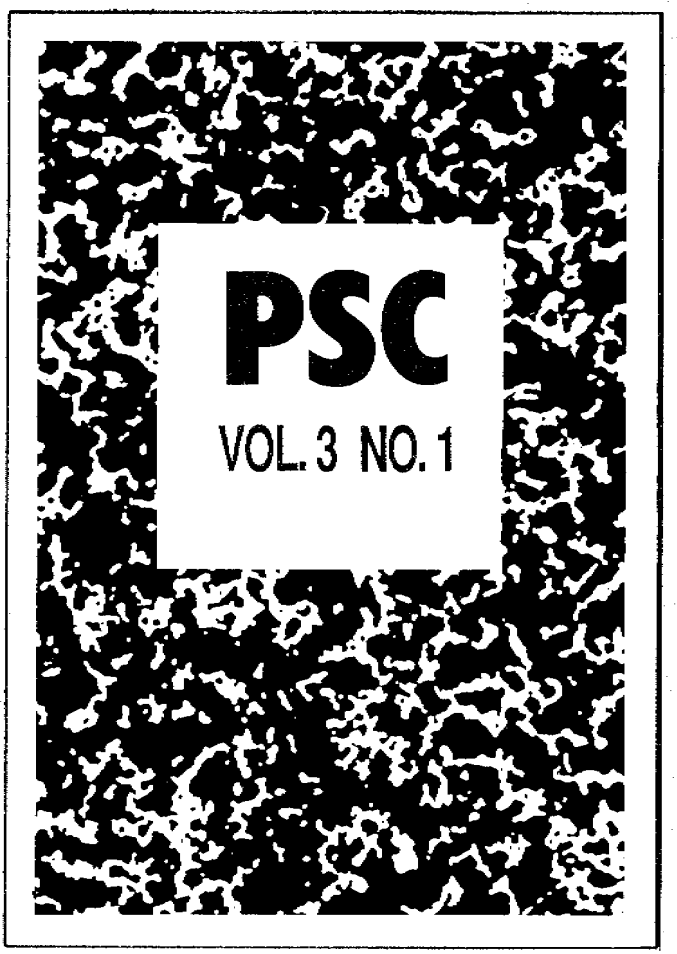
Writing across the CURRICULUM



Plymouth State College Journal on Writing Across the Curriculum

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Preface

Those of you familiar with the first two volumes of the *PSC Journal on Writing Across the Curriculum* will note this is a much slimmer edition. The size of the journal reflects our plan to publish more frequently and with greater flexibility so that we can be more responsive to faculty interests and needs.

This issue also marks my last official duty as Chair of the Writing Task Force and Editor of the Journal. In September Sally Boland will replace me as interim Chair of the Task Force and Richard Chisholm will become Editor of the Journal. Both have been actively involved in the Writing Across the Curriculum program at Plymouth since its inception in the fall of 1985. In fact, Sally Boland was largely responsible for initiating the program and contacting our original consultant, Toby Fulwiler, and Richard Chisholm has written articles for every issue of the Journal to date. They bring years of experience and enthusiasm to their new positions.

I have enjoyed my six years as Chair of the Writing Task Force, a particularly dedicated and helpful group. To all of you and the many colleagues I have dragooned into presenting at workshops and conferences, writing articles for the Journal, or giving up two days of vacation time to attend faculty training workshops, my thanks and appreciation.

Mary-Lou Hinman
Writing Task Force

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Acknowledgments

The Editorial Board would like to thank the following: Dean Kalikow for her support of this project, Lisa Densmore for designing the text, and the remainder of the Writing Task Force—Sally Boland, Richard Fralick, Russell Lord, William Taylor and William Taffe—for their interest.

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Modeling How We Think When We Write

Roy Andrews

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:

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> 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?"

Introducing Students to Peer Review of Writing

Richard M. Chisholm

Note: The Introduction below describes a classroom exercise to teach collaborative peer review of writing. The draft paper that follows the Introduction describes the theory and practice of collaborative peer review.

Introduction

"Right away I was drawn into your paper," a student wrote about a colleague's draft, "because the scenario is so common that I could personally relate to it." Responding with these words of praise to a request for feedback on a draft paper, this student had taken the first step in learning to participate effectively in collaborative peer review.

Peer response to a colleague's paper has become commonplace in writing classes. But the draft and this student's response to it were unusual because she was responding not to another student's writing but to a paper I had written and asked the class to read. Not only that; the paper itself describes the procedures for conducting collaborative peer review. In receiving instruction about how to read and comment on a paper, reading my paper, and commenting on it, students in this class were learning to participate productively in collaborative peer review.

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An Initial Training Exercise

For several years, I have used an exercise that demonstrates procedures for collaborative peer review of writing in a college class. I use this exercise during the first week of writing courses to introduce students to what peer review entails and to open students' minds to issues we develop later in the semester. It describes how writers can collaborate productively and then gives students guided practice in doing it. References to the paper throughout the semester—both by students and by me—show that this exercise provides a firm basis for building further understanding of collaborative work in the classroom and beyond.

The Procedure for This Exercise

For this exercise, I usually follow a procedure like the following, which is based on suggestions by Karen Spear and Peter Elbow. After a brief preliminary explanation, I hand out the paper and have students read it. They respond in writing to four kinds of questions about the paper. Then each student responds orally to it. Toward the end of the hour, after general discussion of the strengths and weaknesses of the paper, I ask students to write down their concerns about collaborative review. This freewrite often brings to the surface students' anxieties about group work and points to the problems we will need to cope with throughout the semester.

