impossible to write a good journal entry without some thought. Beth insists that education is most successful when students react to what they learn; an academic journal provides an opportunity for expressing such reactions. She also sees the journal as a place for students to express ideas that they cannot comfortably state in class. In this case, the journal becomes not only an intellectual and creative outlet but also an agent for fostering more productive and fulfilling student-teacher relationships.

- Finally, in spite of the emphasis in journal writing on content rather than mechanics, the student writing in journals is often far superior to their work in revised essays. Beth and I noted that the quality of writing in student journals improves as the semester progresses,
and that improvement is often mirrored in the professor’s comments. In one of Beth’s own journals, the professor’s comments changed from “Okay, but . . .” to “A wonderful entry!—a fine reading of the story.” Beth had a written record of her improved ability to analyze literature and her improved writing skill.

**Professor and student find areas of disagreement.**

Beth and I agree that academic journals, for the most part, effectively push students to greater understanding. But some of the aspects of journal writing I find most positive, Beth questions. I have felt that because students know they have to write about what they read, they are less apt to give up on difficult material. I always cite a classic student entry from one of my American Literature classes:

Emerson says on page 898 that the essence of life is spontaneity or instinct. I’m not quite sure what he is getting at. Are spontaneity and instinct the same thing? Wait a minute, I think I can answer my own question now that I’ve thought about it. Is he saying that if we acted out of instinct, that is, truly act the way we feel is right to act, then we would inevitably be acting virtuously or correctly—?

I am fairly confident that in prejournal days, this same student’s thought processes would have stopped with “I’m not quite sure what he is getting at.” Beth responds that she and other students are still apt to give up on particularly difficult assignments. Instead of confronting such difficulties, Beth says, students mostly find a way to avoid them. She suggests more faculty guidance for particularly difficult reading assignments.
I had anticipated another problem which I have encountered in a few student journals. My goal is to have students write journal entries after they complete their reading but before class discussion. Some students, however, inevitably write their entries after discussion. I have not been particularly concerned, for I have felt the students were at least synthesizing class discussion and therefore writing useful entries. In my discussion with Beth, however, I discovered that other students are angry at these “leeches,” and she reminded me that students must react to assignments on their own if they are ever going to move from passive to active learning. Although she agrees that synthesis is useful, she believes that academic journals are most successful when the professor insists on independent thought and work. She reminded me of my own statement that journals allow instructors to work with students at their own level of understanding and sophistication.

**Journals help the professor.**

I assign academic journals because I believe they benefit students, but student journals help me in ways I never anticipated:

- Students show me in their entries which assignments work and which ones do not. I now give more careful preliminary comments and instructions to assignments that have proven in the past to be unclear or challenging.

- I immediately discover when students have misconceptions about their reading or about comments I have made in class. I can respond to individual misconceptions in the journals themselves, or I can take class time to return to material that has troubled the group as a whole. I find problem areas *before* examinations.
• Often students force me to look at material in new ways. Sometimes they amaze me with their attention to detail or with their fresh observations.

• I play a different role when I read student journals. Since how students write is beside the point, I concentrate on what they write. I respond to their ideas as a peer—which means I can agree or disagree with their comments and explain why. I find the activity a pleasure, not the drudgery that “grading” exams and papers can be; therefore, I do not begrudge the time I spend reading journal entries. And, as Beth reminds me, this role makes the professor less intimidating. Students react more positively, she insists, and work harder.

• Finally, I can see intellectual growth from the beginning to the end of the term. In a profession where tangibles are few, I am delighted to have a written record of a student’s intellectual progress in the course.

The student offers suggestions for better journal assignments.

Academic journals are used in a myriad of ways across the disciplines at Plymouth State College. Of necessity differences in course objectives dictate the guidelines established for the use of journals. Keeping those facts in mind, I offer the following suggestions to the faculty for their consideration:

• Students generally participate in more than one course where academic journals are assigned. Since each professor has a slightly different concept of what a journal should be, faculty
should give students *written instructions* to clarify their expectations for students and to avoid misunderstandings.

- Assigning specific topics for journal entries may make more difficult pieces seem less threatening. Furthermore, helping students focus on certain themes and issues will encourage them to read and think more critically, eventually on their own.

- Professors should collect journals early in the term and frequently after that. This way, any questions or misconceptions about the journal itself or reading assignments will surface, and the professor can deal with them immediately.

- Even though debate is healthy, professors should avoid imposing personal interpretations on students. Instead they should try to work with students at their own level of understanding. The fastest way for faculty to destroy student enthusiasm is to smother students’ ideas with their own.

- When possible, faculty should connect journal entries with class discussion, examinations, and assignments. Through this connection of material, students gain more understanding and retain material better.

- Finally, teachers and students alike should do their best to keep the lines of communication open. Students should look to professors for guidance, and professors should look to students for their insights.
As always, the professor gets the last word.

I will continue to use academic journals. I think students learn by writing journal entries, and I learn from reading them. Two years ago Beth enrolled in her first course with required academic journals. Since she had never encountered journals before, she was apprehensive about the experience. Looking back, however, she says, “I realize that those journal entries encouraged my growth as a student, not to mention my growth as an individual.” If that is the case, the experiment I began five years ago has succeeded beyond my expectations.

(1997)

Academic Journals Revisited: Or Why the Professor Hasn’t Changed Her Mind

Mary-Lou Hinman

“I really despise journals,” Christine writes early in spring term. “Students are asked to write down opinions and ideas so that they can be graded—so it can be marked down in a book that we actually have ideas and opinions.” She is adopting the voice of Daniel from Doctorow’s Book of Daniel, the novel under discussion in my Twentieth Century American Literature class. “There,” she continues, and I see the smile in the words, “That was my take on Daniel. That was my little rebellious impression of the kind of tone I got from the book so far.”

Christine is playing, but she voices the sentiments of students who fail to see the point of journals. Mostly, they would rather take quizzes and tests or write short essays on assigned topics, because then it is clear what I think is important, the slant I want to take on the literature under discussion, and students are more
comfortable that way. But I don’t want my students “comfortable”; I want them to read and think and attempt to come to terms on their own with difficult material. Journals help students with that struggle.

Another entry from Christine’s journal is a case in point. This time we are reading Leslie Marmon Silko’s *Ceremony*. In her entry, Christine is working through one section of the mythic poetry at the center of the novel. At first she writes methodically, concentrating on simple paraphrase. Then she notices color, traditional emblems, the use of the four points of the compass. She begins to sketch directions, then sees how myth and direction pertain to the main character of the novel. She writes in the margins, draws diagrams, and makes notes to herself. In her excitement, she goes to the internet to look at some criticism. She comes to class full of information, a better understanding of the novel, and a paper topic for her major essay—all because she was required to write a journal entry.

For every Christine, however, there are students who write almost nothing in their journals for me. These students are bright and interested in the literature they read. They simply do not like the regimen of writing in a journal. Mostly, their reticence on paper is balanced by their vocalness in class. I know they’ve read the material because they discuss it openly. But for those quiet others—the ones for whom participating in class is downright painful—the journal becomes a voice. I have one student this term who has typed over a hundred single-spaced pages in his journal. All of it is excellent, thoughtful work. Most entries relate to the reading for class, but some focus on literature in general, on defining what makes a piece of literature great. Sometimes he writes poetry in the style of the poet under discussion. I always save his journal for last: it is pure pleasure to read.
Or take the case of Jenn, who writes cogent and intelligent journal entries, but cannot take my exams. I ask her why, and she answers in her next entry, “. . .you asked me what happened to me on my exams, since my journal entries are good. I think the answer to that question is that in my journals, I am never forced to answer one specific question, whereas on an exam I am. In a journal I can comment on any aspect of a poem or story that I wish, and I can do it informally. . . . Exams always make me nervous. . . .” I remind myself as I read her explanation how much I like to read journals and how much I hate grading exams.

I have heard colleagues say they don’t use journals because they don’t want to read bad, unedited prose. I insisted in our article seven years ago, “. . .student writing in journals is far superior to their work in revised essays.” I haven’t changed my mind. I think back to the first novel we read in my Twentieth Century American Literature class spring term, John Updike’s *Rabbit Run*. Students were eloquent in voicing their distaste for the protagonist and their reluctance to see him as a good man. To broaden discussion, I gave them criticism that made references to Rabbit as a recipient of Grace. The journal responses were far-ranging and passionate. I give you one entry here, not because it was the best, but because it shows the level of thought and involvement in the assignment.

**Journal Entry:**

*Rabbit, Run* by John Updike with reference to the handout

I am not going to try to explain the Jesus Christ references. Nor do the ideas of Rabbit as a mystic interest me. I can not think of this book as deeply as (it seems) I am expected to because I could not feel for the characters, and therefore I was not interested. But I do find the reasoning behind Rabbit’s cruel accusation to Janice regarding the death of Rebecca interesting. I
think it is something we have all done at sometime in our lives to get out of a sticky situation.

The handout says that Rabbit points the finger at Janice to free everyone from the common guilt of death. I do not agree with this statement. I believe he is attempting to free himself from the circumstances that involved the death of his child. Placing the blame on the person who did the actual act of killing, no matter how accidental, frees him from all blame of the wrong he did Janice by leaving her.

So why is what Rabbit says so bad? Because it was cruel, by any standpoint. Cruel to Janice, the mourners, and to himself. I believe that part of the reason he left the graveyard is because he was also fleeing from his own guilt that was brought to light by his accusation. By placing the blame of the actual death on Janice in front of everyone, he clears himself of that wrongdoing. But then the question is, “why did she do it?” All eyes turn to Rabbit, the husband who left his pregnant wife, who drove her to drink, who lived with a prostitute, and who still does not want to be where he is in life.

In spite of the frustrations of using journals—students who won’t do entries; students who copy class discussion and try to palm it off as their own work; the extra time I spend reading—the kind of lively exchange you see above makes me assign them semester after semester. Journals are a showcase for bright students and a voice for quiet ones. In their entries, students try out ideas, voice reservations or complaints, or return to class discussion long after it has ended. And I get to read lively and interesting prose. What more could I desire?
Introduction  
by David Zehr  

Few students enrolled in an introductory psychology course ever become professional psychologists. And realistically, only a small percentage of psychology majors end up employed in psychologically-oriented professions. For that simple reason many students often fail to see the relevance of learning about research methods. In the introductory course students want to learn about, among other things, deviant behavior, altered states of consciousness, and psychotherapy. I’ve yet to encounter a student who comes to introductory psychology drooling over the prospect of discussing internal validity, falsifiability, and the differences between experimental and correlational research. “Why do we need to know this stuff?” and “I’ll never use this” are questions and statements I hear every semester. I usually counter by saying that every student is a decision maker, and that by learning about research methods one can become a better decision maker. At this point their incredulous stares suggest that I need to be a bit more explicit, so I ask them to consider the following scenarios:
A friend tells you that the son of a friend committed suicide after listening to heavy metal rock music. Your daughter loves heavy metal. What do you do?

A member of a Presidential Commission reports that pornography causes rape. You find a Playboy magazine under your son’s bed. Will he rape?

A magazine article reports that working mothers are more likely to raise behaviorally troubled children than women who stay home. You work and are thinking of starting a family. Should you quit your job?

I encourage them to admit that before they’d censor records, burn magazines, or give up a promising career, they’d seek more information, evaluate it, and then arrive at a decision regarding the best course of action. Every one seems to realize that, yes, one needs to know what information is pertinent, what its source is, who’s disseminating it, and whether it is valid. After my lengthy verbal exhortation about how research can help answer these sorts of questions, students admit that maybe knowledge of research methods could benefit them in some way. At this point in time I claim victory in a skirmish, but still face an uphill battle: getting students to see how research can be relevant in their own personal experiences and getting them to master often difficult and dry material.

Developing Writing Assignments

When I began teaching introductory psychology, I knew that I needed to create assignments that would help my students better understand research methods, for without that foundation much of the content matter is difficult to master. It was apparent from prior
experience that merely lecturing about methodology did little more than encourage them to memorize information that might be seen on an upcoming exam, and I wanted them to be able to think clearly about methodological issues and apply what they had learned. So, to supplement my lectures on the topic I began to develop writing assignments that I assumed would induce the critical analysis that I sought.

One of my first assignments was based upon a supplementary reader. Students were asked to read both sides of some controversial issue in psychology, for example, is psychotherapy effective, or, can attitudes affect recovery from illness. They were then asked to write a paper identifying strengths and weaknesses of the two arguments. It was my expectation that they'd see right through major flaws, of which there were many, e.g., drawing causal inferences from correlational data, or generalizing findings from biased samples.

Did the assignment work? Of course not! Students read both sides of the issues, but their papers were, for me, a major disappointment. Invariably they’d write papers praising the side of the issue they agreed with initially, while disparaging the opposing viewpoint no matter the merits of its supporting evidence. I was learning a lot about my students’ attitudes toward controversial issues in psychology, but they weren’t learning a darn thing about research methodology and its relevance to their lives; I subsequently adopted a different supplementary reader.

The new reader promised that it would help students “think straight” about psychology. It promised to explain how science is done, how science is different from pseudosciences, and how one could avoid pitfalls in evaluating the flood of information we are confronted with daily in the mass media. Those are pretty hefty promises and I suspected from my experience with the first
supplemental text that merely reading the book was not going to do the trick. So once again I sat down to devise an appropriate writing assignment based on the reading. My initial attempts were less successful than envisioned. I’d assign certain chapters for students to read, then I’d ask them to do something along the following lines: identify ten important concepts from your reading, define the terms, and write a short paper telling me where you see these principles illustrated in “real life.” That’s an oversimplification of the assignment but it does give you a sense of what the students were up against. Oh sure, every semester I tried something a little bit new, but it was always the same assignment in different clothing, and I was therefore chronically depressed when I did the grading. All of the papers sounded the same. Students didn’t really seem to understand a lot of what they were reading, and therefore couldn’t even begin to explain the relations between methodological issues and the outside world. For example, the idea that a good theory is one that is falsifiable was problematic for many students. Upon hearing the term “falsifiable” they automatically assumed it meant a given theory was false, and therefore no good.

On sabbatical in the Spring of 1991, I spent time critically examining several of my courses. Looking at my experiences in introductory psychology I realized that my writing assignments were too directive and lacked meaning for the student. It was as if I was having the students do an intellectual scavenger hunt. Scavenger hunts are a fine form of entertainment but a lousy pedagogical tool. So it was back to the drawing board.

I’m not really sure where the idea came from, but one day I decided that I had to do something to allow the students to use their own unique talents in mastering the material; I had to do something less directive; and I had to do something that would allow me to assess whether students really understood the prin-
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ciples I wanted to convey. Then it hit me. I often adopt the personas of different characters in my classroom when I want to illustrate certain things. Acting out the material certainly gets students’ attention, and they seem to remember those classes more than the ones that are straightforward lectures. And so I thought, if I can act out certain ideas, why couldn’t the notion of acting be incorporated into my writing assignments?

Buffy and Elvis Make Their Debut

The assignment was short and direct. After reading their methodology text, students wrote plays incorporating the content into a dialogue. I provided two characters and a general theme. The characters were Buffy and Elvis, two students enrolled in an introductory psychology course. Buffy had read and loved her methodology text; Elvis had not read it and therefore not loved it. The theme was as follows: Elvis had just finished watching a TV show featuring Dr. Elmo Zehr (my evil twin), who made an incredible statement regarding human psychology. Elvis was duly impressed. Students were told to put the words in Dr. Zehr’s mouth; they could write whatever they wanted but it did have to deal with psychology. They were further instructed to write a dialogue between Buffy and Elvis in which Buffy must convince Elvis, based upon her knowledge of methodology, that Dr. Zehr is a complete charlatan. Students were told that they could add additional characters, expand the setting, in essence, do whatever they wanted to do with the material and the characters.

Did the assignment work? I certainly think that it did. The play that appears at the end of this article is just one among many that induced copious tears of joy. To me it is quite clear that this student knows what the methodological concepts mean. I sense that the student found the assignment challenging and had fun doing it. From my vantage point as grader, this was one of the best
things I ever did in a class. There was little ambiguity in assessing students’ levels of knowledge; plus, each paper was different. When I have to grade 90 or so papers, variety helps. I also had little fear of students violating academic dishonesty norms; two students independently writing two identical plays would have been something that not even Elmo Zehr would foresee as possible.

Conclusion

My success with this assignment was heartening. It reinforced my belief that the study of research methods does not have to be soporific. I think my students also now see that knowledge of methodology is not foreign to their interests nor their well-being. I am certain that I have not heard the last from Buffy and Elvis.

*      *      *

Skip the Sauce and Hold the Jalapenos
by Kathleen Henderson
(a paper written for Dr. Zehr’s Introductory Psychology course)

Concepts (in order of appearance):

breakthrough
great leap
converging evidence
Einstein syndrome
connectivity
artificiality
falsifiability
replication
“Man Who”
single case
Scene: An under-maintained, over-priced student rental in Plymouth. Buffy is at the kitchen table studying diligently when her friend and fellow classmate, Elvis, bursts through the door clutching a videotape.

Buffy [startled]: What are you doing here? I thought you had a class?

Elvis [flushed with excitement]: I didn’t go. I was too busy recording this. [Fumbles with VCR] How do you work this thing, anyway?

Buffy [somewhat put out, goes to the VCR and puts in the tape]: I’ve got a lot of studying to do for that psych paper. Have you even started the reading yet?

Elvis: When you see this tape you’ll realize how unimportant all that stuff is.

Buffy [rolling her eyes, sits next to him on the sofa]: This better be good, Elvis. I’m busy.

[TV recording starts.]

TV Announcer: And now, it’s live with B.S. Daley! America’s favorite talk show host!

Buffy: You didn’t! You skipped class for B. S. Daley?

Elvis: This is the most monumental psychological breakthrough of our time. Listen to this!

B.S. Daley [with microphone in hand before the live audience]:
We are indeed fortunate to have with us as today’s guest, America’s most renowned psychologist to tell us of his revolutionary new method of psychoanalysis. Here he is, ladies and gentlemen—Dr. Elmo Zehr!

[Wild applause. Dr. Zehr enters stage and takes seat next to host.]

B.S. Daley: Dr. Zehr, I understand that your years of research have led to a startling new approach to psychoanalysis. Please tell us about it.

Dr. Zehr: The clinical term I’ve given my procedure is cuisinanalysis. It’s the process of analyzing an individual according to what he or she eats.

B. S. Daley: Amazing, just amazing! Can you tell us how it works?

Dr. Zehr: Certainly. It’s a well known and often stated fact that we are what we eat. Well, I’ve taken that concept one step further and actually studied the behavior patterns and personality traits of people who habitually choose certain types of food. In every instance, I obtained the same findings.

B.S. Daley: Can you elaborate on some of these findings?

Dr. Zehr: In a total departure from previously held beliefs about personality and behavior, I’ve discovered that the food people consume is really “telling all,” as they say. For instance, those who always smother their food in sauces and gravies are actually suffering from feelings of insecurity. The sauces are like a—security blanket for these people.

B.S. Daley: Of course. That makes perfect sense! Please tell us
Dr. Zehr: One discovery most people find particularly disturbing is related to the consumption of hot spicy foods. These people only eat those things when there’s someone there to watch them. It’s a desperate, almost masochistic attempt to get attention. And those who pile on the condiments—it’s not an insult to the meatloaf, but a sign they’re trying to hide something.

[Gasps from women in the audience.]

B. S. Daley: No wonder your research has catapulted you to the forefront of your field. Can we take a few questions from the audience now? Yes—you up there.

[Popping up from her chair like a coiled spring, a young rosy-cheeked co-ed waves at the camera.]

Co-ed: Yea, what about people who eat really gooood, like tofu and mineral water?

Dr. Zehr: Very interesting cases. Extremely deep feelings of guilt. This response represents a subconscious attempt to purify themselves—to cast off this guilt, so to speak.

Co-ed: Oooo, thanks. I guess.

B.S. Daley: Do we have another question?

[Overweight middle-aged man in very loud tight suit, slowly stands.]

Middle-aged man: Yea, doc. I’m a butcher, and I want to know about people who always come in and buy up all the organ
meats—liver, kidneys, you know?

Dr. Zehr: Classic expression of self-hate.

Buffy [leaping up from the sofa and turning off the TV]: That’s enough!

Elvis: No! No! There’s more!

Buffy [thrusting the tape back into his hands]: Tell me you don’t really believe this, Elvis. Please!

Elvis: Of course I do, and you would too if you’d listen to the rest of this tape.

Buffy [snatching her Stanovich text from the table and holding it before her like the cross before Dracula]: This, Elvis. This is what I believe!

Elvis: But this guy’s for real! I mean, he even helped the FBI crack a murder case. They put him on a stake-out in a buffet line and he picked the guy out on his way back to the sausage and peppers!

Buffy [pulling out chair for Elvis]: Sit down, Elvis. We’re going to talk.

Elvis: You’re not going to read that thing to me?

Buffy [putting Stanovich aside]: No, I’m going to ask you something. Doesn’t it seem odd to you that years of research by brilliant psychologists just got flung out the window by that—that—guy!
Elvis: He’s a revolutionary. I mean, didn’t Einstein startle people? And I bet you would have pulled the plug on him, too.

Buffy: Einstein didn’t totally discredit the work of others who had also done some extremely worthwhile things. Maybe they weren’t right on the money like he was, but it was all important. Real breakthroughs in science don’t happen overnight. They build on what’s already established.

Elvis: He’s worked hard, too. Five years it took him! Hiding behind potted plants in restaurants, working the salad bar at Bonanza...

Buffy [interrupting]: What about controlled conditions?

Elvis [hostile]: I know what that means—a lab! You think he’s a quack because he got his findings out in the real world and not some sterile lab with rats and buzzers and test tubes!

Buffy: Don’t you see? None of his theories can be proven one way or another. Other researchers can’t test his theories because they can’t replicate his research.

Elvis: It doesn’t take a scientist to see how right he is. I know a man who used to put sauces all over everything and then eat a jar of pickled jalapenos for dessert. And do you know what? He was abandoned as a child and no one ever noticed him. Isn’t that just a bit amazing?

Buffy: That’s a single case! How would you explain that millions of Mexican people eat spicy food all the time? Do you honestly think they’re all starved for attention?

Elvis [momentarily subdued]: That’s different. That’s—culture.
Buffy: It’s more than that, Elvis. It’s multiple causation. His research is flawed. Not only that, but it’s flawed research that has absolutely no commonality with any meaningful work that’s ever been done in the field. Show me the converging evidence!

Elvis [sinking deeper in chair]: That tape is all the converging evidence I need. I mean, take me for instance. I bet after watching that tape you can tell a lot about me.

Buffy [scrutinizing him caustically]: You’re right. You should stop eating scrambled eggs and screwdrivers for breakfast!

[Buffy jumps up from the table and goes to the refrigerator. Elvis follows.]

Elvis: What are you doing?
Buffy: I’m going to have my lunch.

Elvis [breathless at the opportunity to obtain his own empirical evidence]: And just what might that be, may I ask?

Buffy: Breaded fishsticks.
Elvis: Wow, I wonder what that means?

Buffy: Cutting fish sticks apart with a knife. In the spring of 1986, Toby Fulwieller was invited to campus to give a workshop on some sort of new, at least to me, pedagogical movement called “writing across the curriculum”. As a new faculty member I was encouraged to attend the two-day presentation by my department Chair. Summoning all of the enthusiasm I could about attending a summer workshop, I cheerfully, I think, agreed to do so.

In all honesty I really can’t remember clearly my expectations
toward the workshop, but from prior experiences they couldn’t have been too high. Too often workshops are uniformative, poorly presented sermons to the already-converted. Looking back now at that first WAC program, I dare say, and happily so, that it was unlike any other workshop of which I’d ever been a part. “Inspira
tional” is one of those cliched adjectives used to describe so many common, everyday events which are anything but; however, Toby’s presentation was truly deserving of that label. What he said was important not only for the workshop participants, but for everyone at the college. The WAC program has been tremendously successful at Plymouth State, and I feel fortunate to work at an institution which places such high value on using writing to learn.

Not long after Toby’s presentation, I began to think of how I might use writing differently in my classes. My first success at using writing in the WAC framework was for a history of psychology course that I teach. Seeking to expand on the success I had with that assignment, I next applied WAC principles to my introductory psychology course. To me, an essential part of that class is learning about how psychologists do research. Methodology, however, can be difficult for students to master well, particularly at the introductory level.

At around the same time I was wondering how to do a better job at teaching research methods, I stumbled on a small textbook called, *How to Think Straight About Psychology*, written by Keith Stanovich. I liked the book and the way it spelled out to the nonprofessional the value of research and the way it was conducted. I immediately adopted it and decided to use it as the cornerstone of some new writing assignments, most of which incorporated two alter ego characters, Buffy and Elvis. The first assignment developed in this context was described in the preceding article.
In looking back I assert confidently that the assignment worked in ways that I hadn’t even imagined. Instead of getting and having to read the same repetitive, regurgitative, mind-numbing papers of the past, I was now getting writing assignments that were carefully crafted, humorous, and different for each and every student, all of which made grading them a delight rather than a chore.

