Intended for teachers of an advanced undergraduate composition course for majors in any of the liberal arts, social sciences, humanities, or business, this manual offers an outline, instructional materials, and some suggested assignments. Emphasis is placed on the process of composing, particularly the ways students should write for different audiences and different purposes. The course also stresses the crucial relationships among critical reading, clear thinking, and effective writing. Students are expected to write and review a variety of documents and also to practice related skills, including finding and analyzing audiences outside the classroom and conducting an empirical evaluation of a document. The course material, which can be covered in one semester or in one quarter, moves the students in a cyclical pattern through the same process at three different levels: first, they move step-by-step through the composing model; then they apply the model to actual documents that they rewrite; and then they create documents, gathering information, determining need, and moving through the process to evaluation and final draft. Chapters in the book follow the steps of the composing process and discuss such topics as the composing process model, planning, organizing, writing clearly, using design well, reviewing/revising/editing, and evaluating documents. Appendixes include a suggested syllabus, an example of a redesigned form, and exercises for writing clearly. (HOD)
WRITING IN THE PROFESSIONS

A Course Guide and Instructional Materials for an Advanced Composition Course

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A product of the Document Design Project
funded by the National Institute of Education
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with Siegel and Gale
Acknowledgements

The authors want to thank Anita Brostoff, Robert Kelton, Candace Miyamura, and Ramsay Selden for their perceptive comments on an earlier draft of this book. We also express our appreciation to Mary Medved for preparing the manuscript and to Anita Bennett and Denise Peck for the graphics.

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# Writing in the Professions

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Introduction

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Introduction

About this Book

In this book, we offer an outline, instructional material, and some suggested assignments for an advanced undergraduate composition course. The course focuses on expository writing in work settings and is meant for juniors and seniors majoring in any of the liberal arts, social sciences, humanities, or in business. It should be excellent training for students entering any profession in which writing is a valued skill.

The book is addressed primarily to the instructor who is interested in a writing course which grew out of research and practical experience in work settings. It is not a textbook for students, but we have included some materials that you, the instructor, may want to make directly available to your students.

Because composition instructors have told us that they are least comfortable teaching graphics and evaluation, we have included detailed chapters on these topics. We have gone into less detail on aspects of clear writing that are familiar to English instructors or that are covered extensively in most composition texts.

Some Background on the Course

This book is a product of the Document Design Project—a three year effort funded in 1978 by the National Institute of Education to foster clear and simple writing in public documents. During these three years, the American Institutes for Research, with the help of Carnegie-Mellon University and Siegel and Gale, Inc., has conducted research in writing, applied research findings to practical projects, and developed courses on clear writing and design for graduate students and undergraduates. This book is the final product of the Document Design Project in curriculum development for undergraduates.

Three earlier activities of the Document Design Project strongly suggest that this course is needed. First, in 1978-1979, we conducted an informal survey of innovative approaches to the teaching of composition in American
We found a dearth of courses that would directly prepare undergraduates in non-technical fields for the writing assignments they would be likely to get in their future jobs.

Secondly, we spoke with many English teachers at the 1979, 1980, and 1981 meetings of the Conference on College Composition and Communication and found great interest in our approach and confirmation of the need for such a course. Letters from many of you have also encouraged us in this effort.

In the third place, we have been working with lawyers, economists, tax specialists, program analysts, and other professionals in government agencies. Since 1978, we have participated in more than thirty technical assistance projects, helping writers develop, revise, and evaluate documents, and conducting workshops on clear writing. Most of our clients need these services because they had no training in how to write clear, effective documents for public audiences.

Research, practical experiences, and insights from business and technical communication lead us to suggest that on-the-job writers and students in advanced writing courses have major needs which include the following:

1. They need to tackle whole pieces of discourse, focusing on general procedures and processes for writing rather than on recipes for special types of documents. Knowing conventions and formats is necessary but not sufficient for writing effectively in actual work settings, particularly for writing comprehensible, complex documents for public audiences.

2. They need the ability to manage writing tasks that require team effort and that involve reviewers.

3. They need techniques for using graphics effectively, or at least for drawing on the expertise of graphics professionals intelligently.

4. They need research-based guidelines for using clear, comprehensible language as well as techniques for testing out these principles of clear writing and developing their own theories about what actually works.

5. They need systematic procedures for getting out to their intended readers to learn what the readers need to know and what problems the readers now have with document. As they define purpose, audience, and readers' tasks, they must be able to link these to choices of organization, style, and graphics, and to evaluate the effectiveness of what they write.

A Description of the Course

This course stresses the process of composing, particularly the ways students should write for different audiences and different purposes. Students taking this course will write and revise a variety of documents and also practice related skills, including finding and analyzing audiences outside the classroom and conducting an empirical evaluation of a document. The course also stresses the crucial relationships among critical reading, clear thinking, and effective writing.

The process model, which is an important part of the course, is a practical framework for training programs or a full semester's course. It guides both the novice and the experienced practitioner through the planning and design stages that underlie clear, effective writing.

Using the model, the writer specifies content, audience, purpose, task, and constraints at the pre-writing stages. This specification allows the writer to shape an evaluation procedure at the post-design stage that is more accurate than a readability formula in determining how comprehensible a document is. Moreover, writers who use the model must go outside the classroom or organization to evaluate their documents with readers other than their peers, colleagues, or instructors.

