

TECHNICAL WRITING

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Preface

This text offers a comprehensive and flexible introduction to technical communication. Designed specifically for heterogeneous classes, it speaks to a diversity of student interests. Rhetorical principles are explained, illustrated, and applied to a broad variety of assignments, from brief memos and summaries to formal reports and proposals. Exercises parallel the writing demands students will face in college and on the job.

The book is organized into four parts. Part I, *Communicating with a Specified Audience*, treats the process by which any document is written. The first four chapters analyze the writer's essential decisions about purpose, audience, content, organization, and style. Chapter 5 synthesizes these decisions.

Part II, *Strategies for Technical Reporting*, covers the principles of rhetoric, design, and research that are vital in the production of technical documents.

Part III, *Specific Applications*, adapts the earlier concepts and strategies to the composing of the varied documents that typically comprise technical writing.

To unify the concepts in Part I with the strategies in Part II and the applications in Part III, each sample document throughout the text is preceded by an audience-and-use analysis.

Finally, the appendices contain a handbook for easy reference and the full text of interviews with four writers on the job.

The rationale for the sequence and substance of chapters is based on these assumptions:

1. Although no single, predictable sequence characterizes the writing process, it is in no way a random act; instead, the writing process is a deliberate act of problem solving. Beyond studying models of a particular document, students need guidance in the recursive process of decision making in order to generate their own useful documents.

2. Writers who lack rhetorical awareness begin "writing" too early, ignoring the initial decisions on which writing is based. Only by defining their writing situation, and by asking the right questions, can they find the right answers. The mistake of a too-quick start is compounded by the failure to write deliberately. Students begin to write deliberately only when they see writing as a form of problem solving.

3. All students can learn to recognize and incorporate into their work the essential rhetorical features of good writing: worthwhile content, sensible organization, and readable style.

4. Despite their knowledge differences, juniors and seniors generally face the same difficulties as freshmen or sophomores in planning, drafting, and revising a document.

5. The proliferation of technical writing courses has caused most classes to be grouped heterogeneously. This assortment of students with varied backgrounds calls for explanations that are accessible, examples and models that are broadly engaging and intelligible, and goals that are rigorous but collectively achievable.

6. The countless approaches to the teaching of technical and professional writing require that a textbook be as flexible as possible.

7. Class time in a writing course should not be wasted by lectures reiterating information readily found in a textbook. Instead, workshops can *apply* textbook principles by focusing on the texts composed by students in the course. The workshop approach, then, calls for a text that is both comprehensive and accessible. (Suggestions for workshop design are found in the Instructor's Manual.)

In line with the above assumptions, this book offers a pattern of cumulative skills, moving from assignments of summaries and expanded definitions to more complex tasks, ending with the formal report or proposal — an assignment that draws on most skills developed earlier. Within this structure, however, each chapter is self-contained for flexibility in course planning.

Ample exercises in each chapter offer practical applications at various levels of challenge and complexity. Thus the instructor who wishes to spend more time, for instance, on letters and short reports will find plentiful resources. Timely examples and models are drawn from a balance of student and on-the-job writing in a variety of fields, and are intelligible to students in all majors.

Individual chapters move from concept to practice in the following progression:

1. Defining each assignment in detail.
2. Explaining its purpose to students, whose implied question invariably is "Why are we doing this?"
3. Discussing the criteria the completed assignment should embody — with an emphasis on rhetorical purpose.

4. Providing models accompanied by explanations and audience-and-use analyses.

5. Offering guidelines for planning, drafting, and revising the document for a specified audience with specified needs.

6. Providing revision checklists for self- or peer evaluation.

The emphasis throughout is first on the process, then on the products of writing. Students are guided through inventing, developing, and organizing their materials recursively. They learn to make *all* the decisions necessary to produce a useful document.

Just about every page of this new edition is in some way improved, with the style more efficient, discussions more concise, and illustrations more vivid. Rhetoric theory is translated into sensible practice. Some specific additions include:

- in Chapter 1, discussion of the features unique to technical writing
- in Chapter 2, more on discovering and evaluating content for usefulness to a specified audience for a specified purpose
- a new Chapter 3, treating the standard paragraph as the structural model for any discourse of any length
- in Chapter 4, new sections on ambiguity, analogies, acronyms, and tone
- a new Chapter 5, giving an overview of the writing process in an actual work situation
- in Chapters 6-12, many new examples and models, with emphasis on high-tech and environmental subjects
- in Chapter 13, a new section on computer graphics
- in Chapter 14, a new section on electronic information searches, including a sample automated search
- in Chapter 15, two scientific/technical documentation systems and MLA's new in-text citations; a primary research report, with new primary research topics
- in Chapter 16, sections on claim and adjustment letters, and plenty of short-case exercises
- in Chapter 17, a major revision to emphasize persuasive memos, with many short-case exercises
- in Chapters 18 and 19, expanded discussions and new proposal and report models, with emphasis on primary research
- a new appendix containing interviews with working professionals who must write daily
- a new instructor's manual (8½" by 11" format), containing detailed suggestions and 60 master sheets to be reproduced as dittos or transparencies, or shown on an opaque projector. Some of the masters are designed for the instructor's convenience (syllabi, chapter quizzes, a final exam, and sample responses to various assignments). But to emphasize more than

the products of writing, many of the masters illustrate the writing process as a *thinking* process.

Many of the improvements in this edition were based on excellent advice from reviewers: Patrick Cheney, Pennsylvania State University; William J. Kelly, Bristol Community College; Thomas L. Warren, Oklahoma State University; Edith Weinstein, University of Akron; Valerie K. Wescott, Western Michigan University; and Sharon K. Wilson, Fort Hayes State University. Robert M. Hogge, U.S. Air Force Academy, gave suggestions of unsurpassed quality and detail. My thanks to you all.

At Southeastern Massachusetts University, Raymond Dumont, Jr., served as contributing editor for sizable sections, and acted as counselor, advisor, and all-around support system. Charles McNeil, instruction librarian, contributed vital material, advice, and editing for the section on automated literature searches. Once again, Jean Morgan tied all the loose ends of my teaching/administrative life. Shirley Haley did a superb job of editing the final manuscript, suggesting crucial changes, and contributing art, ideas, and energy.

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