As I continue to teach introductory psychology, I still use these sorts of assignments. I am at a point, however, where I am beginning to feel again a need for change, just as I did all those years ago when Toby Fulwiler first introduced me to those favorite little words Michelle Fistek* now likes to whisper in peoples’ ears (no, not “let’s go shopping”, but “writing across the curriculum”). Buffy and Elvis have served me well, but perhaps they need, as did even Calvin and Hobbes, a respite from it all. In a sense they are getting one. Currently my introductory psychology students are writing a play, but this time with their own characters and their own plots. I see this as a transitional assignment; one that will allow me to keep on using proven techniques as I try to figure out where WAC will lead me next.

*Dr. Fistek is the Coordinator of the WAC Program.
The Circle

Meg Peterson

The circle formed on Wednesday nights. Far from the English Department, in a room decorated with meteorological charts, my composition class would sit in silence for an hour reading and writing comments on each other’s papers. The circle began as a less threatening way for shyer students to receive peer response, but grew to become much more. Through this written conversation, a community of learners and writers formed and evolved. This community challenged us to engage in honest dialogue, and gave us support, a sense of having been true to ourselves and a chance to be heard. Reflection on the experience led me to see broader implications about the place of the personal in academic life and students’ potential contributions to academic discourse communities across the curriculum.

From the beginning, I had structured the composition class to require regular writing. To enable me to respond to students while they were in the process of writing, I required a five-page paper every week on the topic of the student’s choice and a weekly conference outside of class. I formally evaluated only revised versions of pieces in portfolios submitted at midterm and at the conclusion of the course. While I did not grade their weekly papers, I underlined mechanical errors and wrote a page of commentary responding to the work. In my written comments, I tended to focus on the effectiveness of the writing. In conferences, I
responded more to the content of the papers.

I also wrote a five-page paper every week. I shared aspects of my composing process and my finished papers with the class. The course established a rhythm over the first several weeks, and I was generally satisfied with its progress. Students seemed to be working on issues important to them in their writing and taking more control of their weekly conferences. But I was concerned about response.

Students needed more response than my comments on their papers each week. During the Wednesday class session, I provided time for students to read their pieces aloud to the class and receive commentary. Those students who availed themselves of this opportunity found it valuable, but most couldn’t bring themselves to read their work in front of the group. The same students always seemed to take advantage of the sharing sessions. I was concerned that the majority weren’t getting response from their peers.

The idea of the circle was to create a less threatening way for students to get peer response. Written response, while lacking the interactive quality of oral sharing, would allow everyone to receive feedback on their work in a single class period.

To introduce the circle exercise, I simply brought a stapler and some loose sheets of paper to class one Wednesday night and asked everyone to attach several sheets of blank paper to the back of their composition. After we had moved our chairs into a circle, I explained how the exercise would work. To begin, we would pass our papers to the right. We would read the piece we received and write comments on the paper stapled to the back.

I asked students to center their response around two basic questions, “What works?” and “What needs work?” and to be as
specific as possible, as this would help the author more than general comments like, “Good paper.” When they had written their comments, they were to look for someone else who had finished in order to exchange papers. With these simple directions, “the circle exercise” was born.

Shortly after the first pieces had been passed to the right, a stillness fell over the room as everyone began to read. I turned to the piece which had been passed to me. I noticed my reading of the piece changed when I wasn’t underlining errors. I began to relax and follow the words. I wrote on the attached paper, sticking rather strictly to my own guidelines about responding to what worked in the piece and what needed work and looked up for someone to pass it on to. Everyone seemed to be reading intently; a few were writing comments. The only sounds I heard were noises filtering in from the hall. Finally someone looked up. We crossed the space in the center of the circle to exchange papers.

With this second paper, my reading became even more relaxed. As I read of this student’s experience with appendicitis, I found myself thinking about the time I had spent in the hospital with my son’s hernia operation. When I reached the end, I read the comments of the student who had read the piece before me. She had followed my guidelines for response rather loosely: “The lead really caught my attention, but I think you should explain more about the hospital room—maybe add more description.” Then she had taken off in another direction: “Something like that happened to me once. I could relate to a lot of what you said here. When I was in sixth grade, I had to go to the hospital for an operation on my heel. I was scared and felt very lonely.” The piece had also brought up memories for me. I decided to let the author know.

As time went on, my responses in the circle exercise became more those of a person and less those of a writing teacher. I
 enjoys my reading more, not worrying if I was teaching them anything, knowing I would write my teacher-oriented comments later. I became more fully a member of the classroom community.

I left it up to the students to choose if they would sign their comments. Most did not. When I received my own pieces back at the end of a circle session, I usually did not know who had written the comments. I tried several variations on this structure, but the students indicated they preferred the basic format. I occasionally added specific things to comment on (e.g. leads, focus, order, etc.) that we had been discussing in class.

**Concentric Circles**

Once a routine was established, several things I hadn’t anticipated started to happen. I began to notice signs that the expanded audience provided by the circle was affecting the composing process. Students frequently asked in conference if they would have a chance to pass their piece around the circle. Sometimes they asked my opinion on whether the class would like a certain piece. I did not require them to submit the paper they were currently working on if they did not wish to. I provided the option to submit a previous piece in case the current one dealt with a personal topic the student would not feel comfortable sharing. Most often, however, their reason for not sharing was that they felt those pieces did not represent their best effort.

Students began to care about their writing more and depend on the response they were receiving from their peers. Response validated what was said. One student said he was “testing the power of writing...I have found this tool has infinite leverage.” Another wrote, “Stories have shown me that past experiences can be re-experienced through writing. The experience will never leave
you if you have it in front of you.” We learned about the power of being heard. “It helped me to express feelings and write stuff that normally I would not have written.” We learned how our writing could affect readers.

Testing the Waters

Students began to use the circle response sessions to test the effectiveness of their writing. They judged the success of their efforts by their peers’ responses. One student wrote:

I set out to write a cliffhanger. And judging from the response I received, it worked. ‘I must read the ending!’ and ‘When you finish this, you better let me read it!’ were some of the favorable responses I got.

Another explained, “My intentions in writing the piece were to get the feelings on paper. From the responses, I guess I did that.”

But responses that pointed to problems in the piece were also highly valued. Students used these responses to show them where they needed help in the writing. Even though the pieces we passed around were that week’s finished copies, the responses often led to revisions. One student wrote:

The most valuable kinds of responses I got were when people gave me ideas of ways to make the piece better or asked questions that I could use the answers to add more in the paper.

Questions were viewed as signs of reader interest:

The responses that best stay with me are the questions.
When you hear or read questions, you know what you have to expand on. You understand what you left out and are able to see what the reader is interested in. Through questions I am able to learn what is more important to others and what needs to be elaborated on more within the story.

As were requests for clarification and more detail:

I liked it when people told me specifically what needed to be fixed.... And I also like it when they (the readers) tell me where they need more detail. I may have it in my head, but they don’t understand because it jumps around too much. This helps my story develop into a better story that a reader will better understand.

When the audience expanded beyond the teacher to include peers, revisions made more sense and took on more importance. Even if the writer didn’t choose to revise the particular piece being commented on, she took what was said into consideration the next time she sat down to write.

Community

Maxine Greene (1988) describes how we need to open up “a public space, a space of dialogue and possibility” (xi). She holds out hope for education to provide a context for open dialogue between authentic beings. “In contexts of this kind, open contexts where persons attend to one another with interest, regard and care, there is a place for the appearance of freedom, the achievement of freedom by people in search of themselves”(xi). The circle allowed us a space in which we could begin to speak the truth. One student wrote:
A lot of [comments] also supported me when I wrote about topics which were very emotional for me. I was also there for others who chose to open themselves up, looking for support. I remember one girl wrote about how she didn’t want to move into her new stepfather’s house after her parents’ divorce. Another girl wrote about her sister attempting suicide. It felt good to be able to comment on those papers and support the writer’s point of view. This encouraged them to open up even more in the next essay...by sharing our essays we became a unit.

Students began to use this community to seek help with problems. One woman said of a piece she wrote about her troubled relationship with her parents, “I wrote it hoping someone could relate to it and maybe give me some ideas.” And sometimes they received it:

The response that affected me the most came from my essay about... when my mother announced she wanted a divorce from my father the night before I left for college. The quote was, ‘You are a tough woman, [name]. You are going through a lot and not only are you handling it well, but you can share it with others. I appreciate the fact that you can share this with me.’ I don’t know who wrote that, but it certainly made me think. I realized I did feel better after writing how I felt in the essay.... This person really helped me to feel better. To whoever it was- thank you!

Some of the support was simple validation for the writer as a writer. One student says simply, “The most valuable information I have received this year is that there are people who like some of
the things I have written. This makes me have more confidence and determination to write a piece that is even better...”

The circle created community. Elizabeth Chiseri-Strater (1991:1) describes this type of academic community as “an extended family unit that functions as a support system for students’ exploration of personal and intellectual literacy development.” Our community supported our efforts, spurring us on to attempt pieces we would not have tried to write under normal circumstances.

This community was unique in that while virtually all comments were positive in spirit, the vast majority were given anonymously. We received support from the group, most often without knowing which individuals it came from.

The trust level was high in this anonymous community. The personal content of the pieces that were passed around surprised and impressed me. Experiences with alcoholism, drug use, suicide attempts, divorce and rape made their way around the circle and were treated with respect. This level of trust challenged us to meet a high standard of honest writing. And the truth-telling taught us writer’s truths. As one woman put it, “I learned that honest pieces get the most reaction from your peers. I also learned that it is hard to write pieces that are completely honest.”

The Conversation

The circle helped us establish a dialogue in which one piece led to another, not only about personal experiences, but ideas. Papers about experiences would trigger memories or give someone the courage to write about similar experiences. Papers about ideas sparked connections and drew us into communal written conversa-
tions. Some papers were written directly in response to others. We developed an ongoing conversation on several issues: abortion, suicide (right to die), and the drinking age among them.

In response to several different papers about abortion, I wrote a paper about how unfulfilling I found the public debate and about the lack of real choices in this country. One of the authors of the papers I was responding to wrote, “You got me thinking. I liked the way you compared your experiences in Santo Domingo with the United States. It gives another perspective.” Another wrote, “It’s hard for me to see the side of the pro-lifers, but I like how you don’t really ram anything down the reader’s throat.” Another considered the issue for the first time: “I never really thought much about what abortion really means. What was also interesting was the amount of time mothers get off from work after they have a child.”

Another made a personal connection:

I really liked this. It makes you think about what choices women have in life. I work in a hospital in Somerville, Mass., and I see poor people who are lacking medical treatment because they do not have money. It is pretty sad to think a baby must have a baby to be loved.

Some students consciously began to use the circle as a forum to inform their classmates about issues important to them like the rain forests, animal research, and capital punishment, or to educate them about things they were familiar with. One writes, “I liked the fact that I could educate the class about a whole other culture so different as Jamaica.”

We all learned from this exchange of ideas and experiences. We learned about the ideas, but more about ourselves and the
power of writing to reach people and to change lives. One student used a quotation from Bob Dylan to describe the circle: “We were all the same; we just saw it from a different point of view.”

Clearly the circle gave these student writers (and their teacher) a way to be heard. This forum inspired us to write better pieces each week and helped us generate ideas. A member of the class put it this way: “Through the process of learning to write I can now see more. Everything has come into focus...In the effort of returning to a whole person, I meet people along the way. This is the gift of living.”

Implications

In her study of the academic literacies of college students, Elizabeth Chiseri-Strater (1991b) found that university students were asked to write within a very narrow range of forms in their content courses. Their personal understandings of course material were not valued or considered relevant. She recorded no incidents of sharing of student writing outside of the English class.

When the concept of circle response moves beyond the writing classroom’s focus on process into content-oriented classes, the purposes expand and the effects are transformed. The power of the circle exercise stems from its dual nature as personal, yet public, discourse.

Students care more about writing they know they will share with peers. Traditionally, academic writing is produced for an audience of one, the teacher, who typically knows more about the subject than the writer and whose sole purpose in reading is evaluation. Sharing of
academic writing among students in a class transforms the writing situation. The writing becomes “authentic” (Edelsky, 1986) in that the writer writes in order to create and communicate meaning. When students care more about their writing, they work to make their ideas clearer to the audience and thus the ideas become clearer to the students themselves.

The opportunity to educate their peers about a topic allows students “authority” in the sense of being an author. Freedom of topic choice enhances this authority by allowing them to establish some turf (Graves, 1983) within the field in an area personally meaningful to them. We should urge students to “start where they are” (Lofland and Lofland, 1984) in terms of topic selection, using their personal histories as a way of identifying potential areas of interest within a field of study, thus maximizing the transformative potential of the class.

Written response demonstrates the social context of learning within a field, and creates a community within which honest dialogue can take place. As students build on and react to each other’s ideas, they enter into a collaborative conversation with other minds. This free exchange of ideas introduces them to the process of academic thinking.

Most instructors recognize the value of academic dialogue and try to encourage oral discussion within their classes. Public writing and written response is a natural extension of this concept, but provides several advantages over classroom discussions.

Written response provides an equitable way to share student writing and ideas in a classroom situation. Research suggests that men tend to dominate oral discussions. Thorne, Kramarae and Henley (1983, 17) attribute this not to any natural passivity on the part of women, but to “the mechanisms, such as interruption, [and]
inattention to topics women raise which men use to control women’s silence in mixed sex talk.” In a written exchange, everyone’s voice has an equal chance to be heard. The option of anonymity increases the chance that all contributions will be equally valued.

The process of writing for a public forum encourages the writer to reflect on content. Applebee (1984) cites four advantages of written over oral discourse in promoting thinking. The permanence of the written word allows for revision and reflection, while the need for writing to communicate across space and time demands explicitness. The conventional forms of written discourse provide resources for organizing and thinking through relationships among ideas. Finally, the active, recursive nature of writing allows for exploration of the implications of otherwise unexamined assumptions. The writing of short papers to share in class encourages students to consider how their pieces will be received and reflect on the implications of their material.

**Suggestions for Implementation**

Allow students freedom to write about subjects they care about. Personal connections increase the chance that course material will transform personal understandings. Lofland and Lofland (1984) point to a long tradition of social science researchers who have used their personal histories as starting points for research. They caution that, “without a foundation in personal sentiment, all the rest easily becomes so much realistic, hollow cant.” (10)

Keep papers relatively short (no more than five pages) to allow for more responses in a shorter time period and to avoid reader fatigue. Position or reaction papers which assume greater personal voice are better suited to this type of activity than more traditional research papers.
A climate of acceptance in our classrooms encourages expression of differing points of view and free exchange of ideas. Welcome diverse voices and encourage students to bring private literacies into a public forum, creating a space where course material can interact with and shape personal truth.

Bringing circles of written response into the content classroom requires changes in the type and frequency of writing assigned, and larger changes in our thinking about student potential. We need to turn away from deficit models, that focus on what students cannot do, and begin to look at what students do know and can contribute. Change is always difficult, but the potential rewards are great.

Public Spaces, Personal Voices

One of my composition students wrote, “To write to be able to expand on ideas and to clear our minds seems too easy to be a course.” Another said, “Words to me are no longer words, they are feelings.” He said in writing he is “running toward the truth.” I do not believe these matters are peripheral to education. As Toby Fulwiler (1990) notes, “self knowledge provides the motivation for whatever other knowledge an individual learns and absorbs... In the end, all knowledge is related.” (261) Or as one of his students put it, “I put myself into it and I write well. It bothers me when people tell me to make it less personal—to take me out of it. I’m afraid I can’t write unless I am in the paper somehow.”

“The greatest lie of all,” says Chiseri-Strater (1991b), is “that education itself should be neutral, that education should be separated from personal and private knowing, that education should transform students’ ideas without transforming students themselves.” Academic discourse communities grow out of real dialogue, engaged reading and committed writing. They can become
an extension of the private literacies all students bring to our classrooms. Yet, unless a course is structured to foster the concept of community, such discourse communities remain the province of professional scholars writing in academic journals. The circle taught me that communities which support literacy growth and conditions which allow course material to transform students lives happen when we see the personal as relevant to the educational endeavor and provide public space for private voices.

References:


cal level, as it gets to the heart of what I believe writing instruction is for and the place of the personal in education. After rereading it, I feel the need to respond on both levels.

On the practical level, I have used the circle to a greater or lesser extent with every composition class I have taught since I came to PSC. Classes are collections of human beings. As I implied in the article, they tend to take on a personality as a group which is more than the sum of the individuals, including as it must, the web of relationships between them. Different classes have responded to the circle in different ways according to their personalities and needs. All have found it valuable, but not all in the way I described in this article. Some were much more focused on the simple need for response to their work than they were in engaging in an extended conversation. One additional factor which has emerged since I wrote the article is that students (most often males) have expressed to me that the circle helps them to feel more secure in the writing community because it gives them a sense of where their writing stands in relation to others. This often gives them the confidence to begin to share their writing more publicly.

My response to the article on a deeper, more philosophical, level is one of recognition. I quite simply still believe these things to be true. I still believe I am teaching people first and my subject second. I have come to believe that owning knowledge on a more personal level through writing is the best way I know to bring us closer to truth. I still believe, more strongly than ever, that “conditions which allow course material to transform students’ lives happen when we see the personal as relevant to the educational endeavor and provide public spaces for private voices.” I still believe, that for however much we might at times wish it to be otherwise, all genuine learning must transform the person in some way. Knowledge cannot be held apart to be deposited untainted in the learner. Writing cannot be a matter of fitting
words into a predetermined form. All knowledge, all writing must be transformed through and by the learner in a process which is messy, wondrous and unpredictably human. And I would not have it any other way.

In the five years since I wrote “The Circle,” I have become more a part of the community here at PSC. I am now more aware of how controversial the article is. An article taking issue with many of my assumptions was printed in the next issue of the WAC journal. But for all of the negative and positive response I have received, I am grateful. Whether or not my readers would agree with me, they have heard me and have responded to the essential message of the article. I am grateful that the article continues to generate its own concentric circles.
Can science be fun? Why not! Often, as depicted by the media, science is a serious business and scientists serious persons. Who among you thinks of Spock as a fun-loving, carefree soul? Not I. He may have a dry sense of humor and those pointy little ears to offset somewhat the seriousness of his visage, but let’s face it, he is all work and very little play. I don’t think science should be seen in that light and to partially change that view, in the fall of 1988, I had my invertebrate zoology class, a lower division majors course, publish an in-house newsletter.

With me as the chief editor and publisher and the students as cub reporters, the class published *The Inveterate Invertebrate Reporter*, a weekly newsletter devoted to the life and times of the invertebrates. Issue one began with a welcome editorial and a brief biography of the professor, both of which I wrote to inform the students of their future duties and what notable events characterized my life. In that issue I described the three functions of the newsletter: 1. to describe the anatomy, physiology, ecology, and behavior of the different groups of invertebrates; 2. to describe the lives of biologists who chose to study invertebrates; and 3. to provide the members of the class with a chance to develop their talents as writers.

Subsequent issues of the newsletter had three sections, an
article on an invertebrate group in the phylum we were studying that week, a brief biography of a famous invertebrate zoologist, and a review of a book dealing with the phylum we were studying. In addition each issue usually included biographies of the students who had written the articles that week, and bibliographic citations for sources the students used in writing their articles. If time and space permitted, I also included either scanned or hand-drawn pictures of invertebrates. To liven things up, I wrote the headlines for the articles:

"Forams: Our Testy Protozoan Friends" (this group secrets a calcareous test)

"The Molluscs: First-class Foot Shufflers" (molluscs are classified according to the type of foot they have)

"Those Silver Threads Amongst the Gold May Have Been Nematomorphans" (these creatures are called thread worms)

"On the Inside Looking Out: N.A. Croll Takes a New View on the Ecology of Parasites" (Harvard Press has a hit on its hands)

"Water Fleas: Even a Lake Has its Problems"

The Publication Process

Figure 1 shows a student-edited copy of the issue that was published on the 21st of October. I will now describe the process used to get to that stage. Each week three students were assigned to write articles. I told two of the students which group and person to write about, but the third student was free to choose any book, as long as it related to the group being studied. The articles were due in my hands on Tuesday and were then given to three other
paste figure 1 of 2
students who were supposed to proofread and comment on the article. The annotations on Figure 1 are the student editorial comments. They were to return the copy with their comments and corrections by Wednesday. The authors were then asked to give me their corrected copy on Thursday. Thursday night I put the newsletter together and xeroxed copies Friday morning before class. Students submitted copy to me as an ASCII text file on a 5 1/4" diskette. I used First Publisher, a low cost desktop publishing program for the IBM computers. The program can use style sheets for newsletters or other common publications, but since each issue had varying amounts of text, I pretty much had to paste-up each as though it were the very first of a new series. The drawings were either scanned and then pasted into the appropriate spot, or space was left empty and I later penciled them in on the final copy.

The articles were roughly 200-400 words long. Authors were noted either in the headline or at the end of the article. When students failed to submit their work on time, their space was left empty, except for a slightly caustic note:

This space is deliberately blank. Copy from a class member failed to arrive in time to meet the publication deadline. The editor regrets the omission and hopes that it will not happen again.

The Editor

This happened only twice.

Evaluation

No evaluation, objective or subjective, was done on this experiment. In the first place, I did it because it was fun. In the second place, I subscribe to the school of writing that believes that the
more you write the better you get, particularly if you get feedback through reading the work of peers and comparing your product to theirs and by listening to what peers say about your work. Thus I expected improvement. As each student had to write one of each type of article for the newsletter, he or she ended up writing at least 600-1,200 words for this part of the class.

In retrospect, there are a few things I will do differently if and when I do this again. The first is that I would write a brief guide for the student editors. This guide would include a list of things for them to comment on as they read the articles. As shown by Figure 1, most of the editorial comments were about simple errors: spelling, lack of italicization of scientific names, etc. The comments on structure and overall competence were too general; they didn’t say what was good or bad. Second, I would lengthen the process. Although the students had enough time in the initial stage of composing the text of their article, the time period between submission and publication was too short. In as much as I was the paste-up person, artist, headline writer, and printer, I spent many Thursday nights staring into a computer screen trying to integrate the various components. Sometimes this was a very difficult task.

The reader might ask “Why didn’t you have the students do the page layout, paste-up and artwork?” True, it would have been much easier for me if I had handled it that way, but the purpose of the newsletter was to provide an outlet for student writing and to have the students read material from non-textbook sources, not to learn how to use a computer program to produce a newsletter. I was worried that if students had to do the mechanics of newsletter production, they would lose sight of the main objectives.

Would I do it again? Sure, but I don’t like doing the same thing year after year, so it will probably be a few years before the newsletter gets resurrected. Until then, there are plenty of other
ways to make science fun and at the same time get students to become better writers. How about having them write articles for a scientific journal simulacrum, *The Northern New England Journal of Functional Zoology*? Hm, maybe I’ll do that next.

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(1997)

The Inveterate Invertebrate Reporter—
A backwards glance

Should every piece of writing a student does be graded and corrected? I don’t believe so and much of the writing I have my students do is read, but not always graded or corrected. My contention is that writing is partly a skill and like any skill, practice makes perfect. I also believe that writing exercises should be fun. Many PSC faculty would also agree with that contention and the *WAC Journal* has published some of those “fun” exercises. Lastly, I believe that students should compare his/her work with that of his/her peers. This essay demonstrates how I followed those principles a few years ago and where I have gone in the present.

*The Inveterate Invertebrate Reporter* was an attempt on my part to provide pertinent writing experiences for lower division biology majors. I asked students to find information on invertebrates, invertebrate zoologists and books written about the different invertebrate groups. The topics were specific rather than general and thus forced the student to not only write, but to use library skills to find appropriate materials. The newsletters were published on a weekly basis and thus provided the author with a captive audience (his/her peers) and at the same time provided the his/her peers with direct evidence of how their work compared to
others in the class.

Did it work as promised? Yes. Did I continue the process in subsequent semesters? No. Why not? A long time ago, I decided that one way to avoid burnout was to not teach my classes the same way each and every year. Now, one could say that by sticking to a pattern one would use up less energy, which might be true, yet at the same time, by sticking to a pattern, one gets stuck in that pattern and never explores other options. Thus, even though the newsletter idea was fun and successful, I have moved onto other ways of getting students to write.

Today that new approach involves the use of a homepage on the internet. Students are assigned topics to research, books to read, etc., and then are asked to send me written material via e-mail. I then incorporate their contributions on the homepage for the class they are enrolled in. A specific example is appropriate. This semester I am teaching Perspectives on Wilderness. It is an upper level “I” course. Students are required to read four books and write two papers. In addition to those requirements I want them to read other books and written materials. With the requirements as given, asking each student to read additional books would be an onerous task. To accomplish that goal, I simply assign each student a chapter in a book and ask them to write a short synopsis of that chapter. I then take each of the chapter summaries and put them on a homepage for that book. Each synopsis is a signed synopsis. All students are asked to read the other synopses so they can get a first hand feeling for a sense of the book and at the same time have a chance to compare their writing abilities with those of their peers.

How do I know that they will read what the rest of the class has written? I have no way of certifying their perusal of the homepage material, but one component of their class grade is that they must rank written and oral contributions of their peers to the class. The
form I use for this assignment indicates that they must read their peers’ work on the homepage. Hopefully when they fill out that form, they have done that before developing their rankings.

Another way that I involve students in comparing their work with that of other class members is that I have them bring a rough draft of each major term paper to class one week before the final draft is due. I pair the students and have each pair exchange drafts. As they read the draft they are to fill in a feedback form that they return to the other student, along with their oral response. The form asks very specific questions.