The Goals of This Exercise

These are unusual characteristics for a classroom exercise. How often does instruction engage students in the collaborative review of a paper that is itself about the process of collaborative peer review? How often do students review a paper written by their instructor? These features help students meet several goals: 1) this exercise helps students grasp the concept of collaborative peer review; 2) it helps them understand appropriate procedures; 3) it confronts them with realistic

problems in a supportive environment—with built-in risks and safety nets; 4) it gives practice in participating in an actual document review; and 5) it prepares them for engaging in collaborative peer review beyond the classroom and beyond the campus. While this exercise takes up only parts of two class periods, it lays a foundation for semester-long study and practice of this important technique.

How This Exercise Reaches These Goals

This exercise reaches these goals in several ways:

1) *This Exercise Presents the Concept of Collaborative Peer Review.* The draft paper that students read and comment on during this exercise shows real-life peers learning to review each other's writing. This feature helps students who know little or nothing about document review comprehend how useful collaborative peer review can be.

2) *This Exercise Describes Realistic Practices of Collaborative Peer Review.* This exercise gives practical step-by-step procedures for conducting collaborative peer review in a college class. Although the paper describes writers on the job, students have no trouble seeing how the procedures could work for them. In fact, the business office setting provides enough distance from their present academic setting so that students can examine the components of collaborative peer review objectively. While the paper contains simulated material and while its characters are fictitious, students recognize its realism and truth.

3) *This Exercise Confronts Students With Realities.* The exercise is also realistic in the way it puts students at risk. I expect them to read a real draft and to review

a real writer. Because that writer is their professor, the risk is not simulated. I also provide safety by explaining the importance of peer review, describing the procedures, providing a supportive context, and creating a framework for them to work in. I specifically ask for their comments and accept them with enthusiasm that is manifestly genuine because I genuinely need the help. When I hand out the paper, I explain that many other students have read and commented on it—and survived. By asking for their help and accepting whatever help they give, I have created trust. And by actually using the feedback in subsequent revisions, I make good on the trust.

4) *This Exercise Provides Practice in Conducting a Peer Review.* As soon as the students learn about the skills of collaborative peer review, they practice them by actually reviewing a paper. As they comment about the writing of the instructor, students gain insight into the review process, especially important elements such as the need for useful but tactful comment and the need for a writer to elicit comment. They also develop skill in doing these things.

5) *This Exercise Refers to Writing Beyond the Classroom.* Students learn that this kind of review lies at the heart of the process of collaborative and cooperative writing anywhere it takes place—inside the classroom as well as outside.

Additional Benefits of This Exercise

This exercise initiates students early in the semester into the mysteries of collaborative peer review. It not only explains the value of doing it and shows them how to do it, but it shows them that they can do it.

Meeting those goals at the beginning of the semester gives students a good start at mastering important attitudes and skills.

Having students comment about my paper leaves me in control of the class. I can direct the discussion, pause to emphasize important points, fill in where student comment leaves blanks, and help students overcome their natural reticence to comment on another person's writing. Students are not thrown prematurely into groups that require them to interact with fellow students. Later in the semester, as they become more and more confident working in groups of their peers, they can refer to this initial successful experience carried on under the watchful eye of the instructor.

Responses to This Exercise

Over the past several years, I have used this exercise with considerable success in a variety of groups. Students in several sections of Composition, Introduction to Communication, Technical Writing, and Study of Language, as well as writers in several professional groups, have read and critiqued my paper. In each case, the procedures and text have elicited significant comments that indicated the participants had grasped the concepts and were able to apply them skillfully, even after such scant exposure and practice.

Not the least advantage of this exercise is that students find it interesting. The fact that they can openly critique the prof provides a good deal of motivation. Classes are lively. Readers participate with an enthusiasm that I judge springs from interest in this concept of working together on a draft. One reader of the paper said, for example, "It makes me want to go right out and do it."

In short, this highly compressed and economical exercise effectively launches a semester-long study of collaborative peer review.

* * * * * * *

Note: Following is the paper I use in this exercise.

HOW TO CONDUCT COLLABORATIVE PEER REVIEW OF WRITING

Giving and Getting Feedback on Important Documents

Richard M. Chisholm
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PART I: THE NEED FOR COLLABORATIVE PEER REVIEW OF WRITING

Why Efforts at Eliciting Feedback Often Fail. When writers ask their colleagues for feedback on a piece of writing, they often get perfunctory responses because they go about it awkwardly. The following scenario illustrates a failed effort at eliciting feedback:

"Jane, will you look over this report for me?"

"Sure, Bill, I'd be happy to."

After reading over the report, Jane hands it back, pointing to her proofreading marks that show that she has read Bill's report. She adds a cursory comment of perfunctory praise:

"Good idea, Bill! I think the boss will like this!"

Bill's draft needs a thorough revision, so what he needs is analysis and suggestions that will help him reconceptualize it. That is what he is really asking for, but he is not likely to get it the way he asked for it.

Why is Jane's attempt at giving peer feedback unsuccessful? Why does Bill's request fail to call forth the full response he needs?

Several reasons account for the failure. First, Bill does not know how to dig out the information he needs; in his lame effort at eliciting feedback he has not formulated the right questions. On her part, Jane does not know how to respond. Besides, she is reticent because she knows Bill has worked hard on this report and she does not want to offend him.

Lying beneath these shortcomings is a deeper one, rooted in an inadequate concept of the writing and revising process. Experienced writers and experienced reviewers know that a solo draft is *only* a draft and that the purpose of peer review is to stimulate the writer to rethink the entire document. Although systematic rethinking is what Bill needs, they both assume that the job is virtually complete. If this is really an important piece of writing and Bill is the only one who has seen it, it *cannot* be complete, but neither he nor Jane seems to understand that fact. Bill is too close to it, Jane too distant. While Bill may have a vague hunch that something is lacking, he doesn't realize that he should still be rethinking the report.

