DOCUMENT RESUME

ED 215 360

CS 206 849

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TITLE   A Course and Curriculum in Advanced Technical
                Communication.
PUB DATE   Mar 82
NOTE   11p.; Paper presented at the Annual Meeting of the
                Conference on College Composition and Communication
                (33rd, San Francisco, CA, March 18-20, 1982).

EDRS PRICE   MF01/PC01 Plus Postage.
DESCRIPTORS   Career Guidance; Computers; Course Descriptions;
                *Course Organization; Editing; Higher Education;
                *Interdisciplinary Approach; Job Skills; Layout
                (Publications); Simulation; *Technical Writing;
                *Writing Skills
IDENTIFIERS   Writing across the Curriculum

ABSTRACT
        A course in advanced technical communication was
developed at West Virginia University for upper-division students in
engineering and the sciences and those planning careers in technical
communication. The first four weeks of the semester are spent copy
editing, with the students learning to use standard editing marks and
keeping an editor's style sheet. They also learn how the editing
function is handled in various work settings. As the semester
progresses, the students continue to use their editing skills on one
another's work. By engaging in the editing process, the students
achieve the first course objective--better writing. Students also
read about and write several kinds of professional documents, such as
a set of specifications for bidding and a proposal. A simulated
public notice is prepared providing the students with an opportunity
to learn more about layout, type selection, and copyfitting. Students
also attend a demonstration of computerized literature searching and
do some on-line searches with the terminal operator. The class
project involves the production of an actual document for a campus
department. Ethics in technical communication is handled by an ethics
specialist of the philosophy department, and interaction with members
of the technical community is provided during a social evening,
giving the students a chance to ask questions. As part of the course,
the students end the semester with a simulated, or real, job hunt.
(HOD)

A COURSE AND CURRICULUM IN ADVANCED TECHNICAL COMMUNICATION

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Advanced courses in technical communication seem to be proliferating. Little information, however, is available about these courses and how they are being taught. I would now like to describe the advanced technical communication course I teach at West Virginia University. I began teaching this course in the spring of 1980; I taught it for the second time in the spring of 1981; and now, for the third time, in the spring of 1982. The course so far has been offered on a trial basis and has carried our independent studies course number, English 290. But we are now in the process of getting the course formally approved and listed with a number of its own in the University catalog. In describing the course I will discuss the kinds of students it serves, its objectives, and--most important--its content. I'll conclude with some projections about the future of the course and a brief account of the curriculum for training future technical communicators that the course is the center of. Also, I have appended the reading assignments for the semester.

CLIENTELE

I originally conceived of Advanced Technical Communication

as a course for students planning careers in technical communication. Several students with this career objective in mind had asked for such a course. I did not intend the course for students in the sciences and engineering (people I'll call "technical professionals") seeking coursework in technical communication beyond what was offered in our service course. When these folks asked about an advanced course, I responded that we had nothing suitable for them. Turning them away disturbed me, however, and so this year I began accepting technical professionals. Mixing the technical professionals with the technical communicators has not been a problem, and I will now do so without reservation. Henceforth my requirement will be simply that all students must have earned an A in the service course or have equivalent skills.

Another point to be made about the students in the course is that about half have turned out to be post-graduates--people seeking to enter the field of technical communication and working technical communicators seeking to improve their skills. Also, of the two technical professionals I admitted into the course this semester, one is a post-graduate--a geologist with the West Virginia Geological Survey.

Advanced Technical Communication is and will remain an upper-division undergraduate course. As such, it can be taken for credit in many of our graduate programs. So far, however, only one of my post-graduate students has been enrolled in a graduate program. The rest simply wanted an advanced technical writing course and enrolled in the University to get one.

We meet once a week for 2-1/2 hours. We meet in the

evenings because the post-graduate students generally hold full-time jobs.

OBJECTIVES AND CONTENT

Advanced Technical Communication is designed to fulfill two general objectives. The first is to improve the students' proficiency in the fundamental technical communication skill: writing. One important means of fulfilling this objective is our use of Joseph Williams's recent book, Style: Ten Lessons in Clarity & Grace. We are going through this book cover to cover, discussing Williams's principles and working on the exercises. It's a remarkable book, one from which both the technical professionals and technical communicators can learn a great deal.

The second general objective is to give the students a broad range of technical communication skills. These are skills that extend beyond the ability to write well and that are not covered, or covered in much detail, in a technical writing service course (or, at least, not in mine). These skills (and in some cases they can be more accurately called experiences rather than skills) are valuable for the technical professionals and crucial for the technical communicators. I will now describe them.

1. One of the most important of thes skills is copyediting. Most technical communicators do some copyediting, and some work primarily as copyeditors. Technical professionals are themselves edited and so must work with editors; and, they often wind up editing the work of subordinates and even superiors.

The students, therefore, spend the first four weeks of the semester editing. They edit four manuscripts, manuscripts that range in writing quality from reasonably well written to very seriously flawed. They edit each of these manuscripts with a different set of goals and simulated constraints. Thus, they practice light editing, heavy (or "substantive") editing, editing with the assumption that the author is available to respond to queries, and editing without the opportunity to query. In one case they edit to a style manual, and in another to the standard of internal consistency. They edit both "to perfection" and on a crash basis. The manuscripts, unfortunately, are all short; if there were time I would have them contend with the special problems that arise in medium- and book-length manuscripts.