Anyone interested in viewing this approach to getting students to write can visit my personal homepage and click on the links to either History of Science or Perspectives on Wilderness. My homepage is at: http://oz.plymouth.edu/lts/
All of us have had the frustrating experience of reading “final drafts” of student papers that are filled with underdeveloped ideas, unclear sentences, unnecessary words, and punctuation errors. If we ask these students how they went about making their papers, in most cases we find that they did not revise and edit. Many students do not leave time to even read their papers before passing them in. This practice is generally interpreted by experienced writers as procrastination. I have found, however, talking with students who visit the Reading/Writing Center, that, in fact, the reason they leave no time for rewriting is not procrastination, but lack of experience. They either do not know how to revise and edit, or they think adult writers do not need to. They are being logical when they leave no time for activities they do not know how to do or think they are grown up enough to skip.

Having discovered this, I regularly show students how experienced adult writers produce publishable writing. Last fall, after writing a Clock article, I collected all my drafts. I share these with students and talk about what I was thinking when I made certain changes and decisions. Students invariably are surprised and fascinated. I show them the first scribbles I made, the initial rushed “outline,” and my struggle for a first sentence:
This is the time of year… (“No, sounds like Christmas.”)

When I was ten years old… (“No, sounds like ‘when I was a boy...’”)

There was one kid… (“No, sounds too slangy.”)

Paul Williamson batted over .600 in the little league… (“No, sounds like a biography.”)

Lately I’ve been thinking a lot about baseball and writing… (“That’s it. I’m not sure why, but that’s it!”)

At this point the students have already learned that my article evolved from scribbled thoughts and that my mode of thinking when writing was trial and error.

Next I show them my rough first draft, which I wrote quickly on the computer. I talk about the revisions I made in pencil: circled blocks of text to be omitted or moved, new sentences and paragraphs written between the lines or in the margins. I show them the draft after that with sentence and word changes written in pencil on the fair copy, and the draft after that with just a few small corrections. (“See,” I say, “here in this late draft I finally saw that World Series should be capitalized. I never could have seen that earlier when I had bigger things to think about.”)

And finally I show them the printed article cut from the newspaper. They always are quiet as it sinks in that this nice looking printed article did not come from me easily and fully formed.

I am envisioning a college where students know that all of their professors struggle with words when writing. I am imagining a college where the students regularly see that all of their professors
consider and reconsider, imagine effects and test them out, weigh options and make decisions every time they write. Granted, everyone writes in his or her own way: some do multiple drafts; others write more slowly and edit as they go; some make all their changes on hard copy where they readily show; still others work on computer screens or in their heads where only the last of the experiments, reconsiderations, and fine tunings show. But everyone who writes well does a lot of deliberating, and it is this mode of thinking that, most unfortunately for inexperienced writers, does not show in the printed pages students read in books, magazines and newspapers, both in and out of classes.

Students are taught to revere the clear, final thinking of accomplished writers, but they are rarely shown or even asked to imagine the rough experimental thinking that was done by these same writers during the act of writing. They cannot see how the best writers thought while writing, so they do not know how to do it themselves. They imagine most professional writers got it right first try, so that is what they attempt.

Students, I believe, will model the mode of thinking that results in fine writing if their professors regularly share that mode with them. Even if professors share only a page or two of an article, book, or written speech, if they are willing to demonstrate how they thought while working, this will improve the way their students write. For many students, these demonstrations by their professors will be an encouraging revelation.

― You mean your writing doesn’t just come out perfect? (1997)

An Afterword

My sense is that not as many students at PSC now, six years after I wrote “Modeling How We Think When We Write,” believe
that good writers get what they want to say down right on the first try. It’s just a sense, I know, without any objective empirical backing, but a solid enough sense to encourage me to speculate on what might have brought about such a change in belief.

Speculation #1— Over the past six years there has been an increase in entering PSC students who have practiced trial-and-error thinking while writing in secondary school. More secondary school teachers are teaching that it is normal to have rough early drafts. (My daughter’s third grade Plymouth elementary school teacher taught her to call early drafts “sloppy copy” and expect them as part of her writing process.) Increased access to computers in secondary school has made teaching this kind of revising and rethinking much easier to do.

Speculation #2— More PSC professors across the curriculum are giving writing assignments with multiple stages, and therefore rethinking, structured into them. Some of these professors read their students’ early drafts and comment, inspiring the students to rethink, while other professors have been successful requiring that early drafts be read by peers (either in peer review sessions or out of class) or by a writing consultant at the College Writing Center.

Speculation #3— More PSC professors tell or show their students that when they themselves write they do a lot of trial-and-error thinking. Some professors share stories of their own experience writing in order to rationalize assignments they are giving with multiple stages structured into them, and some professors write assigned papers along with their students and then report on the deliberation and trial-and-error thinking they did while writing.

Just a couple of hours ago, I reread my article “Modeling How We Think When We Write.” I felt compelled to respond, and yet when I tried to write this afterword I was frozen. It took me a
while to realize, sitting on the couch in the College Writing Center, pencil in hand, clipboard on my lap, (now I’m revising on a computer) that I was stuck because I was thinking I could get this written right on the first try. It took me a while to really listen to my self of six years ago and proceed, as a good writer should, by trial and error.
The purpose of this paper is to consider ways of using writing to promote student discussion in the college classroom. A survey of the literature shows an abundance of material on writing and discussion for the elementary level, little at the middle and secondary grades, and only a few references specifically for discussion at the college level. Elementary teachers often have trouble with chatter and talking in the classroom, but in undergraduate college courses, instructors often have difficulty getting the students to talk and share ideas. Since classroom discussion is an integral part of the collaborative effort in education, it is critical to utilize strategies such as writing to enhance the discussion process.

In college level classes, students are expected to read chapters in text books, articles, journals, and other materials and be prepared to discuss them in class. Discussions are helpful in learning content material and are usually dominated by the instructor. Other discussions are conducted to allow students to share ideas, insights, or observations and are not dominated by the instructor. Sometimes college-level students are also expected to work in collaborative groups to complete projects. Often it is difficult to get students to have conversation without teacher question, student answer, teacher question, student answer, etc. These are not real discussions but actually oral quizzes. No student wants to be the
first to say anything.

As stated, different methods of promoting discussion were researched. They are as follows:

**Methods**

1. **Discussion:**
   Without pre-thought or any writing exercises, students are asked for opinions or thoughts about a subject, usually one-on-one (teacher, student, teacher, student).

2. **Pre-Writes:**
   Students write in their notebooks for three to five minutes on a theme, problem, idea, or question given by the instructor. The instructor models this and also writes. When the time is up, students are asked to share their thoughts. At first students need to be encouraged to respond. After doing this several times students are not as reluctant to talk, since having their written thoughts to refer to provides confidence. All students are provided an opportunity to talk about what they write in the subject. Comments from the instructor are minimal. Pre-writes are not collected.

3. **Pre-Writes with Partners:**
   Both students discuss the issues and one writes comments down; these comments are shared with the class. The same structure is used as in individual pre-writes.

4. **Small Group Discussions:**
   Students do a pre-write, then divide into groups to discuss an issue, problem, or project. One student serves as the scribe and another the speaker. Groups are self-selected or the class is divided by the teacher. The purpose is to have different students interacting each time. Before coming back to the
class, the scribe re-reads and adds to the report. This also provides student-to-student interaction.

The above techniques were used with undergraduate and graduate classes.

Results

In using any of these techniques the instructor explained the “rules of the game” to the class. Whether the class is large or small, the seating arrangement should be conducive to discussion. (A circle or semi-circle where all students can see one another and the instructor is best. The instructor should also be sitting in the circle.)

Method one, “Discussion,” without pre-thought or pre-writes usually did not result in lively discussions but rather questions from the instructor and one response from a student. Students were hesitant to volunteer answers.

Method two, “Pre-Writes,” writing individually, for 3 to 5 minutes on a topic or question without discussion beforehand, resulted in better conversational discussions and more students volunteering to speak.

Method three, In “Partner Pre-Writes,” the partners had to discuss what they were writing. When it was time to converse with the entire class, they were prepared and less reluctant to speak.

Method four, “Group Pre-Writes” and small group discussions were very successful. This resulted in good discussions and group cohesiveness. Students took turns being the scribe, but usually all the students took notes and were writing.
During the rest of the semester, using the above techniques, we had lively and academic discussions. Later, I explained to the classes what I was doing and why. I wanted to know from them which methods they thought were best to promote discussion in the classroom. The students thought any group method which included discussion with pre-writes took away the fear of talking to the whole class. The small group discussions with writing were voted the best because they made it easier and less threatening to voice opinions. They also liked the individual pre-writes because they let them collect their thoughts before they spoke. In addition, the pre-writes provided a level of confidence as well as a way to focus thoughts. We concluded by talking about collaborative education and writing; my hope is the students will use some of these techniques in their own teaching.

Rowe (1986) best sums up why group discussion is so important:

A complex thought system requires a great deal of shared experience and conversation. It is in talking about what we have done and observed and in arguing about what we make of our experiences, that ideas multiply, become refined, and finally produce new questions and further explorations.

What better way to encourage these explorations than to use writing in the classroom?

**From Partner and Group Pre-Writes to Discussions**

Seven years after publishing “From Writing to Discussion” I am still having much success with pre-writes for getting productive discussions going. Pre-Writes with Partners have been the most
Since writing the article I have devised another method, Group Pre-Writes, that has been the most successful of all. In Group Pre-Writes a small cooperative group of usually 3-5 students discuss the issues being studied, and one of those students writes comments down. These comments are later shared with the whole class. This new method has been very successful at encouraging students to recall information they have read or gathered and work with it, and then share their thoughts with the whole class.

The pre-write method has also been successful with older elementary and junior high school students. I have taught the partner and group pre-write methods to upper level Methods students, and they have gone out to the public schools and used the technique to promote discussions among elementary and junior high students in all classes: science, social studies, English, and others. The college students report that it has been working well, and so it would be nice to do research on the effects of pre-writes in promoting discussions in 4th through 8th grade classes.
Exploring Voice in Business Writing

Daniel P. Moore

Abstract

Many upper division business courses focus on applying the concepts and techniques studied throughout the undergraduate curriculum. The case method, which is often used to teach upper division business courses, exposes students to complex situations, aids in developing their analytical skills, and provides students with an opportunity to offer integrative solutions. An assortment of writing assignments for these case courses can enhance learning. Writing business memos and reports from a variety of organizational perspectives and to a number of organizational audiences enables students to explore the realities of crafting business documents meant to communicate and convince. The use of various perspectives and audiences challenges students to recognize the impact of organizational position in creating and maintaining a voice when writing.

Assignments that Permit an Exploration of Voice

By design, many of Plymouth State College’s upper division business courses are integrative. As an example, to enroll in Administrative Policy students need to have completed courses in
finance, accounting, and operations. These prerequisites provide the necessary conceptual background for a more comprehensive investigation of the complex business situations presented in a policy course.

To facilitate understanding and permit students some practical experience, a policy course uses a case approach. A business case presents realistic information from a particular organization and emphasizes analytical discussions of this situation. A case requires students to sift through factual information, to evaluate a variety of issues, and to develop a range of possible solutions (Christensen, 1987).

Students use various methods for case analysis. Open class discussions, small group reviews, and group or individual presentations provide different approaches to case evaluation. One of the more frequently used review techniques is the written case analysis (Penrose, Rasberry & Myers, 1989). Although there are no “ironclad procedures” for a written case analysis, the papers are usually segmented into three sections: issues, analysis, and recommendations (Thompson & Strickland, 1987, p. 273). Generally, students write rather dry formula evaluations. However, creative writing assignments that mimic organizational situations offer students an opportunity for realistic decision making.

Students can be required to assume the role of a particular character in the case and to write business memos and reports that reflect their understanding of that character’s position and organizational situation. Composing documents from a variety of different perspectives to a number of potential audiences allows students to experience the organizational realities surrounding communication. Thus, assignments can challenge students to recognize the impact of organizational position in creating and maintaining a voice when writing.
Form

PSC’s General Education program requires students to take first year Composition and a designated writing course in their major field. For students majoring in business this writing course is Organizational Communications (OC), which exposes students to various forms of business writing. OC assignments stress the highly stylized business approach to writing. Students learn to design documents for impact by using a direct language, choosing simple words to fully convey ideas and concepts, and arranging information in an easily followed professional format.

Although not a prerequisite, most business students take OC before registering for Administrative Policy. Doing writing assignments designed to capture the realism inherent in the Administrative Policy course’s case approach, students create the stylized mainstays of business communications, memos and reports, which reflect their analysis and recommendations of the case material. Therefore, students build upon writing techniques learned in OC and practice writing through their curriculum.

Content

A writer’s audience is his or her reader (Hacker, 1992). Choice of an audience often influences the tone, approach, and language of a document (Crews & Schor, 1989). Because business people often write to particular persons, they generally know a great deal about the values, desires, and special interests of their audiences, and compose accordingly.

As stated earlier, a business case provides general conditions, background material, and particular facts concerning an organizational situation. Each person or group mentioned in a case
represents a potential audience. Writing assignments that require students to communicate their case evaluations to various people or groups from the case forces students to recognize the values, desires and interests of these different audiences, and use a communication style or voice which connects with the particular audience.

For instance, students could be assigned to assume the role of an outside consultant and write a report to the organization’s chief executive. Students would then have to structure their report to reflect the realities surrounding the situation. This requires an analysis of the case and an assessment of the audience. A primary consideration would be the values and attitudes of an executive receiving the report. The report must incorporate these values.

A slight shift in the assignment exposes students to a different communication style or voice. Instead of the outside consultant, the student’s role can be that of a subordinate communicating with the chief executive as his or her superior. This situation requires students to be aware of the significant status and power differences that exist between a subordinate and his or her boss. The facts are identical. The executive receiving the report is identical. However, the tone, approach, and language must reflect the nuances of the subordinate’s voice. The consultant can be blunt, direct, and formal using his or her expertise as justification for his or her voice. The subordinate needs a different voice, a voice which recognizes the on-going relationship of authority and responsibility inherent in the superior and subordinate dyad, and balances duty with respect.

A third role-play allows students to explore yet another voice. Students can be required to write to a subordinate. This forces an awareness of what it is like to be the boss. Students experience the
contradictions surrounding management, leadership, and authority. Should the writer inform, cajole, plead, or demand? The voice will communicate the writer’s understanding of this position and situation.

Example
Consider the following scenario. Gerry Plotnik, the division superintendent at Sharon Steel’s Posner Works in Farrell, Pennsylvania, has just received a letter from Kaiser Refractories, stating that Kaiser is shutting down its brickworks in Warren, Ohio, and therefore, will no longer supply the refractories Sharon Steel uses to line its furnaces and soaking pits. Plotnik knows that he can buy a lower grade but more expensive refractory from Harbison-Walker in Buffalo. Plotnik has multiple concerns. One is that, because the Harbison-Walker refractory linings are of lesser quality than Kaiser, they need to be constantly monitored for wear and replaced more often. A second concern is that his production supervisors are currently paid bonuses based upon output, and the down time associated with monitoring and relining furnaces takes away from these bonuses. A third concern is that his boss, Henry Tevans, the Executive Vice-President of Operations, has instituted a quality assurance program that focuses on producing the highest grades of defect-free steel, which can only be maintained when furnaces are kept well insulated. Finally, Plotnik’s own goals for Posner Works are to be Sharon Steel’s lowest cost steel producer.

Realistic writing assignments would have students role-playing Plotnik and composing memos or reports to the production supervisors and Tevans concerning the impact of Kaiser’s closing. Students must consider Plotnik’s plight: how to convince the production supervisors to engage in practices that may lower their bonuses and to inform Tevans that production costs are definitely going up, while quality may decline? These two distinctly different audiences require distinctly different voices.
Summary

The realism of the case approach can be converted into the practice of creating a writer’s voice. The above discussion has focused on the Business Department’s Administrative Policy course. However, any course that uses cases has the potential for allowing students the opportunity to experiment with a variety of voices. The only requirement is that of multiple audiences. Students can then be assigned a variety of roles and learn to write with a variety of voices.

References


WAC Reflection — ‘Unsticking the Voice’

(1997)

After re-reading my article and chatting with Roy Andrews, I realized something about the writer’s voice. Voice differs as situations differ, but only when the writer recognizes these differences. The gist of my article was to explain how I structured an
exercise that attempted to make students aware of and to allow them to practice with various voices. I mention this because I had some trouble getting students to follow the assignments described in my article. A number of students would not follow the letter of the assignment. They simply could not change their voice. They would continue to write to me, ignoring the requirement that they role-play and draft letters, memos, and reports to various important stockholders in the assigned cases. It was just impossible for them to convert to another voice. They were students writing to an instructor; nothing could change that fact. Their voices were stuck. Therefore, my response to revisiting this article is this: How to unstick the voices of the non-complying students?

Even before this reflection, I had been working on this problem of unsticking voices. I started requiring students to do more than one of these role-play assignments. This allowed them to receive feedback and gave them the possibility of adjusting their voices. I also permitted students to resubmit assignments, hoping that the second time around the concept would take hold. For many students, these strategies worked. They were able to shake loose from the idea that they were merely responding to an instructor, immerse themselves in the case material, and write accordingly. Still, there were a few students that just refused to let go of the fact that they were students writing to an instructor. They could not change their voice. It was just too ingrained.

The insight gained from this reflection is maybe students shouldn’t write to me. I mean, I should not be the one who reads these assignments. I could extend the role-play, and have students write to other students. This would unstick students from their student to instructor voice. Of course, new dilemmas arise. New voice options exist for sticking: student to student, friend to friend, and that persistent problem of evaluation. I need to talk and write about this with Roy, Michelle, Robert, and the other WAC members.
During my early years at Plymouth State College, I encountered two clearly related problems: first, many students had apparently not done the assigned reading prior to class; and second, when I attempted to provoke class discussion, a relatively small percentage of students seemed willing to participate. Some means was needed to ensure that the material was read and to democratize class discussions.

My colleague Boyce Ford provided one very workable solution to both problems: the QCS. A QCS, which stands for Question, Criticism, or Statement, is essentially a reaction to some aspect of the assigned reading, thought out and written at home, and due when the reading is due.

Assume the assignment deals with Freud’s theory of personality. I tell the class that, inevitably, they will come upon at least one idea (if not more) that strikes them as either good, bad, inspired, bizarre, or provocative. They are asked to respond to this idea. They can ask a question about Freud, criticize him, offer a comment or statement, make a comparison to some other theorist, offer an illustration from their own experience, cite an experiment or an observation that supports/disconfirms Freud, and so on. The important things are that they a. think critically about Freud, and
b. write down what they think.

This gives me several options for the following class. With 8-15 students ready with prepared QCS in hand, I can begin by covering Freud, leaving the latter portion of the class for QCS reading (or paraphrasing) and ensuing discussion. Alternatively, I could cover the entire Freud chapter, albeit in somewhat haphazard fashion, by plunging directly into the QCS’s. Any major points that do not get covered can be brought up at the end of class. If time is short, I won’t have QCS’s read in class that day, but I will read them on my own before the next class. I can then single out the better ones for comment during the following class. This last technique guarantees quality but does violate the principle of democracy.

Obviously a student has to have read all or a good chunk of the reading in order to write a sensible QCS. And, should certain shy students not volunteer their QCS, I feel justified in calling on them to share their ideas, thus solving the participation problem. I find that students who hesitate to speak up in class spontaneously, perhaps feeling “on the spot,” are much more assertive when it comes to reading a pre-thought-out paper.

On occasion students will ask not to read their QCS on the grounds that either the same points have been already covered by a previous QCS, or the material is too personal, a situation that often comes up in “soft” Psychology courses. I am amazed, though, that many students feel comfortable enough to write about very personal issues (e.g., having been abused as a child) as long as the QCS is for the professor’s eyes only.

I have on occasion used other techniques which also involve “forcing” the students to write reactions to the book, but usually they involve doing exercises prefabricated for the students by the
textbook author (e.g., analyzing dreams for the presence of anima/animus figures). Although these exercises ought to generate enthusiasm and sometimes do, students too often resist being constrained. The advantage of the QCS is that it lets the student choose the topic for exploration, thus ensuring a greater likelihood of ego-involvement. In fact, many QCS’s revolve around the students’ own experiences vis-a-vis the reading (e.g., bulimia, depression, birth order, suicide, drug use, and peak experience).

**Some Nuts and Bolts Issues**

I use an evaluation system I refer to as “semi-grading.” Students receive five points for doing a “decent” job and getting the QCS in on time. They can then earn up to five additional points by writing a particularly good QCS, although two-three bonus points are more common. Examples of QCS’s of varying quality are included below. Students who volunteer to read their papers in class are given a slight edge in grading; the occasional less-than-adequate paper earns fewer than five points; and late papers lose the option for bonus points. Dr. Ford argues that late papers should receive no credit at all since the major purpose of the QCS is to provide a basis for discussion. While conceding this point, I still feel that the written work itself deserves some credit. The teacher clearly has options here.

I do not number grade QCS’s, feeling that this focuses attention too atomistically on the points earned and not on the overall quality of the essay. Instead, I employ a more impressionistic system, akin to letter grades: an adequate QCS receives a “check,” a better than average QCS a “check” with a stripe across it, a very good QCS a “check +,” and the rare superb QCS a “+.” The occasional inferior QCS, exhibiting little thought or care, receives a “check” with a squiggle (the mathematical symbol for “almost”).
Only when I compute the grades at the end of the term do I transform the checks into numerical grades.

Another problem is class size. Above I noted that I aimed for 8-15 QCS’s per class, but what happens in a class of 30 or 35? Since most chapters require two to three classes for adequate coverage, I typically divide the class in half. For example, assume I have 30 students in my Tuesday/Thursday Abnormal Psychology class. Fifteen papers are due Tuesday, the other 15 on Thursday. Assignment to groups is usually alphabetical.

Over a semester, a typical upper-level course may require as many as a dozen QCS’s, the combined point total often equaling or more than equaling the points earnable on an exam in that course. Thus, I caution students that failure to submit QCS’s is equivalent to getting an F or D on an exam.

Typically I allow students to miss or flub one or two QCS’s per term. If 12 are assigned, I may take their 10 or 11 highest scores and total them. This allows some flexibility. On the other hand, students who do poorly on tests and ask for a way to bring up their grade can be assigned extra QCS’s. One semester, in which I had a class divided into two QCS groups, one ambitious student handed in QCS’s for both groups, thus partially offsetting a tendency to get C’s on exams.

The length of the QCS can be varied depending on the course. Typically, a QCS will run from a minimum of half a page up to a page or so. Some dedicated students seem to lose control and go on for pages, running from idea to idea, although I try to remind them to focus on a single pertinent theme! On the other hand, in two honors courses dealing with Psychology and Film, the reaction papers (one per film) were expected to be two typed pages or longer, with a much more encompassing approach.
Edited Examples

The following edited examples were all written for the identical reading assignment, a chapter in Abnormal Psychology dealing with personality disorders. I have received both better and worse QCS’s than those presented here, but it seemed appropriate to pick a set of QCS’s at random, to illustrate a “typical” crop of papers.

1. This “average” QCS (no bonus points) makes a point, but there is nothing particularly insightful here; there are no connections drawn. The student essentially confesses confusion over a distinction already made fairly clear in the text/class. Furthermore, the writing itself is rather uninspired:

   While reading . . . the obsessive-compulsive personality disorder, I thought I was reading about the obsessive-compulsive disorder .... The only difference between them seems to be that the o.c. disorder is rare and . . . stronger than the o.c. personality disorder .... it is confusing to distinguish between the two.

2. Slightly better (but no bonus points) is the following QCS that at least makes a connection, albeit a rather obvious one. This issue has been hotly debated not only by psychologists, but by the popular media for years:

   I remember seeing a film in Intro Psych that showed part of the ‘Bobo Doll’ experiment [a famous study showing how children will model aggressive behavior] .... I was ... wondering if there have been any conclusive findings from
studies of children and violence on TV. Perhaps children who are more violent to begin with will be more likely to watch violent shows on TV.

3. More interesting is the following QCS (two bonus points), which relates the text material to the real-life situation:

Merton’s theory of anomie claims that societies which value material objects (and only certain groups have such luxuries) acquire a state of ‘anomie’ ... in disadvantaged groups. I am currently working on a project regarding adolescents. I recently spoke with the detective of youth crime. He informed me that one factor that leads adolescents toward crime is economic pressures. It is the detective’s belief that these kids feel cheated by the society and this is a major reason for their behavior.

I frequently give extra credit to the student who can apply the abstractions of the text to real-life situations in an appropriate way. The writing style is also a bit more sophisticated than in the examples cited previously.

4. Better yet (three+ bonus points) was a QCS which proposed a somewhat original etiology for the “borderline” personality disorder. After first describing his friend in some detail and matching the symptoms to the text, the student concludes:

Later on I discovered that his parents actually encourage him to act out his moods instead of
repressing them .... I also found out that they would punish or reinforce him on a completely random basis, regardless of what he was doing. This also lends support to the theory of modeling because he saw his parents being unpredictable, so in turn he became unpredictable.

Above and beyond points earned for being a good case study, creativity deserves reward! Modeling theory had been proposed in the text, but in another context; it had not been applied to the borderline personality.