Jane's failure to help Bill reconceptualize his report, then, stems from the fact that these colleagues have not developed systematic strategies and techniques for peer review of their writing. And because neither has been instructed in fruitful ways to review each other's work, neither knows how to go about it skillfully. We can be sure, in addition, that neither of the partners is prepared for the intensive labor that peer review and revision entail.

Bill and Jane are missing out on a lot. Getting together to write in a supportive context creates a magic that could make their writing better and their experience with it more satisfying.

PART II: PROCEDURES FOR PEER REVIEW OF WRITING

How Bill Could Have Elicited Useful Feedback from His Colleagues. Bill's effort at eliciting feedback might have been more successful if he

had used a procedure such as this: Call together a few colleagues, including Jane, for a session to review his report. Explain that he has written a document, that it is important, and that he wants help on it. Then give out copies of his report and ask his readers to jot down their responses to it. Finally, ask individuals to give their responses aloud and the group to discuss them.

Four Kinds of Useful Feedback. During the discussion, Bill's colleagues can help him by giving four kinds of feedback. (This scheme is adapted from Karen Spear's *Sharing Writing* and Peter Elbow's *Writing with Power.*)

1. *Identify Values in the Paper.* Give positive feedback on your colleague's paper. What did you like about it? What are the best parts? What are the strongest points? Where did you become more interested? What ideas did you find exciting? What words struck you forcibly or resonated for you? What things surprised you? (Praising qualities in the paper is not so much a matter of flattering the writer or of stroking the writer's ego but of identifying shared values.)

2. *Describe the Paper.* Explain the main ideas of the paper and how it is organized. How are the lead, the body, and the end related? What did you hear as the main points of your colleague's paper? After reading the first page, where did you expect the paper to go? At that point, were you with the writer or against him? How did the paper guide your thinking? How did your knowledge and feelings change as you read? State some related topics that the paper did not include.

3. *Ask Questions About the Paper.* Ask questions about your colleague's meaning and wording. Be explicit about what you see to be problems. What ques-

tions came to mind as you read it or your colleague read it aloud? Ask about parts that need more explanation or that are not clear to you. Ask "What did you mean when you said...?" and "Why did you say...?" Ask for clarification, further information, and elaboration on points you found particularly interesting.

4. *Suggest Points to Revise.* Give suggestions for improving the paper. Suggest places that need more information, more clarity, or re-thinking. Tell what you wish the paper had said or what it might have said.

Two Forms of Response: Written and Spoken. In this review session, Bill's peers give him both verbal and written feedback. Writing it down allows the reader time to reflect on the paper and create an appropriate response to it. Getting written responses allows the writer to refer to them after the review session. But verbal response, with its flexibility and give and take, will more likely stimulate ideas. In addition, comments that may seem harsh or cold in writing may be made personal and warm when spoken.

Bill's Role in Collaborative Peer Review: How a Writer Interacts With Colleagues During a Review Session. As the writer asking colleagues to review his piece of writing, Bill interacts with them in constructive ways. Knowing that their time and effort are valuable, he calls on their help only for important pieces of writing. When he needs their help, he does not hesitate to ask for it, but he is careful not to present them with a pile of scribbled notes and expect them to sort it and make sense of it. Before they meet, he sends each reviewer a copy of the document, making clear why it is important to him and asking for help on specific aspects of it. As he receives feedback during the review session, he is careful to refrain from defending what he has written and from showing or giving offense, but he tries to stimulate his colleagues to make deeper responses by probing and by asking for examples or clarification. He constantly gives feedback on their feedback. Most importantly, all the

time that they are talking, he is busy reconceptualizing his piece of writing.

Bill's Task After the Review Session: What a Writer Does With Feedback. The period immediately following a peer review session is often the critical time in the development of a piece of writing. The writer sits alone with the document to mull his recollection of his peer's responses. He sorts their comments to discover what is usable and what is not. He weighs them and sifts them. If the review has been successful, the writer will be able to reconceptualize the piece of writing and can follow up with extensive rethinking, rewriting, and revising. What may have been only a passable solo effort has been transformed under the stimulus of peer review into a richer and more powerful piece of writing.

In a system of collaborative peer review of documents such as what I describe here, the colleagues have behaved as sympathetic readers who help Bill rethink his draft. Bill remains the author and controls the piece of writing; what he does with feedback is strictly up to him.

Bill's Task in the Final Stage: Editorial Feedback. When all questions about content, form, and style have been settled and the writing and revising process has come to an end, the production process begins. A text editor helps Bill prepare the text for the eyes of his readers. It is important that text editing take place only at the end of the cycle, after the writer has had several opportunities to reconceptualize and rewrite. Proofreading and publishing complete the cycle.

PART III: BENEFITS OF PEER REVIEW OF WRITING

Shortcomings of Some Old-Time Advice. Unfortunately, much of the advice that untrained reviewers give their colleagues about revising is based on rickety old habits of marking up pieces of writing. In the old way, reviewers scan the paragraphs to find fault and suggest quick-fix remedies. This is merely premature text editing that suggests rewording

before the concept is clear? Why clean up the mess when you'll throw it out later anyway? Focusing too early on the mechanical and surface aspects of writing detracts attention from rethinking and restructuring the text.

How Collaborative Peer Review Helps Writers Discover Meaning. The procedures described here for peer review of writing help reviewers break these old habits. The peers review the document not to find fault and to point it out but to lead the writer in a process of rediscovery and reconceptualization of his own text. Instead of falling back on stereotyped platitudes on the one hand or picky criticism on the other, the reviewers read attentively to follow the line of thought which the writer has laid out. In doing this, they help the writer discover his own meaning at successively deeper levels.