As writers move through the whole complex process to completing a writing task, they become sensitive to full rhetorical situations and to the complex ways their writing is (or should be) shaped by subject, audience, intentions, and constraints.
As we have developed it, the Document Design Project's course differs from traditional composition courses in that it does not focus on self-expression, writing fiction, or literary criticism. It differs from traditional technical writing courses in that it does not stress industrial or engineering writing tasks. As an advanced composition course, it offers guidelines for clear writing and practice in revising and editing, but assumes that the student knows basic grammar, spelling, and punctuation. Students will be expected to use handbooks or dictionaries on their own or to take advantage, if they are having difficulty, of help offered by their university's writing lab or communication skills center.

In Appendix A, you will find a syllabus which suggests how materials might be presented week-by-week.

How the Course Has Been Used Before

In part, the course is an expansion of workshops developed by the Document Design Project for on-the-job training of government writers. In the course, as in the workshops, we are trying to bring together the best of practice, teaching, and research.

In part, the course is built on the experience of a modest field test. During the 1980-81 school year, four instructors of English at three universities taught advanced composition classes using the Document Design Project's model and materials. We owe a deep debt of gratitude to

Dr. Anita Brostoff of Carnegie-Mellon University
Ms. Susan Chappalear of the University of Maryland
Dr. Susan Dunkle of Carnegie-Mellon University
and Dr. Robert Kelton of North Carolina State University

for being willing to experiment with the new ideas and examples in this course. We thank all four for the time they took to tell us about their experiences and for providing us with examples of students' work. In their classes, students selected real-world documents that affected their own lives and followed AIR's process model step-by-step from analyzing the audience to testing their revisions. The instructors and students were able to see how good writing can make a difference. Some of the students' new documents are now in use. In the process, the students learned about different audiences and purposes; they honed their writing skills; they
learned about themselves as writers; and they apparently enjoyed the class.

A Framework for the Course (and Some Assumptions)

The process model of document design, shown below, provides a framework for the course.

---

The model is a heuristic for writing or revising any document. We also think that it has several features that you will find useful in teaching an advanced composition course. The model illustrates many of our assumptions about
good writing; assumptions that you may want to emphasize at the beginning of the course. These include:

1. Writing is a dynamic, multi-step, process.

2. The process of writing does not begin with putting words on paper, but with finding out about who will read the document, why you are writing it, and what you are going to cover. The process includes invention, generating ideas, and planning before you write.

3. The process of writing does not end with a first draft. The writer must review, edit, evaluate, and revise until the intended reader can understand and use the document.

4. Writing is a means of communication; communication implies a sender (writer) and receiver (reader). The model emphasizes the writer's connection to the reader throughout the process.

5. Writing is a recursive process. Dotted arrows in the picture of the model link review and evaluation back to the drafting stage. Decisions at the drafting stage might also require changes in planning or further invention. (The writer should imagine dotted arrows connecting all the boxes in the picture of the model. We have left them out only because they would clutter up the picture.)

6. The model asks the writer to answer five planning questions. We believe that writing down what one does, particularly in the planning stage, helps the writer to understand and then improve his or her own processes of writing. Although students may balk at the amount of time we ask them to devote to planning in their assignments, the time will be well spent. Techniques learned here can become semi-automatic and take up far less time in future writing tasks.
A Syllabus for the Course

You should be able to cover the material in this book in a one-semester or one-quarter course. In Appendix A, we give a detailed syllabus for a cyclical version of the course in which students learn the model using exercises and short assignments and then apply the model to two longer assignments. The plan makes good sense to us and worked well where it was field tested, but we assume that you will want to adapt the plan and the materials to meet your own students' needs and the constraints of your university's calendar.

In the cyclical syllabus, students go through the same process at three different levels: First, they move step-by-step through the model; then they apply the model to actual documents which they rewrite; and then they create documents: gathering information, determining need, and moving through the process to evaluation and final draft.

Throughout the course, your students should be working with actual documents. You and your students should collect about a dozen documents on your campus and in your community that are unnecessarily difficult and that need revision. Students field-testing this course have chosen to work with promissory notes, a constitution for a student government, consent forms, credit card agreements, descriptions of graduate programs, editorial policy for the campus newspaper, and instructions for using equipment (e.g. computer manuals) among other documents. We suggest that you have your students find many of these documents themselves so that they are working with material that they are highly motivated to revise and evaluate. Throughout this book, when we need to refer to your class's collection of documents, we'll call this your "corpus."

Cycle One, Learning the Steps in the Model. We suggest that you spend the first three or four weeks of the semester going through the process model step-by-step. Since this model provides the framework for the course, you will probably need to introduce students to new terminology and techniques, review guidelines for clear writing, and allow students to practice skills they will need later on when they tackle writing projects. If your students are beginning college writers, you may need to spend even more time on these general principles. You may want to emphasize the sections that cover graphics and evaluation, which include material that is unfamiliar to many students. Cycle One
includes many exercises and assignments designed to give students practice in analyzing documents and in writing relevant material, including resumes, memos, lab reports, summaries and case studies. In particular, we have included a set of writing exercises for Chapter Six that AIR staff developed and used in clear writing workshops. You'll find them in Appendix C. Feel free to copy and use them if they seem appropriate.