5. The best of the lot (3+ bonus points) was the following QCS which relates a recently seen film to a disorder described in the text:

The ... Masochistic personality disorder is characterized by a desire to be controlled and hurt by others ... typically a sadist. An example of a masochist-sadist relationship is seen in the movie 91/2 Weeks where the woman is controlled for the sexual pleasure of the man .... the man blind folds the girl and trickles a melting ice cube all over her body. Later in the movie we see him purchase a whip .... At one point ... he asks her if she has looked in his closet, and when she admits she has, he . . . punishes her by forced sex and violence .... it is obvious that she is greatly enjoying her submission .... this was sick and ... deviant. However, I am glad to see that a woman who enjoys being abused is classified as having a mental disorder .... this woman is not so far gone that she can’t get out of this relationship
(though she puts up with 9 1/2 weeks of abuse) .... I don’t think this disorder can be called an excuse for blaming the victim. A victim of abuse should not be blamed whether it is caused by a mental disorder or not.

This paper is excellent for a number of reasons. First, it connects the textbook not merely to real life, but to a product of culture (a film), a rarer and more difficult feat in my teaching experience. Furthermore, the student exhibits a certain amount of commitment to, even passion concerning her beliefs about people and society. Yes, I factor in such non-academic elements, where appropriate! Finally, the paper touches on a political issue raised in the text, “blaming the victim.” This QCS is well beyond being just another case study.

Also included in this set were a discussion of one student’s rejecting father and the aftermath, another of an abused boy’s developing antisocial tendencies, several descriptions of antisocial personalities known to various students, and a proposal to inject sociopaths with adrenaline [to increase their anxiety and make them more tractable]! Overall, the set provided some interesting, personally relevant material for the class to chew on.

As it happened, the next batch of QCS’s brought a rare five bonus-point effort [“+”] by a non-traditional student. The assigned chapter was on addictive disorders and she wrote about a new method for treating addictions using electronic frequencies applied to the brain. She even included a tape of a lecture explaining the method more fully! This was totally new and very exciting to me, so she received top score.

**Future Considerations**
I plan to continue using the QCS method in my upper-level classes. Discussion of the QCS technique with colleagues generated several potential means for enhancing its utility in the future:

1. It often takes students a few tries to get the hang of writing a QCS.
   For example, some students persistently summarize rather than react critically. Modeling would be one means of circumventing this problem. On the first day of class I could hand out examples of fair, good, very good, and excellent QCS’s written on the identical topic. Each example could also include my comments as to what makes this QCS fair, good, or excellent.

2. Writing Across the Curriculum emphasizes the importance of rewriting. The QCS stands somewhere between journal-keeping and related spontaneous writing techniques, and the formal essay students would write their QCS on a word processor, thus making editing a relatively simple affair. I could encourage this. I could also pair students, who would be responsible for reviewing and critiquing each other’s papers.

3. Thus far, I have not gathered any formal student feedback on the QCS Method. In the seven+ years since this article was originally published, my approach to using QCS’s has changed very little. The method works well; all it requires is adaptation to contingencies of any particular course. Here are a few contemporary examples of such adaptations:
1. In Lifespan Developmental Psychology, which hosts about 90 students per term, the class is divided into six groups. Each group is required to write three “discussion papers” on issues raised in the text, e.g., “What is your view on abortion?” Initially, specific questions are assigned to each group, but as the semester progresses, students are allowed more flexibility in topic choice. Papers are only rarely read out loud in class due to time constraints.

2. In Personality, I have at times dispensed with or reduced the importance of exams and instead required approximately 20 QCS’s. This approach favors the ability to think/write well over a penchant for rote memorization.

3. In the interdisciplinary Film and Society course, students are in most instances constrained to choosing from a list of discussion questions. Previously they wrote an open-ended critique of each film. I find that using leading questions helps students focus more effectively and results in more polished papers. For example, regarding the well-known movie *Witness*, students might be asked to describe the “social unconscious” undergirding Western and Amish realities. Having some understanding of this term from class, they are in a better position to say something meaningful about the Amish world as portrayed in *Witness* than if merely required to “discuss the film.”

On the other hand, by the final week of the course, students may be asked to devise their own questions and then answer them!

The QCS method--I think I’ll keep it.
My first semester as a Freshman Composition instructor has ended. The anxiety has also subsided. I can now look back with some new-found confidence to see what worked and didn’t work for me in the teaching of writing.

**Determining What To Do**

How does a new instructor determine what to do? First, I thought about a course objective. What skills do beginning students need to learn? One thing I believed then and am more sure of now is that freshmen must have help learning how to write in ways that other instructors will expect of them: summarizing readings, synthesizing sources, critiquing assigned materials and preparing the typical research essay. Perhaps nothing confirmed the correctness of this belief more than the evaluations of my students, one of whom said:

... this was an in-depth course. I’m not complaining at all because what I have learned will give me an edge on other areas, like when I have to summarize an article or evaluate a piece.

**Choosing A Text Book and Setting It All Up**
Determining what I wanted to do sent me on to the next step: finding a structured textbook and creating a syllabus that would provide such skill-building. Colleagues were most helpful in offering options, but I learned the hard way that nothing is more paralyzing to the new instructor than information overload. So I just decided to work with a text and syllabus recently used by a more experienced instructor.

Following a pre-set syllabus as a framework allowed me to focus my time more on the assignment and the actual preparation of lesson plans and materials. There just wasn’t enough time to agonize over what text to use and what content areas to cover.

The use of a more structured text was a plus in another way as well: it did some of the work and planning for me. Seasoned instructors who are comfortable with both the material and the method of presentation can work from a more open-ended text or no text at all. For a new instructor, however, difficulties come in learning how to lecture, how to initiate and sustain class discussion, and how to motivate and keep interest in assignments that students may not wish to do. So, the more prep time devoted to familiarizing myself with course materials, the better.

As a last comment on the value of a structured text, I am never comfortable with ambiguity, and my fears about effective presentation of material were allayed somewhat by knowing exactly what to cover in each class meeting.

Hand in hand with a textbook selection was choice of method. Again, colleagues in the department pointed to the success of the portfolio method which views writing as a “process.” The portfolio method allows students to prepare multiple drafts of each assignment and submit them to the instructor for comment and revision. No grade is given until a final copy of each assignment
(with all previous drafts attached) is submitted in a portfolio. Students have praised this technique for allowing the chance for improvement prior to final submission of the work.

Most likely, no method will succeed, however, unless the course objectives and requirements are clear. A syllabus designed to achieve these aims will focus the course. Vital information such as required text and materials, grading, and attendance policies must be clearly outlined. Individual class assignments should then be listed. Ordinarily the syllabus will be less structured as the semester progresses.

Some Caveats

No textbook, syllabus or amount of preparation can speak to the unexpected. Each class of students is different and requires renegotiating and thinking on your feet. However, here are some well-tested thoughts I gathered from more experienced instructors:

- Be sensitive to the fact that writing is a difficult skill to perfect. Allow sufficient time to learn techniques and to practice them. Everything takes longer than you think, and squeezing in too much material can overwhelm and discourage students.

- Be prepared to expect a wide range of student skills and preparations. The variety will require that you adapt your materials and the pace of your classes.

- Be consistent. If you say one unexcused absence is allowed, be sure that is all you allow. Classroom decorum disintegrates quickly when students perceive the instructor vacillating on policies and procedures.
• Be sure to communicate your expectations to the students; also be sure to find out what the students’ expectations are. If you require students to keep a journal in the course, this would be a fine place to ask them to communicate their expectations.

• Be aware that conducting class discussion is tough on a new instructor. Know your textbook and your material well; being comfortable in the classroom depends on it. Build slowly, including more discussion as instructor and class members become more comfortable with one another.

As a Last Point...

Remember that someone has been there before you. Colleagues are usually more than happy to offer suggestions and sample materials. Indeed, a faculty member is usually pleased to be approached as one who knows the craft.

As I cast an eye over my first ever published piece, one obvious difference strikes me immediately: the title “freshman composition” no longer exists. The course is now “Composition” and freshmen are “first year students.” Has anything else changed since 1989? My thinking? My teaching philosophy? My process? You bet. Has anything stayed the same? Sure enough.

I still believe in:

• teaching students modes of discourse that will produce effective writing both in college and the professional work world.
• providing structure for discovering one’s writing strengths and weaknesses.

• stating clear objectives and requirements.

• preparing to deal with a wide range of student skills and preparations.

• being consistent about policies such as attendance and due dates.

• writing, writing and writing some more.

• first year students. They are fun to assist as they learn about themselves through their writing.

What has changed besides the course title? I now teach on the computer, for one. What a difference it makes to do revisions on the spot. What a difference it makes to have the library’s on-line catalog in front of every student as they receive bibliographic instruction!

Other changes include:

• my greater tolerance for ambiguity. If an issue arises that wasn’t planned, I feel more confident that something in my repertoire will meet the challenge.

• more comfort with deviating from the pre-set. Classes vary greatly in attitude and skill level. Not everything you plan will work with every group. I’m now better at adapting the plan to the audience.
• a better sense for the amount of material students can handle and still produce fine written products.

• no more portfolios. They created too much concentrated work for me and too much grade anxiety for the students.

• a different grading system, one that uses words instead of letter grades. An employer is not going to say, “Gee, this is a B+ memo.” You’ll probably hear that it’s superior, adequate or in need of more revision. I use the same evaluation process—one that is more closely aligned with the work world. Each evaluative category is worth a certain number of points, so the student can keep track of her progress throughout the semester and adjust her performance level as she so desires. I also allow the option to do two re-writes for the possibility of a higher grade—no guarantees for such unless the revision is substantial.

As a last point:

Colleagues still offer support, suggestions and sample materials. I’m pleased to say that I can now offer back to them support, ideas and materials of my own.
"Collaborating with total strangers was a good way to test out my speech. The guys I was with had good speeches and we worked some problems out so that they would be better speeches....At least I know two people will like and understand what I have to say."

That comment from a student in my course in Speech (English 240) summarizes the experience of most of the students who participated in pre-speech collaboration.

The speech of introduction in my Speech course gives students their first experience in front of the class. Students can talk about things they find important, and they get a chance to know each other. This is a standard assignment in speech classes, and I have been doing it for years, but I have always felt that the experience was less successful than it ought to be. The technique of collaboration has helped me help students make this introductory speech more successfully.

For years, I have tried to help students over initial difficulties by giving them a clear idea of expectations, providing them guidelines, having them fill out a Personal Inventory form to re-
discover their own experiences, and giving them adequate time to prepare. In addition, I have tried to lower fears by not grading the first speech. But I still found three problems with the first speeches: student anxiety and stage fright over exposing themselves to an unfamiliar group; uncertainty about choice of the anecdote or experience from their life to talk about; and thin, insubstantial presentations.

This semester, having read Karen Spear’s *Sharing Writing*, I began to use the technique of collaborative preparation to overcome most of these difficulties. Students form groups of three, make their presentations orally to this small group, and ask for and receive supportive feedback from them.

As a result, the quality of the speeches has gone up, evidence of nervousness has declined, and students have felt much more confident and positive about their first experience speaking in front of the class. Though Spear’s book is about collaboration in the writing process, her ideas work well in helping students to collaborate in preparing speeches. This technique of collaborative preparation helps students more than anything I’ve found in a long time.

**Preliminary Preparation**

To prepare for their collaboration, I gave students explicit specifications for their speech (Appendix 1). The assignment was to prepare a 5 minute presentation in which they give background information about themselves and tell an anecdote or experience they have had or explain an important aspect of their life. They then completed a Personal Inventory form (Appendix 2) to review the major events of their lives. At the beginning of the next class, they wrote an outline of a speech to introduce themselves, including the anecdote or interesting aspect of their life. In addition, they
read two chapters on audience analysis and on making the first speech, and I lectured briefly on stage fright and how to control it, as well as on my expectations for the course. Thus, by the time they came to the collaborative part of their preparation, the students had already thought about the material several times and had received explicit instruction in several important aspects of speech preparation and presentation.

Collaborative Procedures

The purposes of the following collaborative procedures are to help students shape their presentations by reconceptualizing the form and content of their statements and to gain confidence in speaking frankly about their experiences.

The collaborative process took up one class period. Here are the procedures we followed on the day of the collaboration:

5 minutes:
**Freewrite** — At the beginning of the class the students made a journal entry as follows: “Choose something you know about and write down everything you can think of about it (anecdote or aspect for Speech #1).”

3 minutes:
**Introduction** — I then explained the purposes of the small group collaboration: 1) to give you practice for Speech #1 (Introduction); 2) To let you get acquainted with the audience; 3) To help you learn to collaborate: give information and get a response, see what got through to our audience, and respond to others’ presentations.

3 minutes:
Procedures — I explained the procedures, showing the following information on a transparency.
Give your speech of introduction

Ask for feedback from your colleagues:
1. Ask for praise, positive feedback (What did you like?)
2. Ask for description (What did you hear as my main idea? What points stick in your mind? One person retells.)
3. Ask for questions (What questions do you have?)
4. Ask for suggestions (Where do I need more information? How should I change the organization?)

3 minutes:
Principles — I explained the principles, showing the following points on a transparency:
Give your presentation to get practice.
Give your presentation to receive help.
Give friendly collaboration and cooperation. (Collaborators simulate the larger audience)
Get feedback to help reconceptualize.
Don’t defend or respond to the suggestions.
Be sure the product remains your own.

1 minute:
Form Groups — I had students form groups of three by counting off, then assigned parts of the room for them to meet, and told them to give each person 10 minutes—5 for their presentation and 5 for feedback.

30 minutes:
Group Meetings — (10 minutes for each of the three persons in the group.) This was the heart of the session. The class-
room buzzed for thirty minutes.

5 minutes:
Freewrite — At the end of the class the students were asked to make a final journal entry. They wrote for five minutes on “How collaborating helped me compose my introductory speech.” I emphasized the idea of reconceptualizing the speech.

30 seconds:
Final Word — Just before dismissing the class, I commented that the keys to effective oral communication are preparation and practice with a live audience. “Ask others to help you prepare,” and “Form part of a mutual support group,” I said.

Evaluation

The speeches that students produced as a result of these procedures were superior to those of any previous class. The subject matter of most of them was extremely personal and confidential, yet the students spoke without hesitation and without either boasting or embarrassment about their successes and failures in life. They spoke confidently, gave pertinent details, and made trenchant generalizations. And although all of them confessed to having been nervous, they showed few signs of nervousness —fewer signs than students who had not collaborated with a small group of peers. Perhaps most significant is the fact that these procedures helped students see that I took this assignment seriously and expected them to do so as well. As one student put it, “Nobody blew it off.”

As encouraging as my observation of their success was, I believe that the comments from the students reveal the importance of this collaboration even more pointedly. Here is a sampling of
remarks from the final 5 minute freewrite at the end of the class period. I think that they speak with the authentic voice of students who are involved in fruitful collaboration.

“The girls I worked with ... seemed to be interested in some of the things I was saying and had some encouraging things to say rather than discouraging me because of my major as so many others do. I feel much better about my speech now and feel that the confidence I have gained from collaboration will make my speech even better.”

“It helped me to see what others thought about what I was planning on saying in my speech.”

“It was good to see them interested and to respond to what I had to say.... Now I can go over my speech again and improve upon it.”

“I can go up to the podium now and I will also know two more people and feel a little more comfortable. I think collaboration helps bring out the good points and the bad points of the speech so you know what to expand on and what you should dismiss.”

“Collaboration has helped my speech tremendously. I hear the good part such as the story itself.... I am going to rearrange my story so that it is one story instead of two.... I am a lot more relaxed now about the speech than before. Maybe because I know two new people.”

“It helped—I’m not nervous anymore because the group next to us was silent while I was speaking and it was kind of like I was talking to them too.... I think it was a great idea to do this. Thank you."
For the Future

I think that in the future I will give students more opportunities for collaboration. What I have used so far is a highly compressed and simplified form of Spear’s procedure; in fact, I used a whole semester’s worth of ideas in one class. As I implement more of the ideas that Spear outlines, I will give students handouts that describe the tasks that groups are to perform and give them space to write down the results.

This collaborative technique promotes involvement by students, both as speakers and as hearers. Thus instead of indifference, casual approval, passive affirmation, or boredom, the collaborative technique helps to build active participation and commitment to achieving the aims of the course. That is an important harvest for a few days’ labor on my part and a few minutes’ collaboration on the students’ part.

As another student wrote, “This is a good method of easing our minds about being nervous—Keep it.”

I plan to keep it.

Appendix A

Instructions for a Speech of Introduction

The Assignment

Present a 5-minute speech to the class. Include the following kinds of information:
1. General information
   Name, home town, current residence
   Year, major
   Interests, hobbies
   Work experience

2. Anecdote
   A story about yourself that reveals an important aspect of
   your life or your personality.
   or

3. An Interesting Aspect of Your Life
   A description of something about you that reveals an
   important aspect of your life or personality.

How to Prepare Your Speech of Introduction

To prepare for this speech, complete the attached questionnaire. Freewrite about several anecdotes and aspects of your life. Talk about your experiences with a classmate, roommate, or friend. Discuss them with the instructor.

Work especially on the second part of the speech, the anecdote or interesting aspect of your life.

List your points, but do not write out the speech.

Practice your presentation once

How to Present Your Speech of Introduction

When your turn comes, walk naturally to the front of the class.
As you are walking up, take a deep breath to gain control of your breathing.

Write your name on the board.

Scan the audience.
Present your speech simply and directly, in a conversational tone.

Present your speech without notes.

When you are finished, scan the audience again.

Ask “Are there any questions?”

Appendix B

How to Prepare for a Speech of Introduction

Personal Questionnaire

In your journal, answer these questions to prepare for your first speech. This process ought to take a total of two hours or more.

Part 1. Lists

List five things you know a lot about. Select each from a different aspect of your life.

List the jobs you have had at any age.

List unusual experiences you have had: travel, work, personal, family. Think of things that are different from what others have done. Service to a community; being a stranger in a foreign land;
close friendship with a person from a different country; experience with children, elderly people, animals; difficulty you have overcome.

List things you are good at. List as many as you can. Think of using your hands, using your body, using words, using your senses, using numbers, intuition, analytical thinking, originality, helpfulness, artistic ability, leadership, follow-through.

List things that are different about you: being left-handed; being a twin; being foreign-born.

List several people that were important in your life. Think of people outside your family. List turning points in your life. List things you have done this year for the first time.

List things that play an important part in your life: music, art, animals, sports, games, courses, reading interests.

List the careers you have considered.

Part 2. Brainstorm.

Go back through your notes and select one item in each category. Write out a brief statement about each one.

Select three of the topics you wrote about. Explain each one in five minutes. Do this out loud, then write it out. Think of as many details as you can that will help communicate your experience to others in the class.

Part 3. Organize

Select one topic for your speech of introduction. List the items you will mention. Create a design for your speech by putting these items in the order you will mention them. Continue your prepara-
Peer Coaching in a Speech Class

Oh wad some power the giftie gie us
To see oursels as other see us!
It wad frae monie a blunder free us,
An foolish notion

--Robert Burns, “To A Louse”

In my course in Speech (English 204), I provide students a venue for practicing their speeches under controlled and unthreatening conditions. I have them present their speech first in a group of three students. Then they make the presentation to the whole class.

In 1989, I described my use of small-group practice in an article titled “Using Collaborative Techniques in a Speech Class.” Since then, I have learned a thing or two:

• I know now that what I was writing about was not collaboration but peer review. I now call it peer coaching. I act as coach, and the students act as coach.

• I know that persons are increasingly called on to make oral and visual presentations in professional contexts and that their work is judged largely on the basis of their presentation skills. Yet our students continue to be deficient in making oral presentations. Fewer and fewer majors at Plymouth State require Speech, and consequently students suffer. I encourage the idea of Speech
Across the Curriculum. This would have students make oral presentations in all classes.

- I know that students feel nervous and anxious about making oral presentations. More than anything else, they fear the response of their peers. They need chances to become acquainted, find mutual interests, broaden their perspectives, and learn to reveal themselves—all the while performing at an acceptable academic level.

- I know that students can build confidence and ability through practice. With practice, they can improve their presentation skills. But they will not practice on their own. For years in Speech class, I used to urge students to present their speeches in an empty room. That would give them the practice they needed. But I don’t think any of them ever did it. Come to think of it, I don’t think I’ve done it myself for more than a few sentences. It seemed silly.

I give students the opportunity for peer coaching at least three times during the semester: before their introductory speech, before their oral reading of a passage of prose, and before their final major speech. Peer coaching gives students a technique they can use in other courses and for the rest of their lives.

I have also discovered some other practices that promote good oral presentations:

- Students must present their material with no notes. When I started forbidding notes in oral presentations, I was amazed at how markedly the quality went up. The reason is that students speak better than they write. When they use notes, their writing gets in the way of effective communication. When they speak without notes, they cannot rely on a false crutch.
• Students need exact, specific, and detailed guidelines for speeches. Left to their own devices, they often present thin, lifeless speeches with unsubstantiated assertions.
• Students need concrete suggestions for speech topics. I have found that the most effective topic for an introductory speech is “A Significant Turning Point in My Life.” That gives them something they can sink their teeth into; after all, they are the world’s expert on the subject. It gives them the opportunity to review their personal experience and tell about something they’ve been bursting to tell all their lives.

Students tell me that the peer coaching is the single most effective experience they have in the Speech course. I think it would work well in any course.
Reflections on Theory
How I Started Using Writing Across the Curriculum and Ended Up Taking Algebra Again: A Review of Useful Works on Writing Across the Curriculum

Sally Boland

As it enters its second decade, Writing Across the Curriculum in the United States is supported by an increasingly sophisticated literature which offers a great deal of hands-on, how-to advice, as well as a solid theoretical basis in linguistic and learning research. Generally, this work is free of jargon, accessible to any interested person, whatever their academic discipline. The four books reviewed here are typical in their blending of the theoretical with the practical; two are more valuable for their discussion of Writing Across the Curriculum theory and for their histories of the movement than as sources for classroom strategy.

Writing Across the Curriculum Theory

The most theoretical of them, Parker’s and Goodkin’s The
Consequences of Writing, both presents an account of Writing Across the Curriculum history and explains the learning and linguistic theories underlying the technique.

The movement began in England in the late 1960s with the work of James Britton and Nancy Martin. They examined educational practice in light of the linguistic theories of Edward Sapir, Suzanne Langer, and Lev Vygotsky. These theorists asserted that, in Sapir’s words, “The purely communicative aspect of language has been exaggerated...language is primarily a vocal actualization of the tendency to see realities symbolically.” In other words, for Sapir, et. al., language is far more than just a system of signs we manipulate to achieve certain ends. It is the medium with which we construct our symbolic representation of who we are and of the world around us.

Considering the implications of this for learning and teaching, Britton and Martin concluded that we “construct knowledge from experience by transforming that experience symbolically” through language when we learn. In classroom research, Britton and his colleagues found that children in all grades, studying all subjects, learned better when all kinds of language activity, from note-passing and conversation to formal written and oral reports, was the basic instructional vehicle. Informal expression, or expressive writing journals, letters, lists, impromptu poems, were found to be particularly valuable. Expressive writing in the child’s everyday language has remained an important part of British pedagogy.

This was the origin of LAC (Language Across the Curriculum), a technique favored in Britain that uses all forms of language activity (reading, writing, speaking, and listening skills) to help students learn subject matter more quickly and effectively. WAC, Writing Across the Curriculum, was but one branch of this larger concern; U. S. educators embraced it at a time when criticism of student writing abilities was more than usually scathing. Unfortu-
nately, we in the United States have often ignored the larger context of LAC and the benefits it can offer. Instead, our general tendency has been to embrace WAC as an alternative way to reinforce the forms and skills of standard English writing instruction.

To remedy this confused application of WAC, Parker and Goodkin devote the second part of their work to a survey of current theory on the connections between thinking and language, especially the work of Piaget and Vygotsky. In Part Three, they draw out the implications for learning theory. Parker and Goodkin believe that much is gained from using the full range of language activity as a means of teaching people the content of disciplines. The final section presents brief case studies of people who use LAC and WAC to teach mathematics, applied psychology, entomology, and clinical nursing.

Indeed, WAC is so widely applicable that it can easily move beyond the English department and may even alter entire institutions. That is the primary message of the Young-Fulwiler collection of essays. The workshop techniques we learned from Fulwiler here at PSC were developed between 1977 and 1984 when he taught at Michigan Technological University. The selections here, all composed by MTU faculty from several departments, demonstrate the many ways a WAC program, if undertaken seriously, can change institutional priorities. While there is some material here that will help in the classroom, the book’s chief value is its account of how, despite some difficult faculty politics, MTU created a successful program. Thus it will be useful to those trying to establish a new program of their own. And for us at PSC, it will be helpful now that we are ready to begin documenting and assessing our program.

Members of our WAC Task Force, General Education Committee and Writing Program Assessment Committee will find
reassurance and useful advice in Section II, “Evaluation: Assumptions and Discoveries.” Anyone interested in undertaking classroom research on WAC’s effects on student learning will rejoice in Margaret E. Gorman’s essay, “Mucking Around,” which explains that credible and responsible studies can be constructed even by those of us who don’t actually remember college algebra and never even thought of taking statistics. (Gorman’s advice: if you don’t have statistics, you can enlist the help of a faculty statistician or educational measurements expert.)