The sequence of the review is important. Starting a review session with a statement of the qualities of the writing reduces the possibility of offending a colleague. While this may not be so important for tough-minded experienced writers, most writers respond positively to positive feedback. When the first words the writer hears are words of genuine praise, they sound so delicious that they make the writer's ear receptive to less positive comments that are sure to follow.

Describing the contents in their own words not only shows that the reviewers have read and understood the document but lets the writer see it through fresh eyes. When it is described in this way, the writer comes to see the text as a whole, the way it is put together, and the nature and function of its parts.

The questions that reviewers ask show that they are interested enough in their colleague's work to reflect on it, and they help the writer rediscover the subject and develop devices to communicate it effectively. Finally, when it comes time to offer a suggestion, the writer has been prepared for it; maybe he will come to the same judgment just as they are mentioning it. This set of routines helps groups of writers

accept document review as a matter of course and take it for what it is—an earnest attempt to give helpful feedback.

This four-part procedure helps writers remain open to suggestions from the outside and to inspiration from within. Like most writers before a review session, Bill probably assumes that because he is the author, he knows his paper. His surprise comes when he hears someone else review his paper and he gets knowledge of it he could not otherwise have had.

PART IV: PEER REVIEW OF WRITING AND THE WRITING PROGRAM

The Larger Scheme of Things. When we contrast the casual interchange between Bill and Jane with a systematic understanding of how groups work productively, the reasons for their initial failure become clear. Bill's request was one-time, impromptu, and apparently casual. Bill expressed no clear purpose or focus for the review, nor did he follow procedures likely to elicit useful feedback. Jane had no personal stake in the document because she was not brought in on it until a late stage. Neither of them had built up an expectation that one would help the other; there was no long-term relationship of reciprocal obligation. Bill's request came out of context, out of the blue, off the wall. Because nothing had been done to establish peer review as an ongoing and expected process, Bill's failure was Jane's failure, and their mutual failure was their organization's failure.

In a fully-developed system of peer review, the four-part procedure described here suggests only the rudiments of peer review of writing; there is much more to it. And although peer review is the heart of the document cycle, it is only one part of an organization's total writing program that includes management support for writing, training of groups and individuals, controlling and monitoring writing projects,

and assessing the written products and audience response to them.

When the writing program is in place and the system of peer review is up and running, groups of colleagues use these procedures on many occasions, whether they work one-on-one or with a larger group and whether they meet one time or several times. They use them for all kinds of important documents, especially letters, proposals, and reports.

Moreover, peer review of documents lies at the heart of collaborative or joint efforts on large writing projects, where review takes place at several stages in the writing process, from inception through publishing. To make the review sessions most effective when they collaborate to produce a document, groups plan their work in detail, establish goals, norms, and procedures, and assign specific responsibilities. Each person does a share of the work, reviews the work of others, and contributes to the progress of the group. In between review sessions, the writers revise the drafts based on feedback from the group of colleagues.

PART V: BILL AND JANE AS PEER REVIEWERS

A Full System of Peer Review. In a full-fledged system of collaborative peer review, writers like Bill and Jane would have learned how to elicit and give effective feedback. To illustrate the kinds of comments that Jane ought to have given Bill, I will cite below some of the things that colleagues have told me about an earlier draft of the paper you are now reading.

> 1. *Values My Readers Have Found in the Present Paper.* This paper speaks with a clear authoritative voice. You have a good product and sell it well. It is convincing; you make me want to go out and do what you describe. Much of this is new to me, and the rest reinforces my own views. My favorite sentence is the

one about "fiddling with the words." I now see why it is important to begin with praise.

2. *Ways My Readers Have Described This Paper.* You begin with a lead that captures my attention and takes me right in to the main idea. Then you give a theoretical explanation, followed by an extended example, some benefits, and a conclusion.

3. *Questions Readers Have Asked Me About This Paper.* Why did you give the four points in two places? Do you claim that this kind of review is more efficient? How can managers monitor and control group work? Can't an editor be more than a copy editor? What is to prevent this process from becoming an empty ritual?

4. *Suggestions Readers Have Made About This Paper.* I suggest that you get right to the practical stuff, then double back to the theoretical explanation. After the opening scenario, state the benefits of collaborative peer review. End with a scenario that matches or reflects the lead. Make the benefits clear. The word "praise" seems but a saccharine call for flattery; tough-minded writers don't need it. This part of the review process may seem patronizing.

These are things that readers have said. I hope that the present version reflects their suggestions.

Conclusion. When organizations support the peer review of documents in the ways described here, they unlock latent powers in their writers. Both the writers and their colleagues learn to do things they cannot learn on their own. To be sure, organizations must never lose sight of the indispensable role of individual persons writing alone; all thoughts, words, and ideas arise in the individual mind. But in addition to the

solitude of solo writing, writers thrive on collaboration; they need the stimulation of group comment. Organizations that fail to support this kind of peer review of documents diminish the productivity of their writers.

* * * * * * *

(The response sheet on the following page will be useful for reviewers.)

WORKSHEET FOR PEER FEEDBACK

(Based on guides by Karen Spear and Peter Elbow) 2/91

Writer _____
Responder _____

Colleagues: Can you help me rethink clarity and vigor in this paper? It is intended for people who are interested in peer review of documents but don't know much about it.

1. *Identify Values in the Paper.* Give positive feedback on your colleague's paper. What did you like about it? What are the best parts? What are the strongest points? Where did you become most interested? What ideas did you find exciting? What words struck you forcibly or resonated for you? What things surprised you?