Cycle Two, Using the Model to Revise Documents. In this part of the curriculum, you should have your students apply the concepts and strategies they have just learned to rewriting actual documents. Your students should select documents to rewrite from the class's corpus of poor documents. We suggest that students work individually to rewrite two or three brief, fairly simple documents and collaborate on rewriting one longer piece. You might run the class as a writing workshop for the shorter pieces, with students serving each other as reviewers, consultants, editors, and audience. For the longer, collaborative work, we suggest that students also be required to find audiences outside the classroom to read and evaluate their revised documents. In this second cycle, you should have the students use (and therefore review) every step of the process model as they plan, carry out, and evaluate their revisions. Cycle Two will probably require three or four weeks to complete.

Cycle Three, Using the Model to Create Documents. At this stage, students should be ready for the challenging work of creating a document. They should be responsible for establishing purpose, audience, and topic; and for moving step-by-step, once again, through the process model. Students might complete two smaller projects or one major project.

Each student should individually create a relatively simple, brief document that represents a kind of writing they expect to do regularly in their major field or career (executive summary, analytic report, case study, etc.). You might review the writing samples and assignments that students have gathered over the first part of the course to help students select a particular writing task. Your students should again serve each other as readers, reviewers, and editors as they move through the process model to evaluation and final draft.
Two to four students should work collaboratively on the major writing assignment. Students should select a complex document intended for a multiple audience, one that has real audiences outside the classroom, that is critical and meaningful to many people in those audiences, one that can be empirically evaluated. Clearly, at this stage you should expect students to be sensitive to full rhetorical situations and to the way their writing is (or should be) shaped by subject, purpose, constraints, and audience. Students should evaluate these documents with outside readers. If the evaluation shows that the final products of cycles two or three are good, you and the students should attempt to have the audiences adopt the new document.

This final project should occupy several weeks. You may wish to schedule a series of workshops as well as large group meetings where you discuss issues that arise as students work on their projects.

If you are working with beginning college writers rather than advanced students, you may wish to spend half the term on Cycle One, half on Cycle Two, and omit Cycle Three altogether. However, another option would be to complete Cycles One and Three and to omit Cycle Two. If you have advanced students who can go through Cycle One quickly, you may be able to do both Cycles Two and Three in one semester. If you have the luxury of a full year course, all three cycles should be possible.

What Comes Next

Most of the chapters in this book follow the steps of our process model. Before we even begin with the planning stage, however, we would like to suggest that you set the scene for your students as future writers in work settings. We suggest that you ask your students to analyze themselves as writers now, to conduct and discuss case studies of professionals as writers in several occupations, and to learn something about the climate of writing in organizations today.
chapter 2

Setting the Scene

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chapter 2

Setting the Scene

The Value of Good Writing Skills

Your students have one distinct advantage over most of the professionals we work with. They are taking an advanced composition course that focuses on the writing they are doing now and will be doing on the job. Most people we meet in our workshops and as clients have had no training in writing after Freshman Composition. They were unprepared for the specific writing tasks that they have in their jobs. They were also unprepared for the amount of writing and the variety of writing that they must do—and for the importance of writing as a criterion for promotion and success in their jobs.

You may find that you can increase your students' interest in the course if you begin by having the students examine the role that writing plays in their own lives now and in the lives of professionals in their major field. The goals of this section are to convince students that:

- they do far more writing in different contexts and for different purposes than they had thought (that is, they already do some of what you are teaching in this course—it isn't all new and impossible)

- people in professional and managerial jobs spend a lot of time writing, and they write a variety of documents to different readers for different purposes (that is, the skills the course teaches are critical on the job), and

- as professionals and managers move up the career ladder, writing skills become more and more important.

By the end of this course, your students should not only be getting better grades for writing well in their other courses, they should have highly saleable skills that will give them a competitive edge in the job market.
The Student as Writer

One technique for getting students to understand themselves better as writers is to have them keep a log of all the writing that they do over a given period of time. On the next page, you will find our format for a writing log with one column filled in as an example. As with other examples and forms in this book, this sheet can be copied and distributed to your students.

We've chosen the questions we put on our logs because they are important aspects of the writing process, because students can answer the questions when they think about them, and because few students have thought about these aspects of their writing before they begin to keep a log. Of course, you may think that other questions are more important for students to be thinking about and may want to change the format.

Remind your students that everything they write counts as an example—grocery lists, class notes, application forms they fill out, letters home, research notes for a paper in another course, a diary if they keep one, memos at work if they have a job, as well as essays, reports, or articles that they turn in for grades.

You may want them to begin by trying to recall everything that they wrote in the past two weeks and then ask them to keep the log for the next two weeks adding to it at the end of every day. Most people, in the recall part of this task, leave out much of the writing that they did. As they keep the log over the following two weeks, they realize how many different types of writing they are doing (and had been doing) that they had not recalled.