**Theory Into Practice**

Every publishing season brings us new, down-to-earth books on how to use WAC in the classroom. Fulwiler’s *The Journal Book* is one of the best. The journal has emerged as a mainstay of WAC practice, and Fulwiler’s collection offers a fine selection of new ideas. I’d like to hear from colleagues who attempt some of them, such as the ones proposed by Verner Jensen (“Writing in College Physics”); George Meese (“Focused Learning in Chemistry Research: Suzanne’s Journal”) and Stephen BeMiller (“The Mathematics Workbook”).

This is a good book to sample from. Last semester in Composition 120 I adapted a project recommended in Christopher Burnham’s “Reinvigorating a Tradition: The Personal Development Journal.” The informal, ungraded, expressive writing students did for the personal development journal led many to greater clarity and power when they came to write the more formal, finished language of the personal essay. At the same time my students were keeping their journals, we read about how professional writers use journals, deal with writer’s block, develop expressive writings into formal essays, and so on. In time, many students began to think of themselves as writers rather than as captives in Composition 120—a change I deduced from their
behavior in conferences about their work. Instead of asking what I thought of their essays, they would begin by telling me what they thought and by asking my response to specific places in their work that they thought especially difficult or especially good. They became active, took the initiative in shaping their own work, which is how writers (as opposed to captives) behave. *The Journal Book* is rich in suggestions for getting this kind of satisfaction for students and teachers.

The success of last fall’s journal experiment has given me the heart to try again—probably for the dozenth time—to incorporate peer response groups into my class. It’s the kind of thing that sounds like it should work—it just stands to reason that students should be able to critique one another’s writing and learn from the process. But so far, I haven’t been able to get it to happen.

This time, however, with the help of Karen Spear’s *Sharing Writing*, I may succeed. She admits that peer response groups are usually ineffective. The reason, she says, is that students lack the social and interpersonal skills to make them succeed. As often happens in WAC literature, she spends the first half of her book on theory, relating the peer response problem to students’ lack of expertise in discussing, listening, reading, giving or receiving feedback—that full range of language activity encouraged by LAC.

Spear then shows, however, that highly-polished—or, at least, much improved—final drafts will come from groups that work consciously to improve their interpersonal skills. The second half of *Sharing Writing* explains how Spear developed such groups in her freshman composition courses at the University of Utah. Instructors interested in developing peer response in any class—whether in writing or in a content area—will find much here to ponder: many interesting revision checklists (ones that work, ones that don’t); strategies for improving reading and listening; ways to
teach groups to monitor their own effectiveness.

I’m planning to try Spear’s method, with a few modifications, on my technical writing students in spring semester. Technical Writing is an upper division course populated by juniors and seniors, most of whom have a strong professional orientation. Nearly all writing done in a professional setting these days requires some degree of peer collaboration. So I want my tekkies to learn two things: how to respond constructively to other people’s writing and how to use other people’s responses to their own work. In setting up the course, I’m borrowing freely from Spear.

Making peer response a priority has substantially altered my usual way of presenting the course—one that has worked pretty well for the last eight years. If it doesn’t work, I’m going to ask Karen Spear for a refund. If it does, I’ll make some big changes in next fall’s Composition 120 sections and some little ones in my literature courses, making peer response central to the writing course and using it to help the literature students in their writing assignments.

And after that—well, maybe I’ll attempt some classroom research so I can reliably demonstrate what’s been going on in my classes, and why, I’ll follow Margaret Gorman’s advice and find a statistician to help me design a study. Because I’m embarrassed... all that bragging about last fall’s composition students and their wonderful journals is a true reflection of my impression of what happened. But if you want evidence... well, I did save a few papers and rough journals, and I meant to do an attitude survey, but I forgot....

I want to get out of that embarrassing spot, even if teaching writing means I do an algebra review next summer and take a stats course in the fall.

Years ago, when I first began teaching composition, the best research showed that students do not read instructors’ comments...
on returned papers. Instead, they go straight for the bottom line—
that letter grade at the end of the last page—ignoring all other
marks and remarks. This discouraged me in literature courses, to
the point where I almost stopped commenting on papers at all. And
in composition courses, I found it particularly galling, because if a
student doesn’t learn from feedback on early drafts, the final drafts
are likely to be disappointing.

Yet, as far as I know, there is no research on why students
don’t read instructors’ comments. Can they not read the instruc-
tors’ handwriting? Do they not understand what the comments
mean? Are they made so complacent by a satisfactory letter grade
that they don’t care why they got it or how they might improve
next time? Or, conversely, are they so intimidated by the letter
grade that they lose any desire to read amplifying comments?

I wondered, and the attempt to develop students’ peer editing
skills, which I describe in the 1989 article reprinted above, came
out of that wondering. What I want to do here is describe my long
odyssey from using checklist feedback to initiating feedback con-
versations instead. Since I began my journey by trying to teach
feedback and peer review to my composition students, I’ll center
on that experience. But I later learned to use a form of conversa-
tional feedback in literature courses as well, so I’ll comment on
what I learned from that also.

Back in 1989, I believed that if students could internalize
editing lingo and use it to give each other feedback, just as I gave
feedback in class and in my written comments, they would become
more proficient editors, for their peers and for themselves. It made
sense: I would model the lingo, and from that students would learn
to use it during peer feedback and revision.

So I spent a great deal of time devising checklists my students
could use to comment on whether the main idea was clearly stated, whether the opening was interesting and the ending sufficiently final, whether the ideas were adequately developed and supported, what parts of the essay seemed to work best, what parts needed further development. Glowing with hope, I distributed the checklists to my composition students, confident that soon they would not only give one another wise advice but would also actually read my comments and use them to revise intelligently.

This did not happen.

When the students paired up to give each other face-to-face advice, a great hush came over the room, a brief flurry of reading and writing followed, then general chatter about football or skiing or music or even less edifying topics. What was going on here? What wasn’t going on?

When I collected the checklists, I found that students did not use them to comment. Instead they filled the checklist with yes/no responses and short answers. Was the main point clear? Yes. What was the strongest part of the essay? Where the writer describes making the lucky interception that brought his team the state football championship. Clearly the students understood the lingo and even the concepts behind the lingo; they knew a topic sentence from a transitional paragraph, but they still hadn’t the slightest notion of how to give useful feedback; they had no sense of how to give advice which would help their writing partner re-think and re-write, which I take to be the primary use of all feedback.

Worse yet, nobody used my comments, either, even though my checklist responses were quite fully detailed. So there matters stood when I took time off from teaching to do a stint in academic administration. I brought much of what I had learned from teach-
ing to my administrative work; when I returned to teaching, I brought back to the classroom much that I had learned in administration. One very valuable thing I learned there had to do with evaluating the job performance of the employees I supervised directly. In the places I worked, performance evaluation always involved checklists, letters, and other written documents, but there was also a requirement that supervisor and employee sit down together and talk about what the supervisor had written. I had found these conversations enormously helpful—for improving my own work as well as my employees’. In evaluating others, I found, I also evaluated myself.

This lesson served me well when I came back to teaching, because I began to listen to the way I talked to and wrote to my students. It came to me that my comments on main points and topic sentences and strong openings were, in a way, irrelevant.

The problem, I decided, was a premature concern for nuts and bolts. I came on as the literary Ms. Goodwrench at a stage in the writing process when students really needed someone to talk to them about content, about the way I was affected by what they had written. Maybe, I thought, that’s what’s missing: conversation, dialogue, talk about ideas, experiences, fantasies, fears, hopes, regrets—my own as well as my students’.

But how to do this in a reasonably organized way, one that keeps students writing and rewriting until they fully realize what they need to say, and actually say it? I remembered a couple of techniques I had heard of, one from Roy Andrews, director of PSC’s College Writing Center, and one from UNH writer and teacher Don Murray. While I began using these response techniques in composition classes, where my students write many drafts, I later adapted them to courses where students write only one draft before the final; I have even found them helpful on brief
in-class writings that I grade Pass/Fail and that are not rewritten. After describing their use in multiple draft situations, usual in a composition course, I explain how I adapted what I learned from Andrews and Murray and how that has enhanced my students’ work in other writing situations.

Roy Andrews taught me “first response strategy,” something he learned from Peter Elbow, which involves making marginal notes on the first thing you think of as you read the paper through the first time. And that’s what I do now—it’s all I do—on first drafts. This, I find, opens the conversation I want to have with the student, and this is where I am most likely to write comments that connect to the student personally: I may bring up similar experiences or ideas I have had or read about; I may simply write confirming comments, such as “Yike!” or “You must have felt wonderful,” or “That’s a neat idea,” or “This is really interesting. I’d like to know more about it,” or “This reminds me of the time I...” or “One of my favorite poets, William Blake, says...”

With my first response, I want to show students that I’m taking the content of their writing seriously—that what they are thinking about and trying to say is worth articulating more clearly and fully. I want to motivate them to invest lots of time in writing the many, many drafts that we require of our composition students. Of course there is no grade at the bottom of the first draft, but I see my students reading my comments (I always offer to clarify any comments they don’t understand) and their second drafts invari-ably reflect attempts to use my comments.

In the second draft, I switch to Murray’s “focus line” strategy, a way of locating what I call the high energy spots in a paper—places that call for further explanation, where there is a mystery to be explored, or a conflict to be examined and worked out. These places I identify rather tersely: “There’s some tension here; try
probing it more fully” or “So why do you feel that...? Would it be different if...?” or “This mystery is probably worth further exploration,” or, simply, “I want to know more!”

My second draft comments aim at helping students find a center for the paper, a place from which their main point will eventually emerge as we work through subsequent drafts, alternative openings, planning sessions, lists of possible titles, and the like. As we come nearer the final draft, my comments and questions become more focused on development, coherence, and sentence structure. But even at this stage I avoid the writing teacher’s lingo that once made up my feedback checklists and use instead content-oriented remarks, such as “I got lost as you moved from this paragraph to the next,” or “I still don’t understand what you mean here. Can you rephrase somehow?”

Perhaps because conversational commentary gives them more information to go on, my writing students do read my comments, and they seem to be able to use them to advantage. On the final draft, there is a bottom-line grade, and my students do look at it. But by then they know pretty much what they have done (or not) and I usually confine my remarks to a brief end comment.

In my literature and interdisciplinary courses, I adapt the first response and the focus point strategies to suit the occasion. Often in these classes, I ask students to write brief response papers which are meant to prepare them for discussion rather than to provide me a basis for evaluation; I grade them pass/fail. Unless an essay grossly misses the assignment specifications, I never ask for a rewrite. As a way of opening the conversation that we will later continue during class discussion, I use a first response marking strategy. For more formal papers, when I require or at least recommend a first draft, I combine the two marking strategies in whatever way seems appropriate to the paper I’m reading. Once again, I find that students do read my comments, even if the essay
receives only a pass/fail grade, and my opening the conversation on paper seems to help people focus better in small group discussions and volunteer their comments during general discussions.

As for time, that need to get on with it and get on to the next thing in our perpetually over-scheduled lives...I find this way of marking actually takes less time than the old checklist method, perhaps because my comments are very targeted. I have very specific reasons for commenting as I do, and I don’t feel compelled to comment on everything at once...I will do the other things later, either through further targeted comments or by referring my students to the appropriate help center on campus—and remember that we have three of them: the English Department Reading and Writing Center (mostly for composition students), the College Writing Center, and PASS, for special needs students.

And my job satisfaction has risen considerably; I no longer feel in danger of crashing and burning, because initiating conversations makes what my students have to say interesting to me—no matter how imperfectly they say it. Furthermore, since conversational commentary seems to improve their writing immediately and markedly, I feel that what I’m doing is worth the effort—another stay against the disaster of burnout.

Whatever happened to peer review? I still do it, though less frequently and less formally than before. It used to be one of the central activities in composition, but since I began teaching writing in a computerized classroom, students spend much more classroom time actually writing and revising. When we do have a peer review, students mimic my marking system; they frequently ask for more information and are more willing than before to admit that they actually got a bit lost in places where transitional or developmental material are weak. But having found the right language for writing comments that students can actually use, I am
less worried about the reinforcement that I had hoped peer feedback might give my remarks.

Certainly I am more comfortable teaching writing than I ever have been. It’s less of a struggle for me and my students now, more natural seeming with a conversational basis. In one of my favorite poems, J. V. Cunningham congratulates his student because “you have learned, not what to say, but how the saying should be said.” I think moving from checklist to conversation taught me that, and my students, too.
People approach writing from a traditional point of view because the very term writing implies letters into words, words into sentences, and sentences into paragraphs. We propose that there are many forms of writing and traditional writing is only one of them. Scientists write formulas and draw molecular representations. Musicians compose using musical scores. Mathematicians write equations and construct geometric drawings. Choreographers use the system of labanotation to record movement. The most obvious to us is the drawing of images, which we believe to one of the most primal forms of human language. In this paper, we will discuss how the artist uses drawing as a form of communication of ideas.

From what seemed to be unrelated fields, we, an artist and educator, met one afternoon to view and discuss a piece of the artist’s sculpture. To explain the method of construction, the artist used drawings from his sketchbook that revealed more to us than just the construction methods. The notations, the language necessary to develop the work of art, revealed a complex process, and we recognized this process as a specific form of writing. In our discussion, this visual form of writing contained all the elements of the writing process. The process in writing and in iconology was identical but was labeled differently by each of us according to our disciplines. Brainstorming was explained by the artist as a combi-
nation of random drawings, fantasy drawings, and drawings made during random encounters. Drafting, revising, and editing were similar to developing an image through a series of drawings where the intention was to clearly resolve the idea. Through this discussion, we came to the conclusion that there are many forms of writing, all using similar elements through different modes of expression. This obvious form of communication is often overlooked. Yet, home owners make drawings for builders, people draw maps for directions, and most people doodle while talking on the telephone. These are just a few of the forms of visual language we use daily without actually considering the images as language.

The Artist’s Approach to Writing

In the fine arts, this area of expression is explored in the form of a sketchbook, which is simply a collection of drawings. These drawings are notations on the development of ideas, the realization of ideas, and the storage of ideas. To the student and the mentor, these drawings are perfectly legible and can be read easily and accurately. Like poetry, the images contain many levels. The sketchbook is an artist’s daily visual diary. Since its organization reflects a personal attempt at capturing and exploring thoughts, the book is multifunctional. It serves as a mental stimulus and repository for those visual events that the artist finds important to note: landscapes, still life, people in action, etc.

A very primal thematic imagery can be perceived over long periods of time. (Our study spanned only 12 years of drawings, yet we could see some strong basic themes emerge.) The sketchbook contains short cyclical images that are introduced, resolved, and abandoned as opposed to long term images that are introduced, resolved, and revisited. We grouped the sketchbook drawings into these broad categories listed below.
Faculty Report Form Revision

Vote on form for recommendation to next fall's Council of Chairmen

Resources Needed
- Textbook Library
- Book Reviews
- Slides
- Litho Press

Gallery
- Faculty Show
- Dreuper Dedication/Sign
- Next Alumni Show

Recruitment Plans for Coming Year

Fig. 2
1. **Practice Drawings**—Drawings that reinforce skills in perception and hand-eye coordination. These are the simplest kinds of drawings. The drawings in Figure 1 show evidence of this fine tuning skill process. The life class in which these drawings took place is a formal practice situation. These drawings increase the range of skill the artist needs for expression and experimentation with new techniques.

2. **Random Drawings** — Pleasure drawings, drawings for the “fun of it,” doodles, and perhaps subliminal ideas. These often occur when one is relaxed and not thinking about a particular subject matter or image. The drawings happen very spontaneously. Figures 2, 3, and 4 are different kinds of random drawings. Figure 2 is the artist’s “doodle” during a faculty meeting. There is evidence of playing with perspective, composition, and light and dark. Figure 3, the dragon, is the kind of spontaneous image that is difficult to identify in terms of its source. A word, a conversation, even a situation can trigger this type of drawing. In reflection, one may find the source, but it isn’t apparent when the drawing appears. The dragon was drawn during a lunch break. Figure 4, the “Redneck,” appeared from reflections about a paradox: the contemporary young man and the image of a ’60s hippie. The drawing occurred long after the reflection.

3. **Fantasy Drawings** — Fantasizing to realize an image, a playing with images, and/or recollections of images. Figure 5 reveals the very origins of a later sculpture called “Spirit of Flight.” This image cannot be observed in nature, but the imagination allows the artist both to draw the image and to experience the sensation of flying while making the drawing.
4. Developmental Drawings — A series of drawings whose primary aim is to bring an idea to maturity. In one case, the process is the focus. In other cases, it is the application of the image to a formal work of art, i.e. sculpture, painting, print. After the drawing of Figure 5 occurred, the sculptural possibilities of the flying figure were explored, as seen in Figure 6.

5. Analytical Drawings—Study drawings which clarify ideas and are often very detailed, with scale, sizes, material considerations, construction, and dimension. Figure 7 is an example of an analytical drawing not drawn from life, but actually drawn from parts of an incomplete sculpture. The intent of this drawing was to assist the artist in seeing the unfinished parts of the sculpture and make visual conclusions.

6. Experiential Drawings—Drawings made about life experiences. These drawings record the exploration of feelings, personal interest, and sentiments. These drawings consist of images which were of enough interest to compel the artist to make a visual note. The drawings in Figure 8 were drawn directly from the experience of attending a lecture at Stratford-on-Avon. The lecture was dull, but the participants attending the lecture were fascinating.

These example drawings were identified with some difficulty since often they contained elements of several categories. Their placement was made by identifying the most characteristic category.

Sketchbooks differ from any kind of formal prose but are most closely related to a diary. In fact, they are a visual diary. The images recorded in them are personal, intimate, and revealing. The intention of the sketch book is to provide information solely for the artist.
Content Analysis Evaluation

The sketch book is a diary of an artist’s selection and compilation of ideas. The expressions found in the sketchbook illustrate key turning points of an artist’s imagery in the journey from the moment to moment ideas to the broad periods of time required for major themes to develop. Recurring themes, although often separated by years, appear here. For example, the theme of “Flight” has appeared in this artist’s work over a 12 year span (See Figures 5, 6) in drawings and sculptures of flying persons and images of birds and kites.

The handstand figure and the crucifixion (Figures 9 and 10) reflect this same general spatial concept. The outspread arms and arched back provide the artist with the same aesthetic concepts while introducing what seems to be unrelated thematic material. This idea of recurrent themes has also been seen in children’s drawings as they progress from the process of labeling to narrative. Although this is a rudimentary example, it is interesting to note that the process, although more sophisticated for adults, remains substantially the same.

Summary and Conclusion

In discovering that the sketchbook is a sensitive visual language that can be read by the artist as well as others, it seems appropriate that this concept of visual literacy be recognized in Writing Across the Curriculum programs. The way language processes—in this case drawing and writing—are used to reflect thinking and meaning should be the primary concern. The sketchbook captures the internal monologue of the artist. It is the “never seen” foundation for those formal public works.

There are many ways to approach the task of writing, and one should not impose artificial forms of writing on any discipline. It is not the form of language nor the amount, but that the form of writing is appropriate to the purpose. A Writing Across the Curriculum program must recognize and encourage all forms of
expression. The differences in the ways to approach the task should be recognized as strategies used to process information and communicate meaning. Drawing should be recognized as a form of expressive language. It is not a substitute for written language, but rather an additional form, an augmentation to that form of communication.

The categories developed in this study are a beginning step in classifying the dimensions of meaning displayed in the sketchbook. Continued study of this visual literacy and the relationships among the language processes is suggested to help gain an awareness and understanding of the many features of communicative media.

(1997)

Iconography Revisited

In our article for the first issue of the WAC journal, we were concerned with the use of drawing as language. The concept seemed to be ideal for the Writing Across the Curriculum effort since drawing is seldom thought of as a language even though we use it as such to assist others in visualizing objects, situations or concepts that are difficult to describe accurately in words. What is most interesting, from an Artist’s point of view, is that although people use this language of imagery often, few work at learning how to become skilled in its complexities. Unfortunately drawing, as a language, is often left behind when we are introduced to our culture’s written language.

In our article we pointed out the importance of recognizing visual literacy, which has now become a part of current national and state standards. With the impact of Howard Gardner’s (1993) multiple intelligence theory, which promotes multiple ways of thinking and responding, visual learning, or what Eisner (1993) calls the “Education of Vision,” seems to have become more
Writing Across the Curriculum

integrated into the educational agenda. Drawing, as a means of communication, seems to be finding a more receptive audience.

We are still in agreement with the ideas put forth in our 1989 publication, and in re-reading the article we noticed several phrases that seemed to us rich material for further investigation. While thinking about drawing as the “most primal form of human language,” we are reminded that the study of human efforts to produce written language reveals the fascinating origins of present day alphabets as pictographs. The most obvious example of this lineage is the hieroglyphics that developed in Egypt several thousand years ago. This well known alphabet is quite sophisticated and apparently its beginnings were from a much earlier pictograph form. Cave painting is another early form of writing that though perhaps impossible for us to read as it was originally intended, still allows us to understand some meaning through its more universal aesthetic form.

“The way language processes are used to reflect thinking and meaning” is another phrase from the article that seems rich to us for further investigation as it makes the connection between cognition and representation, or thinking and imaging, a topic that Eisner (1997) continues to research and that continues to interest us. The following three core ideas from Eisner elaborate what we said in 1989 and still believe today:

The form of representation we use to represent what we think influences both the processes and the products of thinking.

The selection of a form of representation influences not only what you are able to represent but also what you are able to see [and understand]. Forms of representation can be combined to enrich the
array of resources students can respond to (Eisner 1997, pp 350-352).

Upon re-reading our article we came upon one sentence that we now feel needs to be clarified: “The process in writing and iconography was identical.” The reference here was to the more formal applications of jotting down ideas and the development and refinement of those ideas through writing and re-writing or through drawing and re-drawing. The development of ideas through refinement and the seeking of alternative ways of presentation is common in both written and visual languages, and the continual need to write or draw to both build and strengthen these skills is also similar.

Interestingly, Bob’s development is in drawing, but through the experience of writing the 1989 article and this response he feels he has become more proficient in writing, while Dennise feels because of the experience she has integrated more visual learning into her teaching. Both of us believe our collaboration has been a positive experience.

Our article on iconology documents a movement toward seeing connections across all the language processes. The idea stated in our article about “multiple levels and forms used to communicate meaning” continues to be an important concept in “getting the total picture” of learning. Being both literate in the traditional sense and visually literate are the true mark of a well-educated human.

References

Writing Assignments in World Politics Courses

Thomas 0. Schlesinger

Walking out of Rounds Hall with me after class, Benny, a sophomore in one of my international relations courses, asked for, and received, some pointers on the required paper. “You’ve just told me to write exactly as I’ve been taught not to write,” said he.

“And who, pray tell, taught you?” asked I.

He gave an over-the-shoulder nod across the street, toward Ellen Reed House—the English Department.

“Hmmm... fine—I’m not surprised to hear they tell you something different,” I told him. “The English profs teach you to write in a generic way, say, fiction, or generically expository stuff. I want you to write a social science paper.”

With some “Hmmm-ing” of his own, Benny shuffled off, wearing a mildly annoyed and not altogether convinced frown. How dare they teach different ways to write in different departments at the same college!

Benny did make an effort to heed my suggestions, but it took persistence. For example, the introduction to his first draft, in-
cluded a vague statement like: “Conflict between Arabs and Black Africans in the Sudan is a serious problem and should be examined in greater detail. . . including its history, causes, and future.” The purpose statement I eventually settled for read more like this: “This paper will examine social, economic, and political aspects of the Sudanese civil war. The geography and history of the conflict will be briefly reviewed, followed by discussion of population characteristics, agricultural and commercial organization of the country. Political outcomes of these circumstances will be analyzed, with special attention to the impact of Marxist ideology and the Islamic faith.”

Such experiences have taught me that many students find the requirements for a social science paper substantially divergent from other writing instruction and assignments. They learn of the need to adjust their writing style to the demands of a given discipline. This article will describe and explain typical writing assignments for courses related to world politics, with emphasis on apparent differences from other forms of writing. I will deal with assignment objectives, choice of topics, purpose statements, organization, sources, the normative aspects, and some typical problems.

Assignment Objectives

One of the college-wide assumptions of liberal arts education is that our students acquire or improve their skills in written expression. Thus we shall deal only with objectives that may take on a different orientation in social science writing. Generic writing-skill values aside, three themes bear mention here: motivation, knowledge of sources, and relationships among various social science concepts.

One assignment serves partly to motivate. Required early in the
introductory course, it is designed to lead Benny, preferably as a freshman, to think of politics as something directly affecting his life. This essay asks Benny to relate a problem of world politics to his personal circumstances (e.g., to his family, lifestyle, or personal values). The idea is that writing what amounts to a quasi-personal letter to the instructor may help Benny deal with common inhibitions about what is for him and many others a daunting and even threatening subject. At the same time, depending on variations in high school experience, this is for some students the first attempt to write about political reality.

The assignment is to discuss changing notions of patriotism with various generations in the family. Like others, Benny reported that he never had a serious talk with Grandpa, or even with Dad, about “the war,” and results of such talks are sometimes startling. For example, by demonstrating a sincere and serious interest in the senior’s experience, after encountering resistance to discussions of war or patriotism, he may finally have begun a closer relationship.

Another occasional essay assignment leads the student to learn new and different usage of terms and related concepts. “State” and “nation” are routinely misused in popular American discourse, and specific new meanings and usages for these are difficult for some to conceptualize.