2. *Describe the Paper.* Explain the main ideas of the paper and how it is organized. How are the lead, the body, and the end related? What did you hear as the main points of your colleague's paper? After reading the first page, where did you expect the paper to go? At that point, were you with the writer or against him? How did the paper guide your thinking? How did your knowledge and feelings change as you read? State some related topics that the paper did not include.

3. *Ask Questions About the Paper.* Ask questions about your colleague's meaning and wording. Be explicit about what you see to be problems. What questions came to mind as you read it or your colleague read it aloud? Ask about parts that need more explanation or that are not clear to you. Ask "What did you mean when you said...?" and "Why did you say...?" Ask for clarification, further information, and elaboration on points you found particularly interesting.

4. *Suggest Points to Revise.* Give suggestions for improving the paper. Suggest places that need more information, more clarity, or re-thinking. Tell what you wish the paper had said or what it might have said.

The "Factsheet" as a Tool for Teaching Logical Writing

L.E. Modesitt, Jr.

Introduction

One of the major writing deficiencies of many students entering college is the inability to construct a well-supported, logically-reasoned essay—on any subject. Students who are able to write poetry, personal opinions, and even stories often cannot write a solid essay. More important, most are unaware of this deficiency, believing that a recitation of mere opinion and belief constitutes an essay.

Beyond grammatical skills, writing a college-level essay requires: (1) a thesis; (2) factual support; and (3) clear lines of logic to link the factual support into arguments either supporting or refuting the thesis. Regardless of the topic, from meteorology to history, from elementary education to business, any effective essay will require these elements.

Unfortunately, while most students have strong opinions, few have learned these basic skills, and fewer still have had any chance to practice them. Learning such skills requires that students write essays of at least several hundred words on a repeated basis, and in most secondary schools essay writing occurs sporadically, if at all, excepting the obligatory term paper.

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Rationale for the "Factsheet"

The "Factsheet" approach was developed to teach the organization and structuring of facts in a logical fashion. In writing term papers, research papers, and even essay tests, most students focus primarily upon finding and regurgitating facts, rather than upon analyzing, structuring, and presenting those facts.

By actually providing facts, as illustrated in the sample, the instructor can focus the exercise on the process of logical writing, not on finding or remembering the factual components. In addition, a provocative thesis is employed to reinforce the point that the facts must be applied to support or refute *something*. Facts, by themselves, prove nothing. They must be applied to a situation, a belief, or a theory.

Use of factsheets does not help students in learning how to research, nor is it primarily targeted at improving basic grammar. It is a bridge between the objective test/SAT approach and open-ended written presentations required in college and especially after undergraduate work. In higher-level courses and in professional fields, individuals must synthesize and organize large amounts of knowledge, not just a page of "facts." Without understanding and practicing the process, such written organization can be difficult indeed.

Although developing such factsheets requires additional time on the part of the instructor, the factsheets provide writing exercises through which students can concentrate on the logical components of the writing process—choosing appropriate facts, analyzing them, and developing clear arguments based on such facts.

Structure of the Factsheet

As illustrated in the sample, each factsheet consists of two sections:

(1) A short introduction/thesis paragraph, and (2) a list of factual statements or statistics all *apparently* relevant to the thesis. The students

must pick from among the facts, although they may add any additional material which is relevant, and use such facts in a logical manner to support or oppose the thesis.

Thus, students must read and understand the facts, analyze them to determine which are useful to the positions they wish to take, and organize a logical argument based on such facts.

In order to clarify the exercise, I have added two additional requirements: (1) the student must reach a final conclusion either supporting or opposing the thesis, and (2) generalizations unsupported by facts are unacceptable.

Drawbacks

Using factsheets can create problems, especially if the instructor does not clearly outline the rationale for their use, particularly since a large percentage of students appear unaccustomed to proving their opinions or conclusions, let alone in a logical or rigorously supported fashion.

No matter how detailed the explanation of the factsheet, some students will find it difficult to grasp the concept that the *process* is more important than a "right" answer. Likewise, the instructor who employs factsheets must understand that the results must be evaluated on how well students develop and write logical essays based on their analysis of the facts, not on whether such results agree with the instructor's preconceived structure.

Some students will quibble with the selection of "facts" or the wording of the thesis, perhaps because the facts presented or the thesis does not match their opinions. I define "quibbling" as raising arguments against either the selection of the facts or the construction of a thesis. Quibbling, I have found, tends to come from brighter students who would prefer to avoid the concentration involved in analyzing and using

facts, and thus apply their brilliance to semantics. Since any number of provocative theses may be subject to semantic flaws, and since quibbling defeats the basic purpose of the exercise, I discourage semantically-based arguments. At the same time, I tend to reward students who can use the facts to refute the thesis, or who can develop arguments based on other factual or logical grounds.

Some students will also avoid analysis by simply picking facts and merely stringing them together, calling the result an essay. To avoid this, the instructor has to make clear that mere repetition is not writing, that the student must add thought and analysis to each fact.

The biggest drawback from an instructor's perspective is the need for continuity. One cannot merely present a factsheet or two, claim that this will help the students improve their logic, and then go on to the "serious" business of the course. Because students, like all members of society, expect their work and word to be taken on faith, the idea of being evaluated on how they reach their conclusions is both unfamiliar and strongly resisted. Repeated use of the factsheet or a similar process is necessary to emphasize the need for analysis and logical support.

Possible Adaptations

Whether the factsheet approach is adaptable to a specific discipline or course of study depends on whether such a course requires an understanding of *process* as opposed to factual recall. For purposes of my own composition courses, I define process as the combination of developing a logical line or argument which either supports, refutes, or modifies a thesis; analyzing facts, anecdotes, or relationships to determine how to support or refute the thesis; and developing a written argument embodying the analysis, arguments, and factual/anecdotal support.