At the end of the time you set for the students to keep the log, you can review with them the extent and variety of writing that they do and the number of choices that they make as they do each writing task. By the time you are ready to discuss the students' logs, they will have the case studies of professionals for comparison to their case studies of themselves (see the next section). They will probably also be studying the five pre-writing questions that our model raises (you'll find these on page 39) and thus be ready to discuss the different assignments, audiences, purposes, tasks and constraints of the writing that they do.
<table>
<thead>
<tr>
<th>What kind of writing is it? (theme, letter, poem, etc.) Who is it for?</th>
<th>memorandum to office manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why did you write it?</td>
<td>to request, on behalf of support staff, changes in office procedure</td>
</tr>
<tr>
<td>Did you write one or several drafts?</td>
<td>several</td>
</tr>
<tr>
<td>What changes did you make?</td>
<td>some changes of vocabulary &amp; phrasing to alter the tone</td>
</tr>
<tr>
<td>Did anyone help you write it?</td>
<td>yes - staff members contributed information and helped revise drafts</td>
</tr>
<tr>
<td>What steps did you follow? (First, I...; then I...; finally, I...)</td>
<td>First, gathered information from staff; next, wrote a complete draft; next, presented draft to the group; revisions, then wrote final draft, which was approved by the group</td>
</tr>
<tr>
<td>Did the writing achieve its purposes? How do you know that?</td>
<td>yes! the changes requested were made</td>
</tr>
</tbody>
</table>
You can also have students use their logs (and the writing they are reporting on) to analyze their own successes and failures as a writer. After students have learned to analyze an existing piece of writing, you can have them look back over their entries to see if there are any common elements in the examples where the writing did not achieve its purpose.

The Extent and Variety of Writing in Most Professions

Some students, especially those who have managed to avoid writing much in high school and in college, have the mistaken idea that once they move into their professions, they will do very little writing. The very opposite seems to be true. Even while computer-writing technologies become increasingly sophisticated, professionals in many fields report that writing demands on them are increasing in complexity and variety. We want to convince students that whatever profession they enter, they are likely to spend a good bit of their time writing and that their writing will have consequences for them in terms of advancement and rewards.

One way to introduce students to the writing demands made on different professionals is to present them with case studies taken from research on job-related writing. What follows are three case studies of the writing that people in different jobs actually do.
At age 40, John Smith has been promoted to a full professorship at his university. He has an excellent reputation as a scientist. If you think of him as a writer, you probably think of his scientific research articles. But John Smith also has to fill other roles in his job. As a professor, he not only does research. He teaches; he serves on committees; he interacts with students, support staff, administrative staff, and other researchers. To keep up his reputation outside of his university, he writes to funding sources, to people planning professional meetings, to colleagues in other colleges, and for professional journals. In the course of a semester, Professor Smith is writing:

- journal articles reporting on his research
- reviews of other people's research for professional journals (meant also to help the other researchers)
- proposals to get money to do research
- reviews of other people's proposals
- progress reports to the agency that funds his research
- abstracts for papers that he wants to present at professional meetings
- presentations to give to other scientists (limited in time to 10 minutes or 30 minutes or 45 minutes)
- notes for lectures for classes
- review sheets for students in his class
- exam questions for students
- comments on students' papers
- letters to other scientists to ask questions about research or to answer questions they have asked him

*J.C. Redish, interview with a college professor as writer, unpublished, 1980.*
letters to colleagues in other universities to plan programs for professional meetings

letters of reference for students who are applying elsewhere for jobs or for graduate school

letters to people who are applying to his group for jobs or asking for information about jobs

copy for ads for newsletters and journals announcing jobs in his group

copy for a brochure to tell prospective students about his group's research program

report to a department committee considering whether or not to promote an Assistant Professor

memos to colleagues announcing time, place, and agenda for committee meetings

memos to colleagues and to the committee's files to report the actions taken at a committee meeting

memos to the Department Chairperson on suggestions for policy and procedures (or responses to memos from the Chairperson or from others)

instructions to secretarial staff or graphics staff or technical staff about how to prepare his reports or material for his presentations

Professor Smith's job at the university demands skills in writing for many purposes and to many audiences—not only to communicate new scientific results to others who are doing similar research.
Case Study No. 2: Manager of a Department in a Large Retail Store (Goswami, 1978)*

This woman, 27, has always lived in the southeastern United States. She has a bachelor's degree in home economics, but has worked as a salesperson for several years. For about six months, she has been the manager of a department in a large retail store.

Here is how she describes herself as a writer:

As a salesperson, I almost never wrote. Maybe a letter for something special, like some time off. But when I got my promotion all that changed. And the funny thing is... well, nobody said anything [about writing] when they talked about the new job. What would have happened to me if I couldn't write? I don't know. I guess they'd fire me. And it's hard for me. I hate it. But I did what you asked and tried to keep track of what I wrote in the past two weeks. You won't believe it.

Here is what she wrote, during a typical two-week working period:

- notes to myself, reminders and lists
- several notes to one of the women on my floor; a reminder or question; just a quick handwritten note
- notes on bulletin board to the clean-up crew
- handwritten notes to my boss
- report to my workers on this past month's sales; a little pep talk, really
- a report to the store manager with the above attached
- a request to management for part-time help

• formal letter; warning to go in an employee's file

• letter of complaint to a supplier

• answer to a request for help with next summer's sales promotion

• report to a buyer about how a new line is moving

• formal note to my boss outlining my ideas for some changes in the department

• letter to management asking for two days off to compensate for holiday overtime

• sympathy note to recently widowed woman in my department

• letter to customer, responding to her complaint

• daily and weekly sales reports (forms) and inventory reports

• requests to maintenance and supply (forms)

• employee work schedule and part-time report (forms)

This woman's comments about herself as writer, of which you have a brief excerpt, tell us that she must be able to write to a wide range of audiences for many purposes. For her, to be able to write is to be able to advance, at least after she has reached management level in this retail store.
Case Study No. 3: Bank Executives (Van Dyck, 1980)*

Figures 1 & 2 on the next two pages show the variety of writing tasks performed by executives in one bank. Notice that the types of writing are divided into internal (when the primary reader is another bank employee) and external (when the primary reader is a client or the public in general). This distinction between internal and external audiences is important in most job-related writing. An important aspect of this course will be learning to write for each of these audiences (and for both at the same time).