Other assignments are designed to acquaint students with specific sources of information, such as the *New York Times Index* and *New York Times Microfilm*, the *U.S. Department of State Bulletin*, the *UN Monthly Chronicle*, and the *Congressional Digest*. Increased skill in using specialized sources is a significant objective of political science courses. Regrettably, so far the technological revolution works against that. All too often students go to the computerized index relevant to the subject, punch in one or two key words from the assignment sheet, and in some cases end up with a bibliography identical with those of dozens of others in the
The hope is that directing students to other specific sources will compensate for this.

Typically, in a foreign policy course, the assignments are designed to force the student away from commonly used abstract generalizations (e.g., “U.S. economic assistance should be given only to democracies”). These are avoided by using concrete and specific questions (“As an intern for Senator Jones, you’ve been told to write a position paper for the senator on a bill to provide U.S. economic assistance to Guatemala. You are to consider constituent politics as well as foreign policy substance. How should the senator vote on the bill, and why?”)

The traditional full-length term-paper assignments occur in upper level “area studies” courses on the politics of Africa, Latin America, or the Middle East. Here the main objective is to improve understanding of how various political forces and movements interact. An acceptable comparative topic would be “How Islamic revolution affects the drive toward modernization in two specific countries.”

The expectation and hope is that the student’s interest in the subject will be stimulated, that familiarity with professional sources of information (e.g., regionally oriented journals) will be increased, that evaluation of relative credibility of sources will be practiced, that concepts and analytic approaches taught in text and class will be applied to different data, and that personal values will be engaged, and even committed, in statements of policy preference. (Example: “In region Y of country X, preservation of an indigenous culture may be a greater human rights value that modernization because. . .”)

Often I find that developing an appropriate topic, scouting the general availability of adequate sources for that topic, and stating the topic clearly, are the most difficult—indeed sometimes agoniz-
ing—steps for students. This stage typically calls for the most intense interaction with me, which is not to say that it always happens. It is often difficult to get students to realize that this interaction is a crucial step in producing the paper.

**Formal Requirements**

For traditional term papers, I require an outline and at least a first draft. Both of these receive a grade that counts as a quiz, and definitely bears no relationship to the grade assigned to the paper in final form. What is being evaluated is the process of planning and drafting a paper, not the paper itself.

The three points for which I mostly check both outline and draft are 1) appropriate choice of subject; 2) sufficiently explicit and clearly defined purpose statement, hypothesis, or question to be answered by the paper; 3) sufficiently organized structure of the body of the paper.

Topic assignments almost invariably call for the application of some sort of theory to a specific set of “real-world” data. That’s what social science is about. Getting typical American students to deal with theory beyond the most facile generalizations (“democracy si, communism no”) is a painful process.

As I’ve already indicated, the purpose statement tends to be a major stumbling block. Often this is symptomatic of student failure to focus sufficiently on a clearly defined problem. This is perhaps the main reason for insisting that the purpose statement be elaborated in substantial detail. This is also a general perception that the title of the paper can adequately take care of that. I often urge students to formulate an actual question that the paper will finally answer in a head-on fashion—preferably not one that can be answered simply yes or no. Of course, testing a hypothesis as true or false does just that, but it should present many if’s and but’s and gray areas whose pro or con evidence is discussed.
One line of reasoning I like to give students for carefully delineating a research question goes like this: Here’s one option. With the question you have now, go to the library and collect everything that seems to vaguely relate to it until you have enough to fill “n” pages—the length of the paper suggested in the assignment instructions. Simply fill 15 pages to satisfy grouchy old Schlesinger. The other option is this: if you have a definite question to answer, the things you find in your research will either help answer it or not, and the length of the paper will derive to a large extent from that. In the end you’ll have the true satisfaction of having answered the question, rather than just having filled pages. One of my favorite graduate school profs defined explanation, I remind them, as “when the mind comes to rest.”

The purpose statement should be followed by an equally explicit preview of the organization of the paper, i.e., how the reader will be taken from point A to point Z. Like good speakers, the paper should tell the reader where (e.g., what assumptions or historical takeoff lines) it “comes from,” how it proposes to proceed onward, and where it expects to end up. Suspense and surprise are great in other kinds of writing, but have, as a general rule, no place in a social science paper. A typical exception might be some especially startling evidence.

Students preparing more advanced and comprehensive papers are urged to attempt some overview and discussion of the existing literature on their subject. This should lead rather naturally to an explanation of the student’s particular choice of sources for the paper at hand and can, in some cases, be supplemented by a requirement that the bibliography be annotated.

An obvious follow-up for the structural preview is the use of sub-headings. These help the student-author to stay organized as much as they do the reader. For students who have the least experience with formal papers and whose mind is again set on
writing in a more story-telling, rather than analytic style, this suggestion seems at times downright offensive. Why do you want to break up my beautifully flowing prose with your painfully obvious signposts? I like to be subtle, to make my reader feel and think. Sorry, Benny. There should be absolutely no doubt where the reader is at any given point in following your thoughts.

And as for the feeling, believe it or not, we do very much encourage it, but not by vagueness about the flow of the argument. Rather, the feelings should be engaged by clearly identifying the values implicit in specific choices of data, or problem formulations, and preferences adopted to resolve doubts. Once values are clarified, personal choices are strongly encouraged. The instructions typically contain statements such as “A good paper will contain some part of yourself, or your own personality; it will reflect and clearly convey to the reader your position on the values at issues.”

The question of values often arises with the choice of evidence. It is sometimes mistakenly assumed that social science instructors require “balanced” middle-of-the-road papers which end up lukewarm. This arises from confusion between presentation of evidence, its evaluation, and implied policy choices. Social science does indeed require that the selection of evidence avoid a priori bias; it requires that a representative sample of evidence be presented and that evidence on all sides of the issue be discussed. And, contrary to what is unfortunately taught by debating and reinforced by American law, there are invariably more than two. The value choices associated with “feelings” should emerge in the interpretation of the evidence and most of all in the evaluation of policies that inevitably derive from these.

**Some Taboos:**

- When assigned comparison of “X” policy in countries A and B, a frequent result is what I call the tandem comparison. Eight pages
of country A, eight pages of country B, and a page and a half of “comparison.” Comparison should be conceptually organized.

• Usually, but not always, I urge avoidance of the sexiest subject of the day. A current example is terrorism. Despite the obvious motivation that comes from current relevance, the beginner’s learning in social science benefits from a certain amount of distance. When one is nearly overwhelmed by the daily headlines, and by the liberties which the press takes with concepts and terms, that distance is reduced to zero. However, if the assignments lead students to dull topics, eventually there is retribution: once, when a professor moaned about the dull pile of student papers he had to read, a colleague replied, “You must make dull assignments.”

• “Sending away” for material is a scourge. I suspect students learn this from some teachers in K-12 who tend to abuse the public relations resources of government, corporations, foreign embassies, and international organizations by having their classes write them for brochures and press releases. This rarely produces anything that couldn’t have been found in the school library, except that the illustrations can be used in cut and paste fashion. For college papers the practice usually results in late papers and is detrimental to serious research and thoughtful analysis. Most of those who distribute a lot of material have big public relations axes to grind. I don’t know where some of this nonsense (and surely the related plague of cut-and-paste as “learning”) originates, but it’s not my idea of education.

Evaluation and Conclusion

Social science writing assignments consist of a few rules:

1. Careful choice of topic.

2 Explicit and detailed statement of the problem being addressed.

3. Fully discernible structure and organization of the material.

4. Linkage of social science abstraction and generalizations to
“data”—concrete historical events—as well as personal experience and values.

5. Proper use and evaluation of appropriate sources.

While I know what I try to teach, I clearly have no better way than anyone else of determining exactly what or how much of that students learn from formal social science paper assignments. At the lowest, most direct level, it may be the instrumental value of familiarity with the kind of papers that will be demanded of them in graduate school. We all have the occasional good fortune of observing that a senior’s paper is much better than earlier work. Yet the cause for that improvement may lie in anything from daily flossing to the regular Thursday night partying.

Thus the nagging final question remains how to measure what and how much my writing assignments achieve? Guess you’d better ask Benny... perhaps after his first few months of grad school, or some time on a job where he must prepare and present reports.

(1996)

Revisiting “Writing Assignments in World Politics Courses”

In revisiting the piece, one question I asked myself was whether it addressed the problem of conventionalism, of mere form vs. good writing. My conclusion was affirmative, because I made it clear at the end of the article that I saw my teaching objective at least partly in training the student to become a successful graduate student, i.e. equipping the student to “do” social science,
perhaps eventually to get published in social science. At the entry level that means learning to wield the basic tools of the craft, to know and abide by the accepted conventions. For anyone to make up for the lack of that with creativity and originality, to sidestep that as a beginner, would require powerful content at true genius level.

Next, I asked what changes have occurred? Has the passage of time made a difference? And indeed, major change did occur in the research environment with the advent of the World Wide Web. In the original article I groused about:

1) students occasionally wanting to send away for information;

2) the superficial and uniform results produced by the apparent convenience of searching in computerized indexes on CD data bases in the college library, rather than conventional indices.

Regarding point 1), to the extent that high schools are acquiring computers and access to the World Wide Web, it is hard to imagine high school teachers nowadays encouraging them to send away for information. Instead, I imagine they’re being encouraged to obtain information on the Web, and that can produce extremely diverse results, dependent as greatly on imagination and intellectual acuity as working with traditional materials.

Having retired at the end of 1994, I’ve not experienced the results of work along these lines, but have extensively “surfed” information resources on the Web and created a research-oriented Web site. The richness of sources “out there” is beyond belief. It evokes the metaphor of a true universe.

For example, there are a substantial number of different search engines available and well known on the Web. Just depending on which of these one uses, not to mention, of course, what keyword formulations and combinations one searches, and which leads and
threads one then pursues, the results will vary infinitely.

Thus I would guess that if college students today are encouraged to do their research on the Web, the outcomes may well be enhanced. Among other things, some academic journals and major newspapers and magazines have on-line editions that are searchable. In any case, the dreary uniformity that came from the near-monopoly (among electronic media) of a few CD’s can now be avoided provided students are counseled in this respect.

My main thrust would be to have students understand how to use Web searching to obtain ideas that would lead to more interesting choices among conventional hard copy sources. To enhance and better focus their reading rather than replace it.

Shortly after its publication, I had selected advanced course students read “Writing Assignments in World Politics Courses” occasionally as a way to reinforce the importance of carefully formulating research question, outlining, and using headings. This was quite helpful in one or two instances. My harping on these things apparently no longer struck them as merely picky harping ... being difficult... once they saw that it had been put in print. The old “magic” of believing what one reads still persists to some degree.

A bizarre thought occurs: What would a video on writing papers, prepared by the instructor, do? Might we have more credibility coming out of the VCR onto the screen, than in the classroom or face-to-face in the office?

Finally, I asked two professional colleagues to review “Writing Assignments in World Politics Courses” and comment. A relatively young colleague found the article failing to maintain the same order of items in preview statements as in later discussing
them. I introduce them in one order, then discuss them in another. She turned out to be dead-right on this.

As a member of my discipline, this colleague also wished I had been more precise in delineating specific objectives, techniques, and types of analysis. This raises the question of audience for the piece and its level of analysis and technical depth. She also correctly points to the problem of explaining the conceptual, rather than geographical or chronological organization, in comparative analysis.

Overall, she agreed with the basic point of teaching social science writing in a different way, and with the emphasis on planning and drafting papers, stating that the article “forced me to think more seriously about how to improve my writing assignments and evaluation of world politics papers.”

Another quite experienced colleague at the state university found the article useful, agreeing “totally with the point that our writing requirements are totally different than those ‘taught’ in English 101.” He related that in his introductory courses he must engage in complete “hand-holding,” assigning a highly pre-structured paper, guiding the students through every single step in a prescribed format, and penalizing for deviation. He says that he’s “gotten good results for being a bastard on detail.”

That sounds very much like my own experience and like some of what I had tried to convey in the piece.
Writing in the Computer Science Curriculum

William J. Taffe

Why Writing Is Necessary

College students in career-oriented majors such as computer science have two curricular thrusts, professional studies and general education. Writing is an important component of each.

Led by the ubiquitous freshman composition course, writing has long been prominent in American general education. Following this introduction, the term papers usually assigned in literature and history courses build additional skill in a particular type of writing - the research paper. Recently, however, many academics have recognized that writing education cannot be isolated to a few courses and have advocated a much broader approach called “Writing Across the Curriculum.” Ideas advocated by Writing Across the Curriculum proponents are beginning to influence Computer Science curricula.(1)

Unfortunately, in some science and engineering curricula, the importance of writing is not yet recognized. Perhaps it is because some faculty in technical curricula feel that writing should be taught in general education or that they are not competent to teach
writing. Perhaps it is because some technical students have more difficulty with writing than do humanities or social science students, suggesting that more, not less, writing instruction is needed. Perhaps it is because technical students sometimes tend to concentrate more on symbolic expression and less on the development of natural language. In addition, programming language skill development or communication with machines may crowd out the development of human-to-human communication and possibly lead computer science students to shortchange this facet of their education. Indeed, the stereotypical “nerd” is often portrayed as impoverished in written and oral human language skills.(2)

However, our computer science students need strengthened communication skills, not only for personal enrichment, but also for professional activity. Computer scientists must communicate with each other as clearly as with their machines. And, an extremely important Computer Science subdiscipline, the “man-machine interface,” clearly rests on a thorough understanding of human communication.

Modes of Writing in Computer Science Courses

There seem to be three categories which adequately describe most of the writing used in Computer Science courses: writing to develop facility with the specialized language of the discipline, writing to explain results of a study, and writing as a process for clarification of fuzzy ideas. The first two categories are the most common, but the distinction between them is frequently lost. This is unfortunate because they require different skills. A student’s lack of facility with the technical language can be mistaken by the instructor for an inability to organize thought; likewise, disorganized thinking may be passed off as merely a lack of writing skill.
The last category, clarification of thinking, although possibly new to computer science faculty, has important pedagogical potential. Teachers of writing recognize that the process of writing about a topic helps clarify the writer’s thinking. Teachers of writing recognize that the process of writing about a topic helps clarify the writer’s thinking. The simplistic model:

1. Collect all thoughts
2. Write them down

has yielded to the recognition of a feedback loop in the thinking-writing process. Attempting to express an idea often sharpens and clarifies the concept, frequently exposes lacunae in the thought chain, and possibly creates new questions. Thus, writing to clarify thinking may be an emerging tool for the Computer Science educator.

Developing Professional Language Facility

In a specialized discipline there are many new terms, phrasings, and modes of expression which have evolved to allow specialists to communicate more efficiently. When abused they create jargon, but their proper use is necessary if students are to fully join the professional community. This cannot be done passively; students must practice professional writing on a regular basis.

Since learning two things simultaneously is difficult, learning to use this new professional language and concurrently learning to organize professional material is often too large a first step for many students. For them, the first writing assignments in the discipline should be straightforward. An assignment I have used successfully is the writing of summaries. Students are asked to choose an article from a recent issue of a technical journal and summarize it. Although students must be able to abstract essential points, the original article generally provides the organization for the summary and examples of using the professional language. Students learn to express themselves professionally by mimicking
professionals in their use of specialized terminology. Plagiarism is clearly a concern and needs to be discussed with the students straightforwardly. Happily, this assignment also has several beneficial side-effects which are described in the reference cited.

Learning to Organize and Present Professional Results

A second level of technical language skill is organization and presentation of the results of a study. In the natural sciences, this is often a laboratory report. In Computer Science, it can assume several formats and is currently used in a variety of courses. In the laboratory portion of my Computer Architecture course, I generally give an experiment which is somewhat open-ended and ask for a standard laboratory report. In addition to specialized language and organizational skills, students learn to combine text and graphics to explain their results.

This term in Computer Graphics, I am attempting a similar approach through an open-ended programming project. The students are asked to develop three “typeface characters” in two different fonts and examine various problems associated with rendering these fonts on a computer screen. They are asked to explain what they did, what problems resulted, and how the problems were (or weren’t) overcome.

Systems analysis courses are “naturals” for writing, and several authors have described the written assignments given to their students. The discipline demands written materials of varying types, such as user questionnaires and diaries, formal specifications, project correspondence, system documentation, requests for proposals or quotations, the final report, and standards for the analysis process itself. Technical writing is crucial for the systems analyst and “Systems Analysis and Design” courses often require the preparation of technical material.
Because oral communication skill is equal in importance to its written counterpart, Computer Science students also need opportunities to enhance their presentation skills. In our curriculum several courses present the occasion for brief oral reports, but the best opportunity to practice presentation skills is in the required senior-project course, “Directed Study in Computer Applications.” In a multi-presentation colloquium at the semester’s end, each student presents a 30 minute project report to an audience consisting of the department faculty and fellow seniors. Faculty coach students in the preparation of their talks, showing them how to develop effective presentations.

Development of Thinking

Earlier I described the feedback loop that exists in the thinking-writing system. The writing process forces the writer to clarify thinking by exposing the holes in a progression of ideas and frequently raising new questions. Presenting an idea improves the idea, a concept familiarly expressed through the teachers’ adage “the best way to learn a subject is to teach it.” Computer Science faculty are beginning to use writing to help their students understand Computer Science better.

Assignments which require students to express their thinking about problems and concepts may help the student sharpen their understanding of concepts. Getting students to carefully pose questions about the subject may lead them to think about the answers. I have assigned as a homework problem, “Write a potential question for the next hour exam, and explain what this question measures about knowledge of the subject.” In addition to the wonderful side-effect of giving me some great exam questions, answering this question helps students focus and clarify their own knowledge.
My colleague Peggy Eaton formalized this approach last spring during her “Organization of Programming Languages” course. She broadened the traditional concept of the course notebook by requiring her students to keep a Programming Languages Journal. The journal contained lecture notes, but also notes taken while studying. More importantly, in the journal students wrote down concepts or ideas they didn’t understand. In the process of explaining what confused them, they often removed the confusion, and if not, they had a well-focused question for class discussion. Writing helped students learn Computer Science.

Summary

Writing is both an end and a means. Computer Science students need to write to communicate, and professional writing must be taught in Computer Science courses as a continuation of the more general writing instruction of general education courses. But also, through the process of writing, writers are forced to clarify their thinking. By this means students have an additional tool for learning Computer Science.

Notes


(2) For example, see the Dick Tracy comic strips for the weeks of February 25 and March 5, 1989.

(3) For example, New Directions for Teaching and Learning: Teaching Writing in All Disciplines, Jossey-Bass, San Francisco, 1982.

(4) Taffe, William J. “Teaching Computer Science Through Writing.” SIGSCE Bulletin June 1986: 82-83. See also Flaningam, Dona Lee, and Warriner, Sandra “Another Way to Teach Com-


(8) Hartman, p. 34, The microthemes on “supporting a thesis” and “quandary posing.”

Did I Really Write That?
A Retrospective Introspection

It was a good experience to reread my thoughts expressed in that first issue of *The PSC Journal of Writing Across the Curriculum*. As I read, I began to ask myself “do I still believe what I said?”, and “do I still practice what I preached?” Well, yes and no. Yes, I still believe it, but I’ve “backslid” a bit.

Thinking about the uses of writing, and its importance in the learning process, makes me remember some of the successes my students have had in developing their expressive abilities and cognitive capacities through that written expression. Early in the
semester, many students in my senior-level "W" course in computer design express disbelief at the writing assignments, a disbelief that evolves into dismay when they discover that I’m serious about writing. However, as the semester progresses, little-by-little they grudgingly tend to accept the notion that as computer professionals they will have to write proposals, reports, documentation and other forms of tangible instantiations of their ideas, and they begin to put some effort into writing clearly and expressively. Some even begin to enjoy the challenge of saying something clearly, though they usually won’t admit it. As the semester progresses, I see the evidence of their efforts. Gradually, the papers begin to become coherent, then a bit polished, and by semester’s end, some are even writing like professionals. They have it in them; it just needs to be induced to come out.

But there’s a price--and I pay a large part of it. The steady pressure required to persuade students to do what they often insist is irrelevant, useless, and is perhaps even an “unnatural act” for a computer scientist, takes its toll. Consoling the student who gets a rejection slip (“This writing is not at an acceptable level for a college senior - rewrite.”) demands a lot of physic energy. Working with students who have weak organizational skills on documents where text, tables and graphics need be coordinated into a coherent package can be exhausting. I read, in this Journal, suggestions from colleagues about “how to read papers without having to read papers” but I haven’t mastered the art. I still find reading papers to be labor intensive, hard work.

So, I’ve backslid a bit. I still give writing assignments, but I give them less frequently. And sometimes I tend to refine the assignments so that the writing “fits a template,” allowing students to slide through with less thinking. And at times I accept a still weak third draft of a paper just so that I don’t have to read it once again. I hear President Wharton say, “We must raise our expectations of performance for students ...” but I also hear myself ask
“what is reasonable to expect from a generation that doesn’t read?”

So it was good to reread what I wrote eight years ago. I am pleased that after almost a decade, I really have no argument with myself on this matter. But I do have to think about my ideals and what I’m doing to reach them. I need to remember the fervor I (we) had when “writing across the curriculum” was new to PSC, and ask how to rekindle it. I should concentrate on the successes and not on the obstacles that arise as surely as potholes in the roads of spring. It was good to see my reflection in the mirror.
Writing
Experiences
Writing in the Capstone Experience: Psychology Encounters Literature

Henry E. Vittum and Robert S. Miller

In Four Parts:
I. by Henry E. Vittum and Robert S. Miller
II. by Donald Hundgen
III. by Robert Miller
IV. by Henry E. Vittum and Robert S. Miller

Courses that satisfy the integrative component of Plymouth’s General Education program invite, if not necessitate, the use of frequent and varied writing assignments. A supporting document presented to the faculty in 1985 in favor the then-new General Education program described an integrative course this way: “The course should be a capstone or culminating experience for the student…. A significant level of analysis and synthesis is expected as opposed to simple presentation of facts and theories.” The present General Education Handbook adds, “To the extent possible, the process of integrating material is achieved through extensive discussion and collaborative learning experiences rather than lecture, as well as through frequent writing assignments as practiced in WAC pedagogy.”

Psychology and Literature, which has the distinction of being the first course at Plymouth given the integrative label, was
offered for the first time in the Spring 1988 semester with an enrollment of just nine students. We, the two instructors, had spent close to a year preparing and planning. We had decided the course would compare three important theoretical approaches to psychology. The basis for comparison would be to ask which of the approaches was most useful in analyzing literature and to ask which approach seemed best supported, if the content of literature were examined as a sort of “behavioral sample.”

That first time, we studied the theories of three psychoanalysts: Freud, Jung, and Erikson; one radical behaviorist, B.F. Skinner; and three humanists: Rogers, Maslow, and Horney. After the class spent a week reading and discussing each approach, we spent several weeks reading works of literature that might be interpreted in that theoretical context.

For the psychoanalytic unit the choices were Eliot’s “The Love Song of J. Alfred Prufrock,” Shaffer’s *Equus*, Lawrence’s *Sons and Lovers* and Shakespeare’s *Hamlet*. For the behavioristic unit we chose Skinner’s *Walden Two*, Orwell’s *1984*, Dostoevsky’s *The Possessed*, and Hardy’s *Jude the Obscure*. For the humanistic unit, we decided to read Chopin’s *The Awakening*, Ibsen’s *A Doll’s House*, Bolt’s *A Man for All Seasons*, and Hawthorne’s *The Scarlet Letter*.

We used a variety of writing assignments to facilitate learning. Most classes began with a five-minute quiz on the day’s reading assignment. These quizzes served to motivate timely completion of these assignments and to stimulate discussion. The students wrote a research paper designed to deepen their appreciation of one of the psychological theories and a critical essay designed to allow them to practice applying psychology to literary criticism. (In later years we added a journal. That first time we were not so WAC literate as we are now!)
The most successful writing assignment, however, the one that clearly necessitated synthesis, was given in place of a final exam. Each student and each instructor was to write an imaginative paper describing one of the psychologists we had studied engaged in conversation with one of the literary characters we had encountered. We were to place these individuals in a particular setting and write a dialogue that might occur between them.

Everyone brought these papers to the final exam meeting. That session was spent reading them to one another. Since most of us made liberal use of humor in these creations, the meeting was a most enjoyable ending for the course. More importantly, the papers took us in new directions and gave us new insights. They provided, we thought, clear evidence that the kind of synthesis that is supposed to occur in an integrative course had happened.

In the first publication of this article (Volume 4 of this journal) we included four examples of the papers, those written by the two instructors and by two of the students. Here we reprint one of each type. The student, Donald Hundgen, received a BA from Plymouth in 1992 with a major in English and a minor in psychology. He presently runs a successful graphics design business here in Plymouth, New Hampshire.

*      *      *

New Roses for Jude Fawley
by Donald Hundgen

Jude Fawley had gone off on another of his self-mortifying drinking binges. It was like the lines from a poem by A.E. Housman:

Ale, man, ale’s the stuff to drink
For fellows whom it hurts to think:
Look into the pewter pot
To see the world as the world’s not.
And faith, ’tis pleasant till ’tis past:
The mischief is that ‘twill not last.

And poor, wretched Jude did not so readily awake from his perfidious potations. Rather for a while did he linger in the quagmire of his inebriated subconscious, finding himself ensnared within the grasp of a most singular dream.

