TECHNICAL WRITING AND LIBERAL ARTS

by F. Garvin Davenport

Several years ago, the Hamline English department decided to experiment with a middle level writing course called Research, Report Writing and Editing. This was our first venture into professional and technical writing. It soon became apparent that we had two student audiences in the course. One group of students wanted practice in "campus" writing--research papers, footnotes, general library research. The other wanted practice in writing about science and professional matters in their fields of specialization for both professional and lay readers. Thus, we split the original course into two new courses. Research and Report Writing is designed for students who have satisfied their freshman English requirement and who want a further course in which they can concentrate on general research reports. Students in this course come from various majors, although many are prelaw. The other course, Writing for the Sciences and Social Sciences, attracts juniors and seniors from chemistry, biology, physics and the social sciences.

Each course deals with various aspects of technical writing although neither is a technical writing course in the narrow sense--writing for engineers, let us say. Nevertheless, both courses do speak to students who have more or less defined professional plans and who recognize that writing is an important part of a professional career.

This essay, however, is not about these two courses but rather about my experiences with technical writing as they have contributed both to the planning and early implementation of our curriculum-wide Writing Program of which I am the director, and to my thinking about the place of post-freshman writing in a private, liberal arts institution.

One does not teach science majors and pre-law students how to write about their own fields without learning a great deal about such topics as chemical bonding, litigation and plant hormones. In one sense, such a course is an honest exchange of information. I teach the students about abstracts, lab reports and progress reports. I help them with their problems

of grammar and style. In return, they teach me about their research and other professional concerns. I am sure that my students would agree among themselves that I get the best end of the bargain. But my point is that such an arrangement provides a base of respect, tolerance and community. We all have something to teach; we all have something to learn.

An equally important part of my experiences with these courses has been the number of fruitful contacts they have afforded me with colleagues in the sciences and social sciences who have expressed "delight that somebody in the English Department" is interested in the writing needs of students in the sciences and social sciences. In return for this interest in their problems, they have furnished me with examples of good and bad science writing, have included me in the honors exam process (extra work, but worth it both practically and politically) and have explained equipment, process and theory which I need to know about for my evaluation of class assignments.

Such experiences have helped me to see writing from the standpoint of both students and colleagues in several disciplines far removed from my own. I can stand on their turf, as it were, and talk with, not "to" them about writing. In addition, I have gained something of an outsider's view regarding my own department's writing courses and its general attitudes toward writing as seen by others. This outsider's prespective is already beginning to pay off as we consider a re-structuring of our freshman English course in an attempt to make it more relevant to the general and specific educational needs of Hamline students. Even more important, my involvement with technical and professional writing has provided a base of credibility on which to build the Writing Program's first year of accomplishments:

This Writing Program has three broad goals:

1. the establishment of a writing curriculum in which writing will be emphasized at all levels and in all academic areas of the undergraduate program.
2. the establishment of a campus writing center where students from all departments can get help with all

kinds of writing problems and projects

3. the coordination of the English department's writing courses, including freshman English

I have already hinted at the broad role that my technical writing experiences have played in our efforts to deal with the department's own writing courses. In terms of the Program's second goal, the Hamline Writing Center is staffed by peer-tutors, all of whom were chosen last year on the basis of their performances in Research and Report Writing. Since that course covers several of the major techniques taught in most technical writing courses and used in much post-freshman work, the tutors have been able to deal with both basic problems and with more sophisticated matters or organization, rhetoric and style. But the most challenging of the three Program goals has been the establishment of what I call the college's writing curriculum. Here, too, the technical writing experiences have proven invaluable.

In setting out last Fall to interview the full-time teaching faculty on what is now done, what should be done and what can be done through our Writing Program to improve student writing, my technical writing perspective stood me in good stead if for no other reason than that it prepared me to approach the topic in an open-ended manner, encouraging my colleagues to talk freely about their uses of writing and their ideas for improving student performance. "If you consider it a writing assignment," I told each person, "then so do I." Although individual responses varied widely on specific questions, the survey revealed a broad support from virtually every department for a program to increase the emphasis on writing proficiency at every level of the academic program.