The students learn to apply the principles of rhetoric to editing (what Mary Fran Buehler calls "situational editing"), they learn to use standard editing marks, and to keep an editor's style sheet. We discuss how the editing function is handled in various kinds of work settings. A lot of class time is spent comparing and discussing the changes each student has made, and I grade their work according to such criteria as fidelity to the author's intended meaning, clarity and usefulness of queries, and the gracefulness and economy with which problem passages are emended. As the semester progresses, the students continue to use their editing skills editing one another's work--and especially the drafts of the professional project they prepare as a group. Also, we spend an evening at a computer terminal, and those who have not tried computerized text editing get some "hands on" experience.

Before continuing with the next skill, let me mention that as the students broaden their communication backgrounds by learning these skills, they are also achieving the first course objective: better writing. As one edits, for instance, one is also improving one's writing ability. In other words, many of the course activities contribute to both objectives.

2. The students read about and write several kinds of professional documents. They write a set of specifications for bidding and a proposal. They also perform an experiment together--such as testing various brands of paper towel to find how much water they can soak up and their strength when wet. Then, from this simple experiment each student prepares a physical investigation report (or, in other words, a lab report) that is as complete and rigorous as possible.

3. The students are introduced to layout, selecting type, and copyfitting. This year each student prepared a simulated public notice. They wrote copy, chose display and text type, and did the layout down to the last pica. In 1980 and 1981 they prepared actual brochures as class projects.

4. The students attend a demonstration of computerized literature searching and do some on-line searches with the terminal operator. This new technology is important both to technical professionals and technical communicators. One of my students, in fact, wants a career combining technical communication with computer searching and has had an internship as a terminal operator at the medical center library.

5. The students work together on a "professional project." In other words, I volunteer the class to produce an actual document that someone needs. This semester we are writing a self-guided tour through the library that will replace the group tours that the librarians now give to freshman English classes. This project gives the students the experience of preparing a real document for a real audience, the experience of planning and preparing a document as a group effort, and the experience of working for "clients"--in this case members of the library staff.

6. This year for the first time I devoted a class meeting to the problem of ethics in technical communication. The ethics specialist in our philosophy department began the evening by presenting the students with a conceptual framework for analyzing ethical problems. The students then analyzed the ethical considerations in a series of cases that he and I devised.

7. We spend a social evening with a group of technical communicators in the Morgantown area. The students have a chance to ask questions and get answers and perspectives different from mine. They also get a better feel for the different kinds of jobs and work settings within the field of technical communication. They can even do some informal job hunting. And apart from these objectives, it's always nice to have a little party toward the end of the semester.

8. The students do some simulated or else real job hunting as a part of the course. They learn where to look for information about jobs, and they are assigned to locate notices of job.

openings in the Morgantown area, in one major city of their choice, and in the national job market. This assignment can also include seeking a summer job or internship. Summer jobs and internships are especially important in our program, since we do not have a large number of technical communication courses for our students to take. Also, many of the students get valuable experience taking on free-lance editing and writing projects.

That's my course. There are two significant problems that I'm aware of: (1) while I cover a lot of topics, I don't cover them in as much depth as I would like; and (2) because I originally planned the course for technical communicators, the choice of topics still favors them over the technical professionals.

COURSE AND CURRICULUM

Advanced Technical Communication has so far drawn students mostly through word of mouth. When the course becomes "official," it should also become better known, and potentially it could draw moderate numbers of students, both from the University and the community. (Morgantown, I should note, is something of a research center, and so there are quite a few technical communicators and many more technical professionals in the area.)

The course, however, at least as currently designed, only can be taught effectively with a small enrollment--probably no more than 10 students. Consequently, there is the potential problem of not being able to accommodate all those who might want the course. Possibly, we could offer more sections or develop a separate course for the technical professionals.

As I mentioned, Advanced Technical Communication is the center of a curriculum intended to prepare a small number of undergraduate students for careers in technical communication. The communications portion of this curriculum consists of the service course, Advanced Technical Communication, one or more internships, and a variety of other communication courses. These include courses in speech communication, journalism (especially graphics and newswriting), linguistics, and other writing courses offered by the English department.

In addition, the students should have a concentration or a major in a technical field. West Virginia University is a "comprehensive university," and so offers a broad range of technical programs. In many cases the student has already taken many technical courses before deciding on a career in technical communication. Degree programs for these undergraduates consist of a technical major with a concentration in technical communication, an English major with a technical concentration, a dual major in English and a technical field, or an interdepartmental degree in technical communication. Post-graduates re-training for a career in technical communication might take a portion of this curriculum.

Though a single course with a low enrollment, Advanced Technical Communication serves several significant functions. It provides advanced coursework in technical communication to technical professionals, both undergraduates and post-graduates, and to working technical communicators. In addition, since all other necessary courses are already in place, it opens up for

West Virginia University students the career option of technical communication.

COURSE READING ASSIGNMENTS

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