His eyelids, all sticky and sore, did pry themselves open to yet another darkness from the one they had hoped to escape by opening. He was in a dark, strange room reclined upon a sofa, the structure and material of which he had never encountered in a sober state. The chamber had an odd aroma to it, of clean metal and wood and other substances he could not begin to name. After some interval of bleary scrutiny, he observed, sitting in crepuscular shadows at a very ponderous desk, just barely revealed in the light of a single, small lamp, the shape of a middle-aged woman who was apparently busy at writing something. Being not a little disoriented, Jude contrived a scheme whereby he might attract the attention of this nocturnal apparition. He groaned miserably.

The woman looked up and was indeed startled to behold so disheveled and unhappy a sight as Jude Fawley upon her couch. It was not simply Jude’s identity that surprised her, for she could not clearly perceive this in the darkness, but the fact that anyone at all should be sprawled upon the sofa.

“My goodness!” she exclaimed, She had a slight accent that her visitor could not immediately place. “Now, who may you be?” she inquired. “We are after hours here, and I don’t recall hearing you enter. If something is troubling you, it may be that we can set up an intake appointment for you. As it stands, I am not seeing many people at this time. You see, I am writing a book.”

Jude, who has always had a weakness for books, picked himself up into an erect position on the sofa. “What—what kind of book?” he slurred.
“Neurosis in Our Time” it will be called. It’s really a very serious problem.”

“New Roses? New Roses, you say? In our time? Ah a romance! That sounds very nice,” confessed Jude. “Yes, we do need more new roses. Can never have enough of them.”

“You don’t exactly get my meaning,” said the woman patiently.

“What time is it anyway?” Jude asked.

“It’s late. After hours!” The woman looked just the smallest bit disturbed. Unable to see her company very clearly, she adjusted the lamp so that it cast greater illumination on the setting of their conversation. “Good heavens!” she cried. “You look as though you stepped out of a book yourself! Some dusty Victorian novel!”

“Victorian?” mused Jude. “Now that’s a name that rings a faint bell, though I cannot say why.”

“What is your name?” the woman asked finally.

“Jude. Jude Fawley.”

The woman was silent for a moment. “This is very peculiar,” she muttered to herself. “Your name—is—familiar.” She observed the curly black hair and the wan, desperate look of a character from literature. The clothes were certainly not up-to-date, but then some people fancied antique clothing. “I suppose,” she said, “you are the Jude Fawley of Christminster, and in the acquaintance of—”

“Two very troublesome ladies!” cried Jude, leaping to his feet but almost falling. “How is it you know me and I don’t know you? Who are you?”

“I am a doctor. Dr. Horney, Karen Horney, a psychoanalyst. I know you because I’m afraid you have a rather broad reputation.”

“Is that so!” said Jude, collapsing again onto the sofa. “Now what have you heard?”

“I think it would be more appropriate if you tell me about yourself, because I may have heard incorrectly.”
“That may be true. But you are a doctor, you say? A lady doctor? Ha!” Jude looked amazed.
“I am.”
“And what was that other word? Sicko—sicko—”
“Psychoanalyst.”
“Is that some new approach? It is Christian or more the model of Aristotle?”
“Neither, exactly. Have you heard of Freud?”
“I can’t say that I have,” admitted Jude, scratching his head.
“Sounds German. The Germans are so esoteric. Well, what are you writing about new roses for?”
“NEUROSIS!” corrected the doctor. “It’s quite a serious problem, you know. Actually, you should know very well, Jude, from what I have heard.”
“What have you heard? Has Arabella been to see you?” Jude suddenly looked frightened.
“Ha ha ha, no, no, nothing like that.”
“Where am I anyway?”
“The Horney Institute in New York City. It’s summer and the year is 19—”
“19—! New York City! I seem to have misplaced myself worse than ever!”
“That would appear to be the case, Jude.”
“Damn demon alcohol!”
“No doubt it has played a part. Tell me, Jude, have you made any progress with resolving that—uh—conflict in your life? The two women; and that other matter?”
Jude groaned. “Ah, that is hopeless! Sue has returned to that crotchety old twit Phillotson and Arabella—she’ll sleep with anyone who will marry her and help her pay the bills! Things are as hopeless as ever.”
“It doesn’t sound as if you are very happy.”
“Would you be?” cried Jude. “As to the women, well, they both have their qualities. If only God could work a miracle and
combine ‘em together! As they are they are no good to themselves and no good to me. But why am I telling you all this?”

“It is natural, Jude, to want to resolve such problems and talk them out. I am perhaps the best person to tell your problems to. That’s what psychoanalysts are for, to help people sort out their inner conflicts.”

“Inner conflicts! There is nothing inner about Arabella and Sue! It’s all as plain as day to me!”

“And you have no conflicts inside of you?”

I have a bit of gas and a headache coming on. I believe it’s not quite respectable for me to be here with you—spilling my woes to a strange lady doctor. Lady doctor! I’ve never heard of such a thing! It’s almost as preposterous as that quack we have in our town. Vilbert’s his name. At least he’s got cures to sell. What have you got? Still, I could trust him about as far as I could throw a fit!”

“You are insightful in that, I suspect,” said Dr. Horney.

“Ah flattery means nothing to me. But yes, I’m not the half-wit it would seem. I’ve read a good many books on difficult subjects. I thought I’d be a learned man, once upon a time, but providence has had other things in mind.”

“Are you dissatisfied with yourself?” asked the doctor with a sincere tone.

“With myself? Never! You always bring it back to me! That’s rather unfair of you, just as life has been unfair to me. I was ready to go to Christminster! I would have gone and made a fine scholar! The old churls in their mortarboards wouldn’t have it. Just because I was a poor bloke and had a skill! Why, I built the very roofs over their heads so they could fall asleep reading their fine books!”

“You sound as if you have something to be proud about, but instead you are very bitter, Jude.”

“It’s not what I wanted. I was capable of more. I still am! But no one will have it.”
“Could it be that you are angry because you could not live out your ideal self?”

“Posh! I would have if I could have! Imagine locking someone out of a future course because of a silly prejudice! Jude the stone mason! And you! A lady doctor! That comes close to straightening my curls! These must be different times indeed. I must admit that you sound fairly learned for a woman. Arabella—now she’s got a figure to bring the troops home, but a brain like an empty barrel. If only there were a way to put some of her flesh on Sue, and maybe a dash of her practical sense, then Sue would be an angel! Well, she already is an angel, but—”

“Is she really?”

“Why yes, but—but—what is all this anyway?”

“Sue would be ideal then, wouldn’t she? And it would have been ideal, if only they’d said: ‘Jude Fawley, come to Christminster! You set your aspirations pretty high, and they were disappointed time and time again.”

“Well, shouldn’t one have high hopes?” cried Jude indignantly.

“It is good to have goals, so long as they are realistic, Jude. One must be in touch with reality as much as one’s dreams and ideals. Reality is a very complex thing.”

“Reality, you say! Reality is insufferable, Miss—Miss—”

“Horney. Yes, reality can be difficult. Living in society can be difficult. Sometimes we have conflicting needs, and reality does not make it easy for us. We might settle for a good fantasy. Or go drinking.”

“Fantasy! Fantasy, you say! My life has been more than a fantasy!”

“It most certainly has, Jude. You have touched many people in very real ways, and yet you torture yourself because you can’t seem to make up your mind over these two women, and because you couldn’t go to college. You have a lot going for you just as you are, except that maybe you need to take a shower, stay away from liquor, and talk to someone about your inner conflicts. Did
you know that liquor kills brain cells?”

By this time, Jude was fuming. “Brain cells!” he screamed in anguish.

“You seem to be suffering from a serious neurosis.”

“New roses again!” snarled the man writhing on the couch. “I am going to lose my mind talking to you!” New roses indeed! You are quite the romantic. Sue would like you.”

“Not new roses! Neurosis! That’s a disease suffered by people who are out of touch with their real selves.”

“Real selves!”

“Yes.”

“What’s a real self? How can a self be anything but real?”

“Jude, have you ever felt you were not being yourself?”

“There have been times when I’d have liked to plead that, but it’s always been far too real.”

“Exactly. You are always real, or you always have that potential; but you think otherwise, and you make yourself jump through hoops. You torture yourself with impossible—”

“There you go again with this torture business. It’s not me who is doing the torturing! It’s them! It’s you!”

“Yes, it often does seem like someone else is doing the torturing. That is called psychological projection, a kind of disowning of the self. But you are the one who is doing it.”

“How is it that you know so much about me?”

“I have read your chart, Jude.”

“My chart, where is it? I must see it!”

“It is in every good bookstore and library. You are indeed well known.”

“Oh, my God!” Jude gripped his skull and made a horrifying grimace. “The whole world knows about me?”

“It’s generally not our procedure to be so indiscreet, Mr. Fawley, but I’m afraid that you have come to us a little late. Society has been bold, to say nothing of art and literature. It is mostly the fault of a man named Thomas Hardy.”

“Hardy, you say?”
“I wouldn’t be angry at him. He was just trying to be his real self, but I understand it puts you in an awkward predicament. He’s written quite an insightful account of your life, by the way. I would try to get a copy if I were you. It might inspire you to come back and see me for further conversation. I’ll give you a special rate, because this would be a rather special case.” Dr. Horney paused and watched her unexpected client watching her across the darkness. “I’m afraid our fifty minutes is up. Do you have a place to stay, Jude?”

“Oh, it does not matter,” moaned the wretched figure as he stood up. “If I am as well known as you say, someone is bound to take me in.”

“Indeed, many people have, Jude,” she said warmly. “I dare say you have many sympathetic fans. And there are many people in the world just like you, even today. That’s why I am writing my book.” She rose from her desk and fetched something out of the shadows. It was a book.

“Here is another volume I have written.”

Jude looked at the title. “Our Inner Conflicts. Is this about new roses also?”

“It will tell you all you really need to know, Jude. But do come again. It’s been—it’s been very real.”

* * *

Psychology and Literature Final Exam
by Robert S. Miller

“There will be another joining us in a while. Meantime why don’t each of you three begin by telling the others how you come to be here,” Dr. Horney said and turned to the woman seated on her immediate left.

“I really do not know,” Edna began. “I was swimming. I was feeling at peace. I was feeling a part of the sea. I remembered my father and a man I used to know and then I could smell flowers—
the flowers that bloomed in June by the doorstep when I was a girl. Then somehow I was traveling. A strange woman was my companion and seemed to be taking me somewhere. I was clothed and dry and felt I was soaring through space. The old woman explained I was, and through time too. She said we were going to New York City to the year 1950 to see a doctor. I thought it very odd.”

Nora interrupted, “Why that must have been the same old woman who brought me here. I had just walked out of my house. I stood for a moment outside the door. I was wondering where to go next and whatever to do when she appeared out of the shadows. “Just follow me,” she said. She said a doctor wanted to see me. I thought she meant my friend Dr. Rank, that he must have changed his mind. I hesitated because she was so strange. But then she offered me a macaroon, so I followed her. What a strange old woman she was; I wondered who she could have been.”

“That must have been Mistress Hibbins,” Hester stated. “She has special powers and brought us here also. She seemed to realize I was thinking of taking little Pearl away for a while. The child is now an heiress and needs to learn something more of the world. Mistress Hibbins approached me and said she had just become Boston’s first travel agent and volunteered to make all the arrangements.”

“Oh, was that your little girl I saw on my way in?” Nora inquired.

“Yes,” Hester replied.

“Oh, how I love children,” Nora said. “I have three of my own. We play and play. I’ll miss playing with them. Maybe I could play with little Pearl.”

“As I recall, I have two children,” Edna said apparently to herself. “I think they’re boys.”

“I usually don’t entrust little Pearl to strangers, but she took kindly to that woman at the desk—they’re going to the park. Pearl likes trees.”

“Your Pearl will be just fine,” Dr. Horney assured Hester.
“I’ve made such progress helping Madame Stavrogin develop her repressed maternal tendencies. And she’s a wonderful receptionist—so social. Mistress Hibbins found her for me in Russia—apparently she was leading quite a meaningless life.”

“So Mistress Hibbins works for you,” Hester said.

“Yes,” Dr. Horney admitted. “She showed up here one day and claimed she could travel around time and literature and find interesting people for me to study. I figured she was a harmless narcissist and I’d humor her. So I said, ‘Okay, lady, find me someone who’ll make me take seriously what Freud said about the Oedipus complex.’” The next day in she walks with this guy, Paul Morel. Good grief, such a mother complex! We’ve been at it ever since, Mistress Hibbins and I. It was only sometime later that it occurred to me she could also find me cheap help. Do you realize what a New York employment agency would have charged to find a receptionist like Varvara?”

“Maybe you should explain just why you’ve brought the three of us here together,” Hester said with just a hint of impatience in her voice.

“The four of you, actually—there’s one still to arrive. I’m in the process of refining my feminist psychoanalysis. I’ve broken with Freud in part because of his utterly incorrect ideas about the psychology of women. Why the bias that man himself displayed in comparing male and female development is practically by itself sufficient proof of the existence of womb envy. Penis envy indeed!”

Edna felt faint. Hester stared at Dr. Horney. Nora spoke. “Why, Dr. Horney, what on Earth is womb envy?”

“Nora, you of all people should know, having been married for a number of years to a veritable personification of the concept.” Dr. Horney went on to explain the meaning of the term and presented a convincing argument that Torvald Helmer indeed provided a vivid example. “It seems to me far more likely, Nora,” Dr. Horney concluded, “that Torvald envies you your anatomy than that you envy him his.”
Nora for once seemed lost in thought. Edna fanned herself with a handy medical journal. Hester attempted to redirect the conversation. “Dr. Horney, you still have not explained why you would want to meet the three of us.”

“To study self-realization, of course. The realization of self, one’s own true inner identity, is, I believe, the ultimate goal of human life both for women and for men. It is the central concept in my theory. As I build my feminist psychology, then, I must study examples of women who have achieved this state or are on the way to doing so. Such are hard to find in American society of 1950. Present day American culture is male-dominated. To compensate for their inadequate biological state, womb-envying men make women feel inferior. They establish obstacles to keep them out of the workplace and out of the creative professions.”

Nora again appeared thoughtful, and Edna inquired of Dr. Horney whether a vague sense of *deja vu* was often a side effect of time travel. Only Hester seemed unsurprised by what Dr. Horney had to say.

“The result of all this,” Dr. Horney continued, “is that many modern American women develop neurotic patterns of feeling and behaving. I want to study you, because each of you have overcome obstacles not unlike those facing modern women and have achieved or are on the way to achieving self-realization.

“You, Nora, will be interesting to study because you have just taken the first step necessary in overcoming what for you was a long-standing neurotic pattern of the compliant type. You managed when your neurosis was no longer working to make a sudden break from it. I will be anxious to see where you go from there. You, Edna, much more gradually overcame your own neurotic pattern, the resignation type. I believe it was the influence of your friends Robert and especially Mademoiselle Reisz that brought this about.”

“Mademoiselle Reisz?” Edna asked quietly.

“Yes, my dear,” Dr. Horney said. “She was the very first to provide you with the kind of unconditional regard so often associ-
ated with growth.”

“And as for you, Hester. You interest me precisely because I do not yet know where you got your incredible sense of self-realization. I know only that it is so strongly established that it has withstood remarkable threats to its existence. I’ll be especially interested in comparing you, Hester, to the fourth member of this group, who is like you in many ways. She too seems to have always known exactly who she is and how to maintain self in the face of any adversity. The comparison will be fascinating, however, because each of you has such a different sense of self.”

Before anything else could be said, the door burst open and in rushed little Pearl.

“Oh, Mother,” little Pearl cried. “Madame Stavrogin has just introduced me to the most interesting woman. She is out there at this very moment, and, Mother, you must watch what she has taught me to do. Look, Mother, she has taught me to make dimples.”

(1997)

Afterword

by Henry E. Vittum and Robert S. Miller

Despite the success of this assignment, we never used it again. That first semester there were only nine students enrolled in the course. Since then there has always been 25 to 30, too large a number to accomplish the oral part of this assignment in the final exam period. Therefore, for practical reasons, we replaced the assignment with an essay exam, albeit one that always included one or more questions inviting the kind of creative writing of this first assignment.

Revisiting this article in Spring 1997 made us regret our
practical decision, and we resolved to find a way to adapt the original assignment to a larger enrollment. We considered several possible mechanisms for doing so, and decided finally to have all participants, students and faculty, write assignments in anticipation of the final exam meeting. This time we decided each person would write a short short story and a critical essay analyzing the story in terms of literary and psychological considerations.

The 26 students have been working in four groups of six or seven all semester. At the final exam meeting, members of each will read their stories and essays to the group, and the group will choose the best to share with the rest of the class. The meeting will end with the four chosen students and the two instructors reading their works to the entire class. We are hopeful this new assignment will recapture the excitement of that first one.
A Journal Revisited

Russell Lord

In my classes journals have lately become one of several innovative tools to develop fluent and reflective writing. I hesitate, however, to advocate too great a control over their subject matter or their method and effectiveness. To be sure, they need to be encouraged and “checked” periodically to keep many students active; but just how far to carry this oversight becomes problematic, and I believe that in this case like Thoreau in “On Civil Disobedience,” perhaps the best government is no government at all.

I say this with good reason. Recently I looked back at a series of diary journals I kept during preparatory school and college years, in which I freely expressed, without thought of audience or constraint, but with several gaps, observations and judgments during the period from 1938 to 1945. Motivation for these records is not hard to understand. Probably the initial reason for keeping them was that around Christmas time, a local insurance company kept giving my father fine leather diaries which I hated to see wasted. Perhaps a stronger motive was the desire to preserve a record of what was to be (I felt) a remarkable life.

In reading over the record for 1941, a critical year in American history, I have discovered an account of growing intellectual
awareness, but at the same time, a critical self-analysis that becomes almost stifling in retrospect. On the periphery is the developing awareness of World War II, which ascends in influence, and then for a time diminishes as personal concerns replace it. I shall cite a chronological selection of items from the year, my own second-semester Upper-Middler (Junior) and first semester Senior years at Andover (note: the following selections are quoted verbatim, although spelling and punctuation have been normalized):

* * *

**Year: 1941**

January 4: School is looming nearer. . . I shall be sorry. . . to begin again the long grind....

January 12: Practically all the American news of this time is about defense. President Roosevelt is now trying to get power of leasing arms to Britain, etc. There is much dispute over whether he is trying to become a dictator.

January 19: [On the radio] I heard Joseph Szigetti, a violinist who sounds, to me, perfect—without a single flaw.

January 24: I went to the concert given by Mischa Elman after supper—it was the best violin concert I have heard; though he is perhaps not the best violinist, for he made a few mistakes. However, his playing, in general, is masterly.

February 4: . . . I cannot help feeling that Hitler has some plan, which will not be long in coming, and against which England will have a hard job to stand up.

February 17: I spent all evening in reading Maurois’ “Ariel” (a life of Shelley). (It took me 4 1/2 hours). My first impressions are that it is very good.
February 23: After supper I went to see a large fire, which entirely consumed a small factory: said to be recently hired by the government. Perhaps sabotage? This was the first real fire I have ever seen, and it was an awe-inspiring sight. Think how London must look, with several fires larger than this, every few nights.

February 27: I finished Strachey’s “Queen Victoria,” the best biography I have yet read.

March 2: I have only 1 1/2 weeks till vacation, thank goodness. It is always the looking forward to a vacation which is better than the vacation itself; at least in my case.

March 11: The Lend-Lease Bill, for all out British aid, was passed today.

March 15: President Roosevelt this evening spoke on our aid to Britain in a clear speech.

March 20: I read in the evening, finishing the following plays today: Sidney Howard’s “They Knew What they Wanted,” George Kelly’s “Craig’s Wife,” Paul Green’s “In Abraham’s Bosom,” and Elmer Rice’s “Street Scene.” I liked the second and last best. The first was too ordinary, and the 3rd too gruesome.

March 25: Yugoslavia has joined the Axis: Greece beware! I have been planning all vacation to go on a trip to New York Friday with Mr. Baldwin. I would go on a boat with Dad, but now mother says I cannot go—I would pay my own way, but Dad has to accompany me (I am not capable of going myself?), and it would cost him too much. I suppose it is wrong of me, but I still want very much to go there for the first time.

April 18: The Yugoslavs have surrendered and the British are
being pushed back in Greece. Slowly, but surely, this country is approaching war. Our history teacher predicts that by the end of the year, we shall have entered it.

April 26: On the way home 1 cigarette—the first since summer.

May 1: The British are said to have saved 80% of their troops in Greece, by a second Dunkerque; but I fear the Suez Canal is in grave danger.

May 5: Although many are speaking against Lindbergh, I believe that it is right for him to be allowed to speak his views—defeatist though they may be.

May 9: The apple blossoms are out, and these, mingled with lilacs and many other flowers, make the air very fragrant.

May 12-16: Concern with Hess’s flight to England. My conclusion:
“... Hess probably came to England because he disagreed with Hitler’s joining the Russians.”

May 25: The “Hood,” the greatest English battle-cruiser, was today sunk.

May 28: The President made a historic speech last night proclaiming us in a state of emergency: War is soon here.

June 9: After supper I went to the Competition in musical instruments. I played the first movement of Mozart’s E flat Concerto, and they say I did well (for me), but, since they wanted to give the prize to a young beginner, Graham, I got none.

June 17: U.S. and Germany broke off diplomatic relations yesterday.

July 28: Well, today I started out on a new experience, that of
assistant dishwasher at Langsford House, a hotel of about 110
guests, at Cape Porpoise, Maine. We arrived at 11:15 a.m., and I
got right to work. They have an electric machine, so that we
merely have to stack the dishes.

August 7: I am having a very good time here, but I would not want
to live like this very long, for there is nothing constructive to do
in your spare time.

August 9: Today after the breakfast dishes, one of the boys
(Charlie Beattie, a bell boy) was fired for stealing a bracelet and
some money. As a result the dishwasher became a bell-hop, and I
became the chief dishwasher; I receive $7 per week now.

August 14: Roosevelt and Churchill, it was announced today, had
a secret (?) meeting and formulated an eight-point peace program.
This is a momentous meeting, but we will not feel the effects of
it for a little while.

August 19: My present philosophy of life is this: We are all given
certain abilities. We are supposed to use these as well as we can.
The purpose of life is to see how well we can use those abilities,
however slight they may be.

August 31: All phases of life and art are concerned with develop-
ing a theme.

September 9: Today it was learned the Germans sank an American
ship in the Red Sea and one in the Atlantic. Added to the Greer,
these could seem to show that Hitler wants U.S. at war.

September 18: I saw, this evening, the Northern lights. But, unlike
the customary appearance, these were of all hues, like huge
candles, from all sides, even the south. At times they formed a
vault, which covered the entire sky with streaks and shimmering
light. I have never seen them as clear.
September 25: An example of the lower living standards necessitated by the decrease in ability to buy the metal products desired, brought about by the war, is brought home. This morning our water boiler broke. We cannot get a similar one except by an order that may take many days to fill. The only way we can get one now is to buy a more expensive one which the gas company has in stock.

October 1: The unrest in conquered Europe is steadily mounting. Beware Nazis!

October 2: I thought, today, that common sense must enter into any argument; that logic alone is not enough, for things do not always occur as we would expect. Instead, ironically, they often happen the way that no reasoning would reach.

October 5: I today wondered if anyone on earth could ever be truly happy; I think not. They can’t because the future is uncertain, and for complete happiness security is necessary.

October 9: I have almost made up my mind to write on this question for my 1500 word English Essay: Is anyone ever truly happy?

October 11: Mr. Blackmer, my English teacher, seems to me to have the elements of greatness. He is absolutely logical, he is thorough and fair; but, above all, he is a human being.

October 16: The Germans are pushing on to Moscow. They have captured Odessa on the Baltic, and are, all along the 2000 mile front, advancing. Japan, the sly fox, is now probably going to actively join the Axis because she wants to be on the bandwagon. October 17- Today Germany torpedoed an American destroyer!! and America passed the bill to arm merchant ships. That the U.S. will enter the war is almost inevitable. It is up to Germany how long she will stay out.
October 18: After studying I went to Boston to the Symphony for the first time in my life: It was excellent, and since I had a seat near the front, I could see Koussevitsky’s mannerisms very well. The program was fair: a Mozart symphony (the Haffner), the initial performance of William Schuman’s 3rd Symphony and Tchaikovsky’s 6th, but the playing was superb.

October 23: Boston was, today, made the clearing port for all ships from the U.S. to Russia. The night curfew on gasoline, too, is to be lifted, since Britain has returned 40 tankers she had been using.

October 27: Roosevelt made a speech at 10 p.m. in which he tried to arouse us against Hitler. It was not constructive, however, since it merely gave again what he has been repeating for months.

November 2: The leaves are almost all off the trees now, though a few remain like tattered rags to flap in the breeze. We are nearing war. Another American destroyer was sunk a few days ago, but Germany claims this ship attacked her sub first.

November 8: In the evening I went with a group of English classes to Boston to see Maurice Evans in “Macbeth.” The scenery and presentation were excellent and the acting of the majority superb, especially Macbeth, Lady Macbeth and the gate-keeper. The only criticism was that the music, consisting of organ and muted trumpets, was “corny.” This is the best play I have yet seen (I have seen only 2 other actual professional ones).

November 11: I do not believe that a person should be lauded for his abilities; instead, for what he makes of those abilities which he does possess.

November 13: The repeal of the Neutrality Bill passed Congress today. We shall soon be in war.
November 14: After supper I studied, practiced singing and violin and finished Shaw’s “Saint Joan.” His genius is obvious in this play, a magnificent work.