Notice also in this case study that dictation is considered to be writing, so far as these executives are concerned. We agree. Executives (and others) cannot rely on even expert secretaries and administrative assistants to express meaning or to present a personal or corporate image to their audiences. The person doing the dictating must mentally go through all of the stages in the writing process.

<table>
<thead>
<tr>
<th>Function</th>
<th>Audience</th>
<th>Method of composition</th>
<th>Role of revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Call reports</td>
<td>wide and varied; potentially unknown; credit files (resource for entire bank), marketing dept., writer's supervisor, occasionally top management, writer's own file</td>
<td>usually first-time-final strategy; either &quot;spew&quot; technique or systematic approach, from organized notes; dictated to word processing dept. (WP) or handwritten, typed by secretary</td>
<td>usually reviewed only for typographical or mechanical errors</td>
</tr>
<tr>
<td>2. Simple memoranda</td>
<td>colleagues in other depts. of bank</td>
<td>first-time-final strategy; usually dictated to WP; sometimes drafted by hand once, then typed by secretary</td>
<td>revised only for typographical or mechanical errors, or factual inaccuracies</td>
</tr>
<tr>
<td>3. Complex memoranda</td>
<td>supervisor, others in top management</td>
<td>usually drafted by hand, transcribed by secretary</td>
<td>often revised for focus, impact, tone (multiple drafts), as well as clarity, accuracy</td>
</tr>
<tr>
<td>4. Special reports</td>
<td>top management, often chairman of bank; people whom writer must impress favorably</td>
<td>often written as team or task force; handwritten in early draft stages, typed by secretary; final copy printed and bound for important distribution</td>
<td>long-term project involving multiple drafts; revised for organization, focus, impact, perhaps length, overall presentation</td>
</tr>
<tr>
<td>5. Credit committee reports</td>
<td>wide, potentially unknown; Credit Committee; heads of Credit Policy, Loan Review, Int’l Depts., Vice-Chmn. of board and bank, supervisors of all lending divisions</td>
<td>written in sections by credit analyst (executive trainee); by hand; final draft typed by department secretary</td>
<td>reviewed by loan officer whose client seeks loan; revised for inaccuracies</td>
</tr>
</tbody>
</table>

*Terms borrowed from John Gould’s research

**Writing by Bank Executives**
© Barrie Van Dyck, 1980
Used by Permission of the Author
<table>
<thead>
<tr>
<th>EXTERNAL</th>
<th>Function</th>
<th>Audience</th>
<th>Method of composition</th>
<th>Role of revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Simple letters</td>
<td>acknowledge understanding gained in telephone conversation; document information for client; thank client for business or entertainment (e.g., lunch)</td>
<td>customer</td>
<td>first-time-final strategy; dictated to WP or secretary</td>
<td>reviewed only for typographical or mechanical errors</td>
</tr>
<tr>
<td>2. Complex letters</td>
<td>explain complex financing terms; turn down request for loan or withdraw existing policy (fail to renew)—i.e., give client unwelcome news</td>
<td>customer</td>
<td>often drafted by hand, typed by secretary or WP</td>
<td>usually multiple drafts to create desired tone, to present complex information clearly so customer understands all aspects of business transaction</td>
</tr>
<tr>
<td>3. Commitment letters</td>
<td>document loan agreement, committing bank and customer to specific terms; state contingencies of agreement</td>
<td>customer</td>
<td>occasionally form letter with specific details inserted for particular customer, typed by WP; more often custom-tailored, drafted by hand</td>
<td>careful review for accuracy (by writer’s supervisor as well as writer); sometimes multiple drafts</td>
</tr>
<tr>
<td>4. Proposals</td>
<td>persuade prospective or long-standing customer to use designated bank service(s); explain details of service(s); emphasize selling features</td>
<td>customer</td>
<td>form proposals occasionally used; most proposals prepared individually; drafted by hand, typed by WP or secretary</td>
<td>multiple drafts if proposal is customized and lengthy; revised for clarity, accuracy, persuasiveness</td>
</tr>
</tbody>
</table>

*Writing by Bank Executives*  
© Barrie Van Dyck, 1980  
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Assigning Students to Do a Case Study

An excellent way to have students learn about a job they hope to have someday is to have them do a case study of the writing that someone in that position now does. The case study can, in itself, be a research and writing assignment. If they do not know, or have no access to, people in jobs they are interested in, they can do case studies of people in other professional and managerial jobs (their parents or other relatives, health care professionals in the campus clinics, administrators in campus departments, managers in local businesses and agencies, such as a campus bookstore, credit union, or restaurant.) You can require them to use a list (as in Case Studies #1 or #2), a log (as in Case Study #3), a prose narrative, or a combination of these formats. On page 27, you will find a filled-in example of a log used in a case study. On page 28, you will find an example of a prose narrative case study from the Canisius College Writing Project.

Students will need a few weeks to arrange and complete their case studies. Remind students that they must be scrupulous about identifying themselves, explaining what they are doing and why, assuring the subject's privacy, and offering to send the person a copy of the completed case study. Students will be asking their subjects to give up several hours of time, to save copies of writing done regularly at work, and to talk about this writing. Students should ask their subjects questions about how much they write, how often they write, the kinds of writing they do, about their writing processes and problems, and about other aspects of the writing that interest the student and the subject.