While factsheets might well have limited value in pure mathematics courses, where the relationships and processes are expressed in math-

ematical notation, generally factsheets could be used as a teaching device in courses where student understanding of relationships and processes is necessary. A brief listing of historical events within a limited time period could support a range of theses. Similar approaches would seem feasible in economics, political science, business, and education courses.

One cannot use factsheets effectively, however, if the goal, stated or otherwise, of the course is to have students memorize key facts, theorems, dates, and names.

In some respects, an open-book examination is an extension or adaptation of the factsheet concept, since the facts are available to any student familiar enough with the text, and the point of such an examination is presumably more than the use of a text as a dictionary.

Conclusion

The factsheet approach to writing can help develop greater student skills in use of facts and supporting logic, as well as reinforce the concept that education and learning require an understanding of process, and more than simple "right" answers.

SAMPLE FACTSHEET

Recreation in the United States

Thesis:

People in the United States only think they are getting good exercise. In reality, they waste billions of dollars when walking, chopping wood, doing gardening and housework would provide better health at lower cost. The exercise game is nothing more than expensive escapism.

Facts:

45% of the $35 billion spent annually on exercise and recreational goods by Americans goes for recreational vehicles, such as boats, snowmobiles, RVs, and bicycles.

Sales of bicycles—the only human powered vehicle—comprise less than 8% of the $35 billion, although the average bicycle retails for around $150.

15% of recreation/exercise expenditures go for sport clothing, and another 10% goes for athletic footwear, including golf shoes, jogging shoes, sneakers, and gym shoes.

More than 35% of the $10 billion spent annually on athletic equipment goes toward firearms, golfing, and fishing equipment. More active sports, such as tennis, get less than 5% of equipment spending dollars.

More than 68 million Americans bowl, but less than 20 million play tennis, and with 14 million pleasure boats owned in the U.S., boating captures more participants than tennis also.

The number of Americans playing active sports has declined. Tennis players have dropped from 25 million to less than 20 million. Even bowling participants have dropped from 72 million to 68 million over the past 5 years.

Source: *Statistical Abstract of the U.S.*, 1989

Aphorisms

Annette Mitchell

When asked for contributions of anecdotes, ideas, interviews or positions for the *PSC Journal on Writing Across the Curriculum* quarterly, I decided to submit a few of the aphorisms that I write for my own pleasure on a daily basis.

"To struggle uphill takes persistence.
To struggle downhill takes resistance."

"Something there is about a thorn that sticks and pricks and drives home a point."

"Close one eye and you'll see more clearly what you're aiming for. Close both eyes and you can be there."

"People are like sodas in that the more they get shook up, the more they have to let off steam."

"Someone told me the other day that they had been getting some crank calls and wondered who was doing it, at which point I laughed and said that I had been cranky but I hadn't called."

"The surface of the deep reflects when it is calm, but not when it is agitated."

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"My son has very long hair on top of his head as if he's growing as much now as possible, as a hedge against recession."

"My son keeps shaving his head. It's a hairy situation for a mother."

"I enjoy the lines drawn on the night snow by the moon. The moon must have fun drawing all night while few people watch and then erasing the patterns by dawn."

"Wrestling is really a fantasy sport. Those you wrestle with are always your own weight."

"Tonight God's brush painted the moon on a wet sky. Its edges bleed into the black paper that is the universe."

"Flashlights were probably named that by someone who knew the life span of batteries."

"Don Johnson couldn't smoke many cigarettes with a 'slow boat to China.'"

"Cuba. The designated smoking area for cigars in the Caribbean."

"Ladder back chairs climb the space around our table."

"I extend my hand to a friend in order to suspend time long enough for our hearts to beat in sync."

"Tires. An appropriate name for something that has to travel so far."

"There's a Dalmatian that patrols our neighborhood on a regular basis. Unlike a policeman, the spots on his uniform are greatly admired by the local folk."

"All of his life, my older son has said, 'Wait a minute.' Just goes to prove Einstein's theory that time is relative."

"Judging by the name, Dartmouth should have a great debate team."

"The question is not whether you have feet of clay, but rather how they will come through the firing of life."

"The mountains outside my glider looked like huge, gnarly knuckles deeply rooted into the soil...as if God himself was reaching down for a huge chunk of Earth."

"Last night as I prepared a carrot cake for a close friend who had had her second eye operation, my older son made the comment, 'How appropriate!'"

"I guess even the nastiest customers don't want to chance getting on Santa's bad side by leaving him a diet pill or health food rather than cookies and milk."

"There's something so healing about someone telling you a story. The gift, especially when it is given to a child, is more precious than any toy or expensive brand of clothing. Thank goodness a label can't be put on the exchange."

"Life is a wrestling match. You wrestle with your opponents. You wrestle with yourself. Between the two of them, you are always in training."

"In this age of preoccupation with youth, silver hair tarnishes your image."

"Quietness is like a gentle breeze that clears the mind of rough drafts."

An Interview with Michelle Fistek

Mary-Lou Hinman

Following the recommendation of one of my colleagues on the Writing Task Force, I interviewed Michelle Fistek. During the last week of classes, we met to talk about her experiences with writing assignments in her political science classes. As I settled into the wicker chair in her office, she rifled through her files of course syllabi, pulling out sample assignments. "Writing is a big concern for me," she began. "I try to come up with assignments a bit different so students can't buy papers off a list. Unfortunately, too many people just tell their students, 'Write a paper.'" She closed the file drawer, and we settled down to the interview.

What kinds of writing assignments have you found successful?