November 15: After dinner I went with the Elliots (Gordon was kind enough to invite me to go with him and his family, except for Mrs. Elliot) to Exeter to watch the great Andover-Exeter football game. We won by the close score 14-13. After getting home (we were lost for a while on the back, and found ourselves in Newburyport), I had supper, then went to my second Boston Symphony concert. I enjoy them a great deal.

November 18: We had been planning to have Dorothy, Priscilla and Rossy here for Thanksgiving, but we called it off. It seems to me that this family never invites anyone to the house, with the result of a missing freedom of action when we are among other people; a reticence and shyness which is exhibited by all of us except John [my brother].

November 19: After dinner I practiced, then went with May [my sister] and Gordon [a friend mentioned above] to see “La Femme du Boulanger,” (“The Baker’s Wife”) a truly great motion picture entirely in French, with English captions. The greatness of the picture lies not in an exceptionally original plot (a baker’s wife runs off with a shepherd, but eventually returns, repentant) but in its intently potent picture of the suffering of the boulanger; indeed in its portrayal of true life. It is unlike the usual Hollywood productions, for it presents a view of actual life, without artificiality: it is the best movie I have ever seen as an approach to art.

November 28: I had to miss a lecture by Margaret Bourke-White, one of the most famous photographers in the world, because of my theme on “Ability: Its Significance in Success.”
December 1: I finished Tolstoy’s great novel “War and Peace.” War with Japan will occur unless Germany suffers a defeat which is impressive enough to make Japan doubt whether the Axis can really win.

December 4: Dr. Darling [history teacher] is an extraordinary teacher. He realizes the dynamic power of certain historical facts and tries to impress them upon us. He has not once become angry at one class, although he keeps us alert every second of the time.

December 5: Japan is threatening even more to be a source of conflict with the United States and Britain. Since the Germans have not yet made her sure of success against Russia, Japan is holding off. But, I believe, when Moscow is taken we had better look out; for Japan will not.

December 6: After dinner I spent my time preparing for our annual trip to Roger’s Hall in Lowell. We gave a moderately successful concert and then met our partners, ate and danced. A Lowell girl whose father is a jeweler, Millicent Cotter, was my partner. Although she was only a Sophomore, nevertheless she was a very likable girl, and I enjoyed the evening with her. I was not impressed with any other girl except Joan Thomas, my first year’s partner (3 years ago), who is now president of the school, and I danced a few minutes with her.

December 7: Clear-Cloudy and Cold: 20-40 F. It has happened! We are in the war! At 2:22 p.m. today Japan declared war on the United States, and, before that, bombed Pearl Harbor, killing 300 American soldiers. I was wrong in believing that Japan would wait until Moscow fell. But, I cannot see what she gains by this attack, except perhaps to draw American resources away from Europe, under Hitler’s orders. My own reactions are as follows: I have no hatred for Japan; I have no liking for the war; I am excited, but not outwardly; I cannot realize how much the war will affect me.
personally. There was a large fire in Lawrence today. I saw the engines pouring water on the Brocklman Market Building and I saw the Central Building; both shells in the upper floors.

December 8: As was expected, we today declared war, by a resolution of both Houses, against Japan. Roosevelt made a speech at 12:30 p.m. to which the entire school listened before the resolution. It seems, sad to relate, that the Japanese had planned this war well, for they have attacked nearly all the Pacific Island possessions of the United States, and have greatly damaged Pearl Harbor. In Europe, the Germans have given up hope of capturing Moscow before spring a piece of good news.

The war is having a decided effect upon us as students. Aside from taking away our interest in our subjects, it causes a highly keyed excitement which the slightest unexpected occurrence will aggravate and cause I don’t know what results.

December 9: Today the East Coast had an air-raid scare. Somehow the rumor of enemy planes attacking circulated so that all precautions were taken: schools let out (even we had no athletics), traffic stopped, factories let out, stores closed, etc. There was great excitement, but everything was carried out systematically except for a few untrained people making it harder. When it was found it was merely a test, some felt really disappointed; I did.

December 10: We are beginning to become used to the war. A great change has come, however. We have an enemy now, and we are using means of getting the public anger aroused. The word “Jap” is used, with a disdainful sound; 3 new songs have come out against the Japanese. There are pleas for everyone’s help in the defense. Now, I believe that these measures are justified, although I do not like them; for I can see that we are beginning to lose our self control. We are losing the war, however, at least, both our ships and British ships are being sunk rapidly.
December 11: Today, after Germany and Italy declared war on us, we declared it on them. How fast events are taking place. It is impossible to realize the extent of the implications of this war. If we should lose, which I cannot foresee unless Russia changes her side, it would be truly terrible. But, meanwhile, we have to continue to study.

December 13: At assembly today, sheets of instruction about what to do during air raids. I hope they will not come to be needed. I hear, too, that the infirmary is to be used as a hospital for the town in case of air raids, with beach wagons as ambulances. The war itself seems to be progressing very favorably. It is strange, but I feel that it is impossible for us to lose. I feel as if the Axis is the “underdog,” and almost pity them in looking ahead to the results of a victory.

December 14: For the next 3 days I shall have to delegate the War to a secondary position while preparing for exams.

December 22: After dinner I went skating at Gordon’s. At 4, Gordon and I went to Lawrence and from 4-7:45 we were at the Lawrence District Air-Raid warning center. There we received one good check call from the Boston line. But, Gordon accidentally pushed down all the buttons on the telephone, thus locking them and throwing the telephone out of order. On the 2nd check call, therefore, we could not report back. We had to go through a great deal of worry until a service man fixed the phone.

December 24: This Christmas is to be my first War one. There is an atmosphere of recklessness. “This is our last chance to have a good time, so let’s make it a good Christmas.” And, that feeling may be justified, for we are beginning to feel the effects of the war. A 10% tax is on practically all luxuries and even some necessities;
and, besides, dealers are running low on stocks which cannot be refilled.

December 26: Today Winston Churchill addressed the combined Houses of Congress in an expression of Anglo-American unity, at the same time voicing the optimistic view that we shall win the war, although this will entail much hard struggle. I was for 3 hours an air raid spotter of planes at the Andover listening post. We report all planes seen or heard to the army in Boston. The work of preparing New England for air raids is going ahead steadily, and if there can be a few more weeks, we will be fully prepared.

December 31: After dinner I went to Lawrence and had some pictures taken for my Harvard application. I then practiced. In the evening I went to MacFarlan’s and, after taking a while, took Margaret to the midnight show at the Playhouse. This is the first time I have ever taken a girl to a movie that I remember, and I enjoyed welcoming in 1942 in that way. As for Margaret, I cannot tell yet how well I like her. It is queer; I cannot understand why I should suddenly start seeing any girl so much.

* * *

It is doubtful whether the selections above would have been written for an assigned journal. Several tendencies of teachers (myself included) would work against the spontaneity which such expression required. First, the very fact that the material was required would dampen the enthusiasm for direct self-expression. Second, and even worse, if a specific assignment were made requiring, say, a reaction to a play or a book, it would stifle somewhat the enthusiasm which free choice makes. Third, some observations (like those made about teachers) would hardly be expected in a journal to be passed for a class.
Yet I see no real cause for alarm. Journals for the classroom might, indeed, encourage students to continue on their own, in their own way. Thus they might become the catalyst for some future Pepys or Evelyn.

(1996)

Visiting a Revisited Journal

After re-reading the article I wrote for Volume 2 of the Writing Across the Curriculum Journal for 1990, I have had almost seven years to test my hypothesis that writing a journal should be a spontaneous, not a specifically assigned expression. I confess that I have not fully adhered to my own advice, and finding the journal a convenient agent for assuring homework assignments, I have frequently assigned as entries reactions to readings, or classroom activities. I suppose I should feel guilty of expediency; but I rather think I have been acting pragmatically, since journals in classrooms provide one of the best ways to encourage involvement by an entire class in assignments otherwise not assured of universal acceptance.

I am still hoping to put the original concept of the journal into the classroom. Perhaps it would best fit in a class devoted to writing non-fiction, as one mode of self expression. In this context it could be left entirely free. Perhaps in such a class we could supply each student with a colorful blank book to encourage the writing of colorful prose.
WAC works in strange ways. I got involved in Writing Across the Curriculum to help my students understand statistics. I still think that is essential, but I certainly have not had any recent breakthroughs in how to do it. What does strike me in looking back at the past decade is the change in the role writing has in my professional life. To my surprise, I have become a writer, a member of an Editorial Board, an Associate Editor and Coeditor. One thing special about the Writing Across the Curriculum program at Plymouth has been its encouragement of the faculty’s own professional writing. Let me tell you about some of my “adventures in writing” during the past ten years.

I came to Plymouth in 1985, four years after receiving my Ph.D. I had already published the obligatory paper based on my dissertation research. I had even had two rather peculiar commercial successes with my writing. First, someone had ordered a copy of my dissertation from University Microfilms, who then sent me a royalty check. Thus, I joined the select few who have ever made any money from their doctoral dissertation! Then a publication whose name I can never remember asked me to do a guest editorial based on my dissertation. In my own mind, I always call this
publication “The Chronicle of Lower Education,” since it performs a function similar to our own Chronicle, but for lower educational levels. They actually offered to pay me for my writing! This is all the more surprising in that my editorial never appeared. A new editor took over while I was writing the piece. He was not interested in publishing it, but felt obliged to pay for it, so then I joined the select few who have ever been paid for an unpublished work.

Despite these freakish commercial “successes,” I came to Plymouth wondering how much writing would be required for promotion and tenure, and what I could possibly write about. My piece in the 1989 PSC WAC Journal, “Using Writing to Improve Student Learning of Statistics,” was my first publication as a faculty member here. Eventually, it was rewritten for a total of five different audiences. One of our Composition instructors asked for copies to illustrate the idea of “writing for your audience.” One of these versions appeared in a collection of papers on using writing in teaching mathematics that was published by the Mathematical Association of America in 1990. That was my first “off-campus” publication as a PSC faculty member.

At about that same time, I taught an off-campus statistics course for high school mathematics teachers with Farid Kianifard, a tremendously energetic young statistician who was with us at the time. Even though the course itself was not a great success, he insisted we should write up our experiences, both good and bad, and submit them for publication. It seemed unlikely to me that anyone would be interested, but Farid’s enthusiasm was infectious, and we did get a paper written. For a while we were deadlocked over where to submit it. I wanted it to reach teacher trainers, though I was not sure what journal would be appropriate for that purpose. He wanted to submit it to The American Statistician,
which he felt would be the most prestigious place for it to appear. Eventually I let him have his way, figuring that I would get to submit it to my choice of journals after it was rejected by his. Unfortunately, *The American Statistician* accepted it with very minor changes, and it appeared in November of 1992.

In August of that year, the American Statistical Association had its national meeting in Boston, and I contributed a survey paper on using writing in teaching statistics. For the literature search, I used national databases which I accessed with the help of the staff of Lamson Library. This gave me access to many resources I would not have had locally, and I was so enthusiastic that I wrote a brief note on the process and distributed it electronically to a group known as the “Isolated Statisticians” — mostly statisticians teaching in small colleges without a statistics department. One of the staff of the database I used saw it, and asked to publish it in the newsletter they send to subscribers to their service. This was the first of a number of pieces I have put on the Internet that eventually found their way into print.

In addition to getting paid for an article not published, I have also had published an article not submitted. In March of 1993, my colleague Bill Roberts and I gave a presentation to school mathematics teachers at Keene State College. By then I was regularly thinking of translating my professional activities into writing, so Bill and I prepared a written version of our talk to hand out to those in attendance. As it turned out, we were scheduled opposite Dick Evans — a very popular speaker with that audience. As a result, we had many copies of our paper left over after the talk. I offered the remains to people on an Internet mailing list devoted to statistics education. To our surprise, the demand far exceeded our supply. Not feeling brave enough to tax the Mathematics Department’s copying budget still further, I prepared an electronic
version. Months later, Dick Evans congratulated Bill and me on our publication. When we asked, “What publication?” he showed us a copy of a newsletter Texas Instruments sends to teachers using their calculators. In it we found the electronic version of our paper! To this day we do not know how or why it was published.

This work with high school teachers led to my first books. The Connecticut Business and Industry Association received a grant from the National Science Foundation to produce a series of innovative high school mathematics textbooks. Most NSF grants I have worked with were submitted by the team who would actually do the work, and they were usually a group of like-minded people who had already collaborated. In contrast, the CBIA got the grant and then hired writers to produce the books. One fellow that they hired seemed to have a very bad case of writer’s block. He had produced nothing during the school year, and as the time for the intensive month-long summer writing session approached, the CBIA reluctantly concluded that he never would produce anything. A last minute replacement was sought. By a complicated chain of connections whose every link I still do not know, a friend of a friend sounded me out on this position. I interviewed for the job on a Friday. The following Monday, the summer writing session began with me as part of the team. It was a “trial by ordeal” of 60-80 hour work weeks, but a chapter did emerge at the end of the month. I eventually wrote about a third of the ninth and tenth grade texts, dropped out for a year, and am now revising my chapters in the hope of commercial publication. In the meantime, the materials are in pilot use by about 7000 students, mostly in Connecticut.

I have mentioned collaborations with faculty colleagues. Last spring, I was fortunate to collaborate with a very talented student, Michelle Lamarre. For years I have had students working on a study of the statistical training of future teachers. Because of my
involvement with textbook writing, the data they gathered was itself gathering dust. Michelle expressed an interest in working with it and did a superb job of analyzing it. She presented her results to the New England Statistics Symposium in April and to the Northeastern Section of the Mathematical Association of America in June. We worked together on a written report which we submitted to the *Journal for Statistics Education*. Reviews from the three referees pointed in three different directions, but the editor was encouraging. Michelle has graduated and gone on to bigger and better things, and I have been very busy with other projects, but I hope we can finish that paper and see it “in print.”

The *Journal for Statistics Education* is a relatively new electronic journal, and its papers never do appear “in print” unless you print them out yourself. Once the journal was up and running, the founders established an Editorial Board with a revolving membership to carry on the journal’s work. I have been a member for a year or so, and now I get to complain about other peoples’ writing. Alas, the review process is double blind so my position on the Editorial Board will not help to get my paper with Michelle published. Starting in 1997, I will be coeditor of a section of the journal called “Datasets and Stories.” Here we present examples of data, and the story behind the data, that may be useful in teaching statistics.

In addition to the papers mentioned above, I have also been writing reviews for *The Statistics Teacher Network* and *The American Statistician*. The latter journal has long had a section entitled “Accent on Teaching Materials” which has been very dear to me because it provides a place for reviews of all the many nonbook things that might be of use to teachers. As one example, I reviewed the Internet’s statistics education e-mail list, EdStat-L, for this journal. I have already mentioned the Internet a number of times. If this article could be described as “How WAC Changed
my Life,” it could just as well be rewritten as “How the Internet Changed my Life.” The Internet provides a way for faculty at the smaller, poorer, or more isolated institutions to participate in their professions. I hope Plymouth will continue to enjoy the access and support (a.k.a. Frank Olcott) I have enjoyed in recent years. These resources are a new thing in education, and few journals have a section for reviewing e-mail lists. I am very glad that *The American Statistician* provides a home for such oddball reviews. Starting this month (January 1997), I will be the Associate Editor of that journal responsible for these reviews of “miscellaneous stuff.”

Ten years ago I wondered if I would be writing at all at PSC. Today, writing is a major part of my professional life, and Writing Across the Curriculum has had an important role in that development. It is obvious that good luck has played a major role as well — you usually *do* have to submit a paper in order to get it published! Still, I feel I have learned some things that might encourage the writing of others. First, I found it was much easier to get published than I ever imagined. If you are doing anything interesting, I encourage you to write about it. Chances are your colleagues will find it interesting, too. Often the real problem is figuring out where to submit the result. Graduate school taught us about the research journals in our fields, but PSC cannot afford to buy each of us a cyclotron to pursue research on fundamental particles. Publications aimed at high school teachers in our own field may be much more accessible. Don’t overlook publication outside the academic world. Several of the writing activities I described above were sponsored or published by commercial entities. While none of them led to a place on the *New York Times* bestseller list, I think they were all effective in reaching their appropriate audience. The role of writing in fundamental research is to inform our colleagues of what we are doing in the laboratory. For those of us who are primarily teachers rather than researchers, it is just as important to write to share what we are doing in the classroom.
Using Writing to Improve Student Learning of Statistics

Robert Hayden

This paper discusses student writing assignments (and my goals for same) in Math 230, Introduction to Statistics, and Math 330, Applied Statistics Using the Computer. What I have done can most readily be extended to other courses in which mathematics is applied to the world around us. It can less readily be extended to courses in pure mathematics or to courses that stress computational techniques or algebraic manipulations.

I want to begin with some discussion of the reasons why I feel a need for writing assignments. This is as much directed at those already convinced of the importance of Writing Across the Curriculum as it is at those who are unconvinced. In talking with the unconvinced, I often find disagreements about the goals and nature of education to be the key differences. Even among the convinced, different sources of conviction lead to different writing assignments with different goals. By making my goals explicit, I hope to stimulate interest among the unconvinced and reflection among the convinced.

Let me tell you about the experience that first showed me the need for student writing in applied statistics. I had written an
examination question that required my students to do a hypothesis test. It ended with a poorly worded question that students interpreted in a variety of ways. Some simply provided the results of their calculations along with a number they had extracted from a statistical table. Others included some jargon about “rejecting the null hypothesis” while others stated a conclusion in more practical terms such as “the tested drug is probably more effective than the standard treatment.” Some students provided two or even all three of these responses. In fact, all three constitute restatements of a single fact in different language. Unfortunately, I found little or no correlation between the different answers of students who gave multiple answers. If the numbers clearly indicated that the null hypothesis should be rejected or the treatment declared effective, students were just as likely to say the opposite.

Reflecting on my students’ answers, I reached a number of conclusions.

1. Since their final conclusions were no better than what they might have reached via a simple coin toss, all the complex computations I had taught them were of no real value.

2. My students’ lack of understanding was mostly no fault of their own. Their textbook spent pages and pages showing them worked examples of how to do the computations, but far less space discussing what the computations meant. Exercises asked them to perform computations but rarely asked them to explain their results. Nor were they ever required to select an appropriate technique. The appropriate technique was always whatever technique was described most recently. This led to some serious thought about what my students needed to learn in a statistics course, and how I might help them to learn those things.
I next asked myself what my students were likely to need to do with statistics after graduation. I tried to order these needs on the basis of how many of my students might have them. I hope you will pardon my listing those needs here, because they are relevant to all kinds of “book learning.”

1. Virtually all of my students would need to evaluate quantitative information presented to them in newspapers, at zoning board meetings, by their doctor, or by numerous other sources. These students need to know what a mean or a standard deviation is or means. They need to know the strengths and weaknesses of these numbers as summaries. They need a healthy skepticism toward quantitative claims.

2. A smaller group of my students would need to evaluate the meaning and propriety of more technical statistical techniques that might be used by researchers in their own field.

3. A still smaller group of my students might need to evaluate statistical work done by subordinates or provided by consultants.

4. A very small group of my students might actually carry out a statistical study themselves. These students would certainly need to know how to pick an appropriate technique. They would almost certainly use a computer to carry out the mechanics of data storage, editing, and analysis.

5. An even smaller number of my students might one day need to carry out a large scale statistical study while stranded on a desert island, or at a remote wilderness location, or in some other situation in which a computer would be unavailable. These students would need to know how to perform the computations by hand.
If we look at most statistics books, and most statistics courses, we find them organized as if my last group of students were the norm. Indeed, the whole pyramid is inverted. Few textbook problems deal with meaning or interpretation rather than computational technique.

So, I resolved to try to spend more time on meaning, evaluation, and interpretation. However, my new found idealism was tempered by a basic fact of schooling: the students won’t learn anything that does not appear on the exams. The simple conclusion is that questions involving meaning, evaluation, and interpretation must appear on the exams. Once we reach this conclusion, the need for writing is obvious: the answers to questions of meaning, evaluation, and interpretation are verbal, not numeric. Thus writing becomes not just another subject to teach, nor even a tool for achieving traditional goals, but rather a necessary path to developing higher-level quantitative skills.

These, then, are the values and experiences that have shaped my interest in Writing Across the Curriculum. Let me now deal with some of the practical problems of implementation. The most important piece of advice is: **start slow**. Your students have had an average of 14 years of experience with teachers who preached the importance of higher level skills but tested only on memorization and manipulative skills. Your best sermons will therefore have no effect, and your students will all fail that first exam when you ask them all those questions exercising skills they have never developed. You will become discouraged, curse their stupidity and your own idealism (how silly at your age!), and return to rote drill. Actually your students can do far more than you imagine, but they need your help. There follows some advice on providing that help. Bear in mind that it is based on all of the above. If your reasons for using writing assignments differ from mine, you may prefer a different approach.
The first thing you need to change is your teaching. De-emphasize mechanics. Assign only enough computational problems to get the ideas across. Keep the numbers very simple. Encourage the use of calculators or computers for any computations beyond the bare minimum needed to grasp the concepts. Spend lots of class time on interpretation and meaning.

Next, provide sample test questions! This communicates the nature of your expectations and the fact that you are not kidding. Once you have taught the course this way a few times, you will have a bank of old exams. Share them freely. Let students see for themselves that you really do ask embarrassing questions on exams. Distribute these old exams well in advance. Students cannot change their study habits the night before an exam. Indeed, you will find that they will initially, but very strongly, resist changing their study habits at all. There really is not much you can do about that except to fail those who do not perform at the level you desire. Things will improve as word gets around and students enter your class with expectations already tempered by your reputation.

Then there is the matter of writing exam questions. Start small. Problem 1 on Exam 1 should not be

Compare and contrast the methods, assumptions, uses, and histories of parametric and nonparametric statistical techniques, giving special attention to their impact on the methodology of the social sciences.

A more reasonable start might be

For the data 3,1,4,1,21, find the mean, mode and median. Which of these would best summarize this data? Why?

Since I am hoping that many of my readers do not teach statistics,
I do not want to give a large number of statistical examples. The principles should be clear.

Keep in mind that the main goal is to force the students to think. Forcing them to write is just a tool, a way to hold them accountable for thought. You do not have to make them write a lot of words as long as you get them to think a lot of thoughts. One-sentence answers may meet your goals. Also keep in mind that reading and writing may often be interchanged. Instead of asking students

Find the slope in $y=2x+3$.

Or even

Interpret the slope in $y=2x+3$.

You might ask

How much does $y$ change for a unit increase in $x$ when $y=2x+3$?

Now the answer is a single number—much easier to grade than a student written sentence or a paragraph on the subject.

Sometimes teachers are discouraged by the quality of writing they get or discouraged from asking for writing by fears of what they might get. In my experience, lack of mastery of subject matter will far outweigh any writing flaws. Indeed, you may discover that your students know far less than you thought about the meaning of those numbers you taught them to calculate. This can be taken as a sign of either the futility or the importance of your work, depending on your outlook on life. You should work on teaching your discipline until the content of the answers is better than the expression. In the process, you will find that the expression improves by itself. No one communicates well when they have not
the faintest idea what they are talking about.

Yet another issue is grading student writing. Here my solution is as simple as it is radical: don’t. I grade them only on such knowledge of statistics as they are able to communicate to me. As long as their mastery of the mechanics is good enough so I can understand what they are saying, they can get full credit. The only grammatical advice I ever give is, “Never start your first sentence with a pronoun.” Many of my students are as anxious about grammar and punctuation as they are about statistics. For better or worse, I try to handle things so they never notice they are in a “W” course. My exams are meant to reflect what statistics is all about, not to reflect what writing is all about.

However, there are some things on the border line between statistics and rhetoric that I do take into account. I prefer short, direct answers. (Often students are amazed at how short an answer I will accept.) Ambiguity or vagueness is taken as a sign of uncertainty and costs points. So do irrelevancies. I insist that students read the question carefully and stick to it. Indeed, the biggest problem I find (other than lack of knowledge of statistics) is failure to answer the question asked. This, of course, is a problem of thought rather than syntax.

I have been writing as if all the writing I require is on exams. That is very nearly true. Remember that I am trying to find ways to get students to think and ways to hold them accountable for thinking, and exams are the ultimate accountant. I have experimented with projects where students analyze a set of data and write up a report, but I have not had a great deal of success with this. Just worrying about what the numbers mean is a wrenching change for many students. Asking them to consider the meaning of dozens of numbers and integrate them into a report is really too much to ask. Perhaps this will change as other instructors, especially those
in the high schools and grade schools, start to emphasize meaning and interpretation.

Perhaps I should close with some sort of “evaluation” of the success of what I have been doing. This is impossible. I have no idea of what students thought a standard deviation meant before I started asking them. Based on their answers during the brief transition period, before they expected such questions on exams, my suspicion is that it never dawned on them that a standard deviation had a meaning. It was just a cue-word used to Pavlovically stimulate a certain computation. On the other hand, I have often noticed that mathematicians and statisticians are among those least compelled to quantify everything, perhaps precisely because they do know the meanings of numbers—which entails knowing which numbers are meaningless. For me it is enough that today much of my students’ attention is directed toward the parts of statistics that I consider most worth knowing. A decade ago almost all their attention was devoted to the parts least worth knowing. I cannot quantify that change, but I can tell you it is a very important change, and a change that could only have been brought about by making students write.