When the case studies have been completed, you might use them for a general discussion of the types of writing professionals do at work, the concerns they have as they write, the range of audiences and purposes they have when they write, and the ways in which their audiences, purposes, and other concerns influence their choices of length, content, organization, and language in different documents.

You might (with your class) look for common writing tasks across professions. (Do managers do similar types of writing regardless of their field?)
<table>
<thead>
<tr>
<th>Function</th>
<th>Audience</th>
<th>Method of Composition</th>
<th>Role of Revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lethis</td>
<td>Describe experience, Ask questions, Discuss plans.</td>
<td>Family, Friends</td>
<td>One final draft</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reread throughout the process—Final rereading before signature.</td>
</tr>
<tr>
<td>Journal Entries</td>
<td>Emotional cathartic</td>
<td>Myself</td>
<td>Freewriting</td>
</tr>
<tr>
<td>Notes on Tests</td>
<td>Gather information</td>
<td>Myself</td>
<td>One draft, noting page numbers, Sources, - Second draft, First draft—exact copying</td>
</tr>
<tr>
<td>Class Notes</td>
<td>Gather information</td>
<td>Myself</td>
<td>One-time draft, underlining emphasized passages.</td>
</tr>
<tr>
<td>Short Papers</td>
<td>Description, Narration, Explanation, Organization of thoughts, For self, Clarification of ideas for self</td>
<td>Class teacher, myself</td>
<td>Handwritten draft—stepping to read throughout the passage, Final draft—typed or handwritten. Occasionally, one draft only.</td>
</tr>
<tr>
<td>Long Papers</td>
<td>Analysis, Research</td>
<td>Classmates, Teacher, Colleagues, Myself</td>
<td>Multiple Drafts—initial draft handwritten, subsequent drafts typed. Final draft typed.</td>
</tr>
<tr>
<td>Journal Study</td>
<td>Emotional cathartic</td>
<td>Myself</td>
<td>Multiple drafts—handwritten</td>
</tr>
</tbody>
</table>
A Sample Prose Report of A Case Study

Division Personnel Manager -
Large Manufacturing Company

Mr. K types one-page memos for
circulations among associates and superiors
once or twice a week. He composes these at the
typewriter; he usually types only one draft.
Daily, he sends three or four brief,
handwritten notes to subordinates and
associates. He writes letters and informal
presentations frequently. He sends monthly
reports to division management. He is
responsible for an annual report to operating
vice-presidents and officers of comparable
status; these reports may be as long as forty
to fifty pages.

Mr. K needs privacy to write, which he
obtains by closing his office door and having
calls held. Sometimes he works from rough
notes, almost never from outlines or
guidelines. He worries about wordiness and
about overstressing simple points. He also
worries about grammatical mistakes, but he
doesn't confer with anyone about his writing.
Writing is an important part of his job; he
estimates that writing occupies about fifty
percent of his time. Writing well is a matter
of personal satisfaction to Mr. K, who thinks
that writing skills are an advantage with his
company.

from the Canisius College Writing Project
You might have each student look at the nature and variety of writing done by the professional person he or she studied and compare that to the nature and variety of writing that the student now does. Students might ask themselves questions such as this one: To be successful in my career will I have to learn to deal with many new writing demands?

You might save copies of professional writing that students gathered in doing the case studies and use them in later classes as good or poor examples of the course guidelines or to stimulate discussion of the choices that different planning decisions entail. If you use any of the writing from your students' case studies, be sure to change or eliminate any names of people or agencies or any other reference that would violate anyone's privacy or business secrets. Don't just copy letters or memos where the letterhead will give away the sources of the writing.

You might also like to keep a log of yourself as a writer. Have you ever given yourself credit for the range of writing your job demands of you?

Writing Clear English on the Job

We want your students to develop excellent writing skills and also to become advocates of clear writing in business and academia. If your students enter their professions knowing both how to write well and what to expect in the organizational setting, they may be less easily co-opted into following poorly written models that they are given on the job.

One way that this course is designed to prepare students to write in organizations is that it gives students experiences that come close to replicating the conditions for writing on the job. These experiences include

- writing actual documents for real audiences and purposes
- working collaboratively
- having the work reviewed, and
- thinking about design considerations other than writing.
Another way that we would like to help prepare your students for writing in organizational settings is to have them learn about the growing movement towards plain English in business and government writing.

As Robbin Battison of AIR wrote in a recent article,*

Paperwork is choking our society. In many instances, we can cite individual pieces of paper (primarily forms) which, when replicated, control or affect the lives of large numbers of people. Because of their inordinate complexity, many public documents hinder communication, disrupt the lives of people, and cause costly bureaucratic headaches.

Of course, paperwork affects more than just individuals. Businesses must report their activities and keep detailed records to comply with regulations, and businesses are suffering also. Just consider the 10 million owners of small businesses in the U.S., who must file more than 305 million federal forms per year totalling more than 850 million pages, containing more than 7.3 billion questions in answer to some 7,000 rules which come from 90-odd federal agencies (source: Rep. Alvin Baldus, D-Wis.).

All of us in modern technological societies are faced with rapidly rising literacy demands. Our lives run on paperwork and we are faced with more of it in more complex varieties than we ever had before. Paying bills, for example, used to be simple: They sent you a bill, and you paid cash or wrote a check. With the expansion of credit and banking services in consumer societies, the situation has become more complex. You now may receive an itemized bill, a payment card, separate billing invoices, a notice on your credit rights as a consumer, a brochure on the company's policy or services, and an advertisement for merchandise along with an order form. The envelope itself might contain

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other complex messages or response forms (e.g., for changing your address). Functional literacy demands such as these have steadily increased in dramatic ways.