Any assignment where my expectations are clear to the students. Assignments where the students have to figure out what I want don't work very well. Recently in my Political Parties and Interest Groups course, I decided to have students create their own theses for their essays. I discovered most couldn't write a legitimate thesis even though I had described the process at least twenty times in class. Many of them ended up scribbling down something the last minute in class, and in spite of individual conferences with me about their papers, I still got "reports" from many. Another time, I will restructure that paper assignment. Students need a lot more direction when the paper is assigned.

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But back to your question, I have found that short papers seem to work relatively well, especially if I am asking students to argue a point or give opinions and back them up with evidence. These shorter papers are much more effective than having students write a "term paper." In fact, I rarely give the kind of assignments where students write term papers or open-ended reports.

One successful assignment I use in my Presidency class asks students to pick a foreign country and compare the powers of the chief executive in that country to those of the chief executive in the United States. At the beginning of the term, students make their choices of country and write for information. I am very specific about the materials they should request. For example, they might ask for the constitution or information they can't find doing library research. I try to encourage creativity in research. I get tired of seeing the same three books listed in every source list. Besides, material in books is always dated by the time it is published. For that reason, I also encourage the use of periodicals, journals, and other resources—something I wish my professors had done for me.

Do you use other kinds of writing assignments besides essays or research papers?

I use journals now with the interns I supervise. I have them keep a log of their activities so I can see what they've been doing. I tell them to think back to their classes and apply what they've learned—to see if it works in the real world.

I also used a journal successfully in one of my courses. I had students critique every reading they did for class as we went along. They read about fifty different chapters and articles. I had to make myself collect the journals periodically so the students wouldn't sit down and do the entries all at once. It was a horrendous amount of work for me, but I found that classroom discussion was much better. I would love to do more of this kind of writing, but my classes are so huge right now that

the process is unmanageable. (I can't just assign things and not read them. I want students to know that whatever they write, I consider.)

I have also used workbooks with success in my Public Administration class. Because the workbook includes different real techniques of management such as cost/benefit analysis or budget formation, I like that experience for my students. The workbook has them gather information, respond to a problem, and evaluate the problem and their responses. I encourage them to develop their responses, to write more than a sentence or two.

When you responded to the Writing Across the Curriculum Questionnaire last spring, you reported negative results from some of the exercises we promote—for instance, freewriting and multiple drafts of essays. What went wrong?

Some of these techniques I tried with my Introduction to the Academic Community classes, and I think that was part of the problem. The students weren't committed to the classes. However, if I structured the exercise very carefully, it worked well. One of the best "brainstorming" activities happened when I personalized the problem. I told my class that I had a good friend who was an alchololic, but who would not acknowledge his problem. I asked them what I could do. The students were incredible. They brainstormed about possible approaches I might take with my imaginary friend and made wonderful suggestions.

Was that because they perceived it as a real problem?

Yes.

But in general you are uncomfortable with freewriting and brainstorming?

These techniques were never used by my teachers, so I guess I'm not as comfortable with them. I'm not always sure what I should ask students

to write about. Then, too, if students haven't done the reading, they don't have anything to write. I can see that freewriting could be a good way to have students get their thoughts together about the reading they've just done.

What about your negative response to multiple drafts of papers?

I have never been able to get more than the barest effort from students when I've assigned multiple drafts. I asked for a first draft at one point, and all I got were their notes. (And this was after explaining what I wanted.) I've tried having students submit outlines, but I haven't received much of anything.

One of the problems I have is time. In many of my assignments I ask students to synthesize materials and ideas we are covering in class. It is hard to give them the material they need early enough in the term to allow me to read drafts of essays and get them back to my students in time for serious revision.

Do you offer them a chance to revise essays for a better grade?

Yes. Especially with any short assignments, I tell my students if they are not happy with the grade, they can try again. In my American Government class I assign only one short essay. The assignment asks students to pick a political columnist and tell me whether they agree or disagree with the person's opinion. But at this level, students make mistakes. Once in a while they choose editorials rather than political columns (even when we have discussed the difference in class). Sometimes they just summarize. Allowing them to revise for a better grade helps them to learn how to do the assignment. In my comments on their papers, I ask them questions to help them revise and create a better essay.

Do the papers improve?

Yes.

So in a way that's another approach to having students write drafts?

Yes.

Have you ever shown your students sample essays, especially good papers?

I did in the United States History class I taught last semester. The students worked in a "Taking Sides" book. They were assigned papers on several of the issues presented in the book. The first set of these essays was pretty dismal, so I picked several of the "A" papers and had them duplicated for the students. It helped some of them, but it scared many others. Their response was, "I'll never be able to do anything this good." It can have a backlash effect—especially for first year students who do not have the sophistication or background of some of their peers.

Do you assign more or less writing now than you did a few years ago?

It varies from class to class. In American Government I used to give all essay exams, but I don't anymore. I have too many students to make that practical. In the upper division classes, however, I assign quite a bit of writing. None of my upper-level courses is a W-course, but I probably could get a "W" designation for most of them. Students in those classes do a lot of writing for me.

To summarize, you have already said that a good writing assignment should be structured, creative, and specific. For you, are there any other components to good writing assignments?

We need to write more complete instructions, to be as clear as possible when we assign writing. When I write out a whole page of instructions as I did for my Congress class (see below), the work I receive is much better than if I just do a short bit on it, even if I talk further about the

assignment in class. At the same time, talking about the assignment gives students a chance to ask questions.

Another procedure I've used with success in a couple of classes is to have students present the work they've done. If they have to present, they are forced to do a better job at writing and structuring their work because they're not just throwing it under my door at the last second and forgetting it ever existed. As I recall my own experience in college, many of my writing assignments were done at the last minute.

