in a business communication class and some practice drafting an assignment, perhaps in a collaborative writing group. Rather, such knowledge, and the other sorts of knowledge that linguists claim is necessary for human communication to take place, must be learned experientially through years of reading, writing, and reacting to texts.

Although certain techniques may offer shortcuts to learning about words, their meanings, and their combinatorial possibilities, this knowledge cannot be reduced to a technology. Rather, it comes from a wide-ranging experience of texts: from reading, rereading, contemplating, analyzing, and discussing as well as composing, revising, and editing texts. In essence, writing is an art, not a technology. To produce better writers, we need to produce people who have a "feel" for words and texts. A writing pedagogy that says otherwise is reductive and ultimately doomed to failure. All the talk in the world about adapting to readers, about formulating rhetorical plans, about getting in touch with their own writing processes won't help students to compose effectively if those students don't have a good idea of what texts (and the words that compose them) are all about.

The idea that those who wish to produce effective discourse need to immerse themselves in texts (in the main the best texts that their culture and others have produced, I might add)—an idea that Cicero and Quintilian, among others, wholeheartedly would endorse—nowhere gets emphasized in Writing in the Business Professions. For that reason, and for the curious editorial policies I have discussed above, I consider this anthology less than successful in setting an agenda for the teaching of business communication in the 1990s.


Reviewed by Debra Journet, University of Louisville.

Generally, there have been two basic groups of people who write about technical communication: professional technical writers who work in government or industry, and academics who teach courses and direct programs. Both groups conduct research, but that research often seems to divide into types: practical advice about how to solve particular problems, and theoretical arguments about how scientific and technical language works. As a result, there have long been two common complaints about published research in technical writing: how-to advice, unsubstantiated by theory or research, is untrustworthy; and theoretical speculation, unconnected to real-world situations, is useless.
This general distinction breaks down in a number of places, of course, particularly as industry and the academy come together in certain exemplary programs. But there is still a perceived need to unite more closely the interests of professional writers and editors (who attend the STC convention) with those of academic scholars (who attend the CCCC convention). *Solving Problems in Technical Writing* represents one attempt to bridge that gap.

*Solving Problems* addresses a number of specific and significant problems encountered in technical writing situations. Each chapter title is phrased as a question, indicating a problem to be solved: "How Can Technical Writers Write Effectively for Several Audiences at Once?"; "How Can Technical Writers Effectively Revise Functional Documents?"; "How Can Technical Writers Give Effective Oral Presentations?" These questions range from general textual concerns—such as the need to make technical writing more persuasive, or to integrate text and graphics more effectively—to smaller, more professional problems—such as the difficulties technical writers have collaborating with other researchers or furthering their own professional development.

In response to these questions, each chapter contains a section entitled "Relevant Research," which reviews the literature on the subject and then offers some specific suggestions based on that research, as well as, in a few cases, on primary research conducted by the writer. Thus, *Solving Problems in Technical Writing* attempts to provide solutions to common problems (or offer strategies to develop those solutions), and it tries to ground those solutions in more than the experience of the writers. Thus, while the book offers little new information, it does offer interesting syntheses and gives a good indication of where the most useful research in technical communication lies.

What these chapters suggest is that there has been more theory-building than theory-testing in technical writing research. Most of the contributors cite a range of general principles but can provide little specific results that empirically support those principles. Moreover, the two most important research paradigms of this book—in fact, virtually all the theory of this book—come from rhetoric and linguistics. Essentially, rhetoric is shown to provide a top-down perspective: general strategies for communicating effectively to readers; linguistics seems to offer a bottom-up slant: ways to order and signal ideas in a text. But though rhetoric and linguistics probably have been the two most important areas of research in technical communication, other approaches do exist. There is relatively little mention in this book of the body of knowledge created by communication theory, cognitive psychology, or computer science (the chapter "How Can Current Computer Technology Help Technical Writers?" is a rather general guide to getting started selecting and using a computer). Nor is much use made of the growing body of rich, contextual data from ethnographic and field studies which show how discourse communities operate in technical and professional situations.
Nevertheless, this book represents an important attempt to assess solid research in technical communication. The contributors, both from industry and academia, are quite well known, and the chapters themselves present well-written models of problem-solution documents. Some topics, based on established areas of research, are obviously more substantive than others. But the book, as a whole, should be useful to professional writers and editors, and it should serve as an important source of information in advanced courses in technical communication.


Reviewed by Hugh Burns, University of Texas

In trying to account for computer technology in composition courses, many of us have found ourselves scrambling to find in the literature the most relevant, most helpful, and most hype-free articles among a more available article: the I-came-I-saw-I-conquered computer setpiece. So *Critical Perspectives on Computers and Composition Instruction* arrives at a good time, for it accounts for the modest research base yet holds accountable the emerging developments in educational software design for computers in composition instruction. Gail Hawisher and Cynthia Selfe, as coeditors of the journal *Computers and Composition*, are positioned at the center of a notorious band of renegade composition teachers who are willing to try to engage computer technology as promising tools, but who also approach this technology on more human and humane terms.

The old-time, unexamined computer religion is passing away. With it passes the dogma that an unattended word processor would allow the massive population of students to witness the miracle of learning to write. Such medieval microcomputing was also marked by the belief that just having personal computers available was the key to individualized, personal instruction and literacy’s salvation. We left education to the electrons. At one extreme, the field seemed too certain about itself. At the other extreme, some voices decried the whole computer thing as a hopeless delusion. Some still do, but there must have been a promising compromise all along. What distinguishes the collection Hawisher and Selfe assemble is the critical willingness of these authors to be optimistically uncertain. Generally, these twelve authors tell us not to go so fast. Stop, look, review, think. Be sensitive to students’ individual needs. Computers are not for everyone. Teach writing, not word processing. Computer-assisted instruction is too theory