The volume of paperwork is [also] a reflection of the size and complexity of a society's institutions, and both our public and private institutions are growing. Multi-layered governments, hierarchically nested firms within firms, transnational corporations, and branching or franchising are all modern features of the growth in institutional complexity.

The growing complexity of business and government increases the need for clear writing. Clear communication becomes particularly critical when the writer and the reader are not physically close enough to clear up any possible misunderstandings in person. Consider an engineer in a firm's Houston office writing a report that will be read by managers in the New York office. Consider a program officer creating guidelines that will be used five years after she has left the agency. Consider a bank's lawyer creating a form that 10,000 customers must fill out correctly.

Flying the engineer to New York to explain the report (if he could) would be expensive. If the program officer can't be located, she can't be asked five years later what she meant (if she remembered). Ten thousand people can take up a lot of time asking questions and having to correct errors on a poorly designed form. Clear writing can save business and government time, money, legal problems, and inconvenience.

President Carter recognized the problem when he issued two Executive Orders requiring that government regulations and forms be written in plain English and be as easy for users as possible. Twenty-five states have laws or regulations requiring plain language in insurance policies. Six states (New York, Connecticut, Maine, Hawaii, New Jersey, and Minnesota) have laws requiring plain language in consumer contracts. In those states, banks, insurance companies, realtors, and retail businesses now have to rewrite and redesign traditionally dense, legal prose into clearly organized and well-written documents.
In the Reagan administration, also, at least one Cabinet Secretary (Malcolm Baldridge of the Department of Commerce) has made clear writing a major issue in his department. Plain English in public documents also serves the Reagan administration's interest in saving money and reducing the burden that paperwork places on business.

Poorly written and poorly designed documents cost extra money for taxpayers and businesses. A few years ago, 34% of the people using a Federal financial aid form had to go through the process more than once (sometimes three or four times) because they didn't understand the form. The students and their families paid in time and frustration—and sometimes in not getting money they were eligible for. We all as taxpayers paid in processing costs, paper and mailing for extra forms, in maintaining toll-free telephone lines and in paying people to answer questions. Well-designed documents can save money. In one year, with minor changes on the form and major changes in the information and instructions, the staff of the Document Design Project reduced the error rate on this Federal financial aid form by about seven percent.*

Or take as another example the marine radio regulations for recreational boaters that the Federal Communications Commission recently revised. Before these rules were changed, recreational boaters who have two-way radios on their boats had to buy a copy of a regulation that was several hundred pages long, find the rules and parts of rules that applied to them, and understand long and complex explanations in legal language in order to comply with the law. The same rules also regulated use of two-way radios on ocean liners and merchant ships.

By selecting only the rules that apply to recreational boaters, reorganizing and rewriting them, and choosing an attractive, useful layout, the FCC was able to reduce the relevant information to an eleven-page booklet. The Document Design Project helped the FCC to conduct an empirical evaluation of the old and new versions of these rules. In this evaluation, both experienced boaters and people interested in boating who had never seen the rules before performed significantly better with the new rules than with the old ones. They answered more questions correctly, found

the information more quickly, could more often identify the correct section, and rated the new rules as much easier to use.*

To give you a third example: When the number of CB radio owners in the U.S. increased dramatically in the mid-1970s, the Federal Communications Commission decided that the most cost-effective way to increase compliance with the rules was to rewrite them so that CB users could understand them. The revised CB rules are well-organized, clearly written, and available as an attractive booklet. Before the new rules went into effect, the FCC had an office of five people who spent all day answering telephone questions about the CB radio rules from people who were trying to comply with them. After the clear English version of the rules was distributed, the calls stopped. All five employees were transferred to other jobs. Clear writing can save business and government time, money, legal problems, and inconvenience.

Clear English isn't being easily accepted everywhere, and your students should be aware that in any business or profession that they enter, they will find tension between "the way we've always done it" and their own desire to write simply, clearly, and directly.

Lawyers, in particular, worry that traditional forms are necessary for legal accuracy and sufficiency. That is NOT true. The examples we've just given (and others throughout this book) show that it is possible to write legally acceptable documents using the principles you will be teaching in this course.

Similarly, the passive style typical of academic articles is based on tradition, not necessity. The tradition says that to focus on the experiment or scientific facts, the writer never mentions himself or herself. But the passive style that this philosophy engenders makes academic prose very difficult to understand. As our philosophy of communication shifts to an emphasis on communication between people, the appropriate style also changes. Writers can talk of themselves and use the active voice without compromising the objectivity of their studies and their facts.

### An Overview of the Process Model

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<td>The writing stage</td>
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<td>The post-writing stage</td>
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</table>
An Overview of the Process Model

Most of this book follows Dr. Redish's model of the document design process that we showed on page 7 and reproduce again in a full-page size on page 38. This model takes the writer step-by-step from generating ideas through evaluating any piece of writing. We don't mean for you or your students to accept this model as the only plausible diagram of the writing process, but we do think that you and your students will find it useful for a number of reasons. The model can give your course a framework in which the steps of the composing process follow each other logically. The model is a pictoral reminder that writing is a process with separable steps. The model can serve as an aid for writing or revising any text or form.