I used presentations in my Public Policy Analysis class. Even though the presentations took time, some of the work students did in the class was incredibly good. One of my students, a fireman, wanted the state to pass a bill establishing a Fire Academy like the Police Academy. He wrote a paper on the topic for me last fall and ended up using much of the paper this month to testify to the State House and Senate on that bill. He was so excited about it.

The more links I can create like that, the better. I really do try to assign papers that students will learn from and are interested in—not "Here's a list of topics; pick one." Instead I like to ask, "What are your interest areas?"

Also, when students present in class, they pretend we are the House or Senate hearing the presentation. I try to get them to think about who will be listening to material like this.

So you are creating a "real" audience for their work?

Right. Many times when we ask students to write, they don't see any relevance to anything else. We need to create that relevance in our assignments.

SAMPLE ASSIGNMENT

The Congress
POLI 359.01

PAPER

Your paper should be 8-10 pages, typed and double-spaced.

You are a Member of Congress (pick a chamber). You have a pet project or issue and are going to submit it to your chamber in the form of a bill which you are sponsoring. The bill is to be your own, not a copy of a real bill.

In your paper, you will describe how you will guide your bill through your chamber. What is your strategy? How will you obtain support for this bill? How will the major internal and external actors react to your bill? (committee chairs, party leaders, lobbyists, the president, media, etc.) What committee does your bill go to? Assume that your bill makes it through committee. How will your opponents attempt to foil your efforts? Will you make any compromises? Does your bill pass?

Does your bill go to a conference committee? What happens next? (Assume that your bill has been introduced in the other chamber and has been accepted—or team up with another class member, each taking the bill through one chamber, then together dealing with the conference committee.)

You MUST use ACTUAL congressional committees and the actual committee members and real lobby groups—don't make them up. Find out how the significant actors in your chamber have voted on issues like yours in the past.

Your issue must be approved by me on or before February 28. Give me a brief description of your bill.

Papers are due no later than 5 pm on Friday, April 28.

You may start with a bit of research about your issue, but I am most interested in your recounting of how Congress deals with your bill.

The following sources should be of great help to you:

Congressional Quarterly Weekly Report
Congressional Quarterly Almanac
Other CQ publications
The DANCE of LEGISLATION - Eric Redman
CONGRESSIONAL ODYSSEY - T.R. Reid
Congressional Staff Directory
Your Member of Congress

Marine Biology: An Opportunistic Approach

Roy Andrews

When Professor Richard Fralick walked into his Marine Biology class last February to lecture on marine pollution, the Gulf War was raging and Saddam Hussein had just begun pumping crude oil into the water. Instead of lecturing, he stood in front of his students and asked, "How about if we try to find out what the impact of the oil spill is on the marine organisms of the Persian Gulf?" Says Fralick, "I didn't want to be lecturing from a textbook while what might be the biggest marine catastrophe ever was taking place." The students were interested, and within weeks the project, which would be, finally, about forty percent of the course, had built up an incredible momentum.

Says Fralick, "Every Friday we had a class meeting that evolved into something like a press conference, with each person reporting on their specialty." In the first meeting, suggestions were made about what needed to be studied, what organisms were probably being hit the hardest, and how information could be gathered and shared. It was decided that each student would choose an organism or marine community that was being affected by the oil spill—such as oysters, plankton, cormorants, coral—research their specialty, seek information about the impact of the oil spill, and write a chapter about their findings for a class book.

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"The class," says Fralick, "tapped into a major pulse of fresh information coming out." By the second meeting students were bringing in sources, and they continued throughout the semester to find and share information from video copies of CNN special reports and network news coverage, newspaper and magazine articles, scientific articles on other oil spills, computer network printouts, marine biology books listing species, and database searches from Lamson Library. The class put up a map of the Persian Gulf and, using newspaper reports, charted the advance of the spill.

The class soon discovered that not all the information they collected made sense. They gathered wildly different reports about the amount of oil spilled and its impact. Says Fralick, "The students learned to recognize that data might be exaggerated for political reasons." For example, one report stated that oil covered fifty percent of the bird habitat and therefore fifty percent of the birds would be wiped out. But the class reasoned that this estimate was much too high because many of the birds would fly away or crowd into unpolluted areas. Critical discussions of mass media reports became a regular part of the weekly meetings.

Fralick says, "As momentum picked up, it was hard to keep a lid on the project." May 8th was chosen as the last day of research, but when the date arrived, students found it difficult to stop. Their communal clip file had grown to two bulging folders and they were finding more information daily. Their other problem was limiting the amount they wrote. They had so much to share that the size of the book was growing out of control. A limit of five pages per chapter was imposed, which meant some serious condensing had to be undertaken. Fralick explains, "Students learned from necessity to tighten their focus and prune away nonessential information."

The final product, *Oil in the Gulf*, has a sharp professional look. One student, who was skilled at drawing biological illustrations, sketched an oil-slickened bird for the cover. Another student put all the chapters on

one disk and laser printed it at Media Services. "There are some built in limitations to this kind of book," warns Fralick. "Each student writes differently, uses their own choice of format, and extracts data differently, so the end product is fourteen pieces put together, not a consistent whole. But for the time and effort, what they got is fairly comprehensive, and they chose the right organisms to study." A Copy of *Oil in the Gulf* is in the Lamson Library permanent collection.

"The secret to success for this class was opportunism," says Fralick. "I took the opportunity to cover the material in a pertinent way. If I was teaching an ecology class and an oil truck tipped over on the highway near here, I'd take the class there to observe, take measurements, and report. This is what we should be doing more of in science classes."

Each student received a copy of the book on the Friday of exam week. According to Fralick, they were pleased with what they had done. "This was the easiest class I ever taught in many ways," he says, "because the students did all the work."