Instructors in the departments of Philosophy, Physics, Physical Education and Political Science want their majors to know how to write about their subject matter for both professional and lay readers. Many of my colleagues also sensed the need for students to know how to use writing as a part of the learning process, how to develop what Randall Freisinger calls "expressive writing." Furthermore, what most of them want-

humanists, social scientists, artists and scientists-is essentially what we teach under the general title of technical writing and not what has been traditionally taught as freshmen English. Basics are necessary, my colleagues seem to be saying, but basics are not enough. All too often there seems to be little carry-over from freshman English that can be applied to more advanced courses.

Thus, in light of what I learned through this survey, two of my major goals have been first to keep the Writing Program's image separated from that of the English department, especially as that department is represented in the minds of many by the introductory composition course and, second, to link the services of the Program and of the Writing Center to specific post-freshman courses offered by departments in the other academic divisions of the undergraduate college.

Beginning in the Fall of 1981, twelve of our eighteen departments will have assigned to them at least one student tutor from the Writing Center who will function as a direct link between the Writing Program and selected courses in such fields as chemistry, psychology and political science. Most of these liaison tutors are majors in the departments they will serve. All of them have been recommended by instructors who are familiar with their academic work including their writing skills. Each tutor will give special assistance to individual students or to groups of students in their specific departments who are involved in writing projects or who are having difficulty with particular writing skills. The liaison tutors are not envisioned as mere "readers," but as peer instructors who will make it possible for faculty members to place increased emphasis on student writing in their courses.

Finally, through my various contacts with colleagues in other departments and through my early experiences with our Writing Program, I came back to my own writing courses to discover that my attitudes about the place of technical writing in a liberal arts college had also changed. In early versions of the course, I tried teaching technical writing according to what Carolyn Miller calls the "positivistic theory"--writing

as the ex post facto expression of a scientific idea or a technical effort, not as part of that idea or that effort." And for a couple of years, this approach provided a refreshing escape from value-oriented courses in literature and American studies. But eventually, I came around to accepting what Miller opposes to the "positivistic" approach. "To write...is to participate in a community..." according to Miller. "To write well is to understand the conditions of one's own participation-the concepts, values, traditions, and style which permit identification with that community and determine the success or failure of communication." ("A Humanistic Rationale For Technical Writing," College English: 40 (Feb. 1979), 615, 617.)

First, my courses are interdisciplinary not only because I teach them with the aid, advice and occasional participation of colleagues in other departments, but because students from those various majors must talk and write to each other about their own professional assumptions, methods, goals and problems. Such an atmosphere leads in several directions, one of which is toward an increased awareness of the social, economic and ethical implications of each area of research, each field of knowledge.

Second, I try to introduce students to the possibility that there is no such thing as "objective" writing as they have come to understand the term as meaning "neutral." I suggest that style is part of the message, not just a pipeline for data. We deal in class with the politics of the passive voice, the irresponsibility of jargon and the rhetoric of avoided responsibility. "Does it make any difference," I ask, "whether you write about missile systems designed to render Soviet Civil Defense strategy inoperative or about missle systems designed to kill more Russian civilians?

Third, I try to get my students to think of their writing as creative--just as creative, I tell them, as anything written in verse or short story form. Though I am careful to avoid the word, I find myself trying to suggest that there is a poetic aspect of chemistry or sociology, that there is the possibility of thinking in macro-images, or moving toward

knowledge as a unifying experience and that serious writers in any field face both the necessity of moving beyond the protective shell of "data," and the excitement of thinking and learning through metaphor.

It is not always easy. Undergraduate science students are not readily convinced either that language carries connotative meaning or that professionals need to lower themselves to writing in ways that can be understood by taxpayers, politicians and English professors. Creativity and social responsibility are two words my students have not usually associated with professional writing. Yet their very defensiveness--when they are defensive--reveals their curiosity and as we all know, that can be the beginning of wisdom.

All in all, I think the effort we make to teach technical writing in a holistic context is well worth it. If this is true, it follows that such a subject cannot be taught just in the confines of a single course offered by a single department. It should be taught by biologists, philosophers and literary scholars and they should all help each other teach it. English departments spend a great deal of time and effort trying to teach entering freshmen how to write--or at least how not to write--even though freshmen often have little to say about even less. Should we do less for these same students as they begin to accumulate great stores of meaningful knowledge and just as they are on the verge of being able to use it?

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Alexander, Lloyd. WESTMARK; Dutton, 1981. $10.25

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