In the model, we divide the writing process into three stages: pre-writing, writing, and post-writing. Let us briefly review each stage and step in the model here and then spend several chapters presenting material for each step with examples and suggestions for exercises.

The Pre-Writing Stage

- **Determine scope**
  - (what message do you want to convey?)

- **Define purpose**
  - (why do you need a document?)

- **Define audience**
  - (who will use your document? what are their needs?)

- **Determine constraints**
  - posed by
    - the system
    - how the document is used
    - how the document is distributed

- **Determine task**
  - fill out form
  - read and act
  - read and remember
  - locate information
  - ...

We've put five boxes in the pre-writing stage of the model. Each corresponds to a set of questions and we suggest that for every assignment in school or on the job, your
THE PROCESS MODEL OF DOCUMENT DESIGN

I. Pre-Writing Steps

- Determine scope (what message do you want to convey?)
- Define purpose (why do you need a document?)
- Define audience (who will use your document? what are their needs?)
- Determine constraints posed by
  - the system
  - how the document is used
  - how the document is distributed

II. Writing Steps

- Draft document
  - select appropriate content
  - organize for your audience
  - write clearly
  - use graphics to help clarify your message

- Review, revise, and edit

- Evaluate
  (does your document achieve its purpose for its audience?)

III. Post-Writing Steps
students learn to ask themselves (and get the answers to) questions on these five topics.

1. **Scope.** What message do I want to convey? What do I understand the assignment? What question am I supposed to discuss?

2. **Purpose.** Why do I need a document? What am I trying to achieve by writing this?

3. **Audience.** Who will use the document? What do they want to see? What do they need to know?

4. **Reader's Task.** What does this text require of the reader? Is the reader going to read it and learn something to remember? Does the reader have to read it and act at once? Will the reader save it for reference later?

5. **Constraints.** What limitations are there on what I can do? Do I have a page limit? a deadline? Does it have to be reviewed before it is accepted?

With the answers to the pre-writing questions, the writer has a basis for generating ideas and planning the text. The answers to these pre-writing questions will help the writer select appropriate content for the readers, organize to meet the readers' needs, and choose a tone, style, and graphics that will be most effective.

Your students may need to do some research in order to answer the pre-writing questions for some of your assignments. They may not know enough about the audience or the audience's needs until they go and ask. The experience of having to go outside the classroom for answers to the pre-writing questions is important--because it is realistic. Once they have done this work in the pre-writing stage, however, students may find that they can write more easily and with greater confidence. They'll also have the information they need to plan an evaluation of their draft later on--a step that we feel is critical.
In the model, we've enclosed the writing stage in one box. This is only for convenience. The four topics in the box, in fact, constitute the largest section of this course, as they would in any composition course. One of the reasons we give the other boxes so much room in the model is that they are the ones that are new to many students.

In the writing stage, we emphasize four areas: selecting content, organizing, writing clearly, and using graphics to help clarify the message.

1. Content. Students should learn how to be selective in the content they actually use in the document. A major problem many students have is trying to fit in all the research or knowledge that they have gathered instead of using what they have learned to effectively argue or illustrate a point.

2. Organization. Students should learn formats for many types of documents. The narrative format that they have probably most often used is, in fact, seldom the most effective organization for documents they will be writing on the job.

3. Language. Writing clearly, simply and directly is a good principle for all types of writing. In this book, we stress twelve guidelines that respond to problems we've seen in the writing of advanced composition students and of writers on the job.

4. Graphics. Good design can make the readers' task much easier. Good design can help attract readers and keep them interested. Composition courses seldom pay much
attention to graphics, but a few principles, easily learned and applied, can make a great difference in how readable a text or form is.

Although the model doesn't include reverse arrows between the writing and the pre-writing stages, the process is recursive. Students should be encouraged to replan as they write. They should also understand as they write that a finished first draft is not a final product. The process includes a post-writing stage, of which evaluation is an important part.

The Post-Writing Stage

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1. Review, revise and edit. Students should have practice, in a composition course, in several levels of editing. They should become comfortable reviewing their own work as well as the work of others. Revision, based on input from several sources, should be an expected practice, because it is routine practice in the working world. Rewriting should be seen as a positive step, not a rejection. Students should expect that to get a good final product they will have to write several drafts. Moreover, in reviewing, revising and editing, students should become accustomed to returning to the work they did at the pre-writing stage. They should check their writing against their earlier decisions about purpose and audience and edit with their pre-writing answers in mind.

2. Evaluate. Any piece of writing is effective only if it achieves its purpose(s) with its audience(s) in the least burdensome way possible. To really test a document, the writer should find a sample of readers and see if they can
use the document appropriately (fill out a form correctly, choose the best refrigerator, know the rules they have agreed to in the dormitory, etc.). To know if he or she has made good choices about content, organization, writing, and graphics, the writer should see if representative members of the audience understand the material. In Chapter Nine, we explain empirical evaluation, and how it can be useful to writers, in some detail but at a level that students can handle even if they have no scientific background.
# Planning

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<td>Summary of the pre-writing steps</td>
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Planning

Good planning skills are crucial to good writing skills. We know that expert writers spend as much as 75 percent of their time on an assignment planning and we know that experienced teachers regularly have students ask planning questions. In this course, we focus the planning stage on five sets of questions which we have used successfully in writing projects and in training workshops. You may find that when students actually write out answers and discuss them, their approach to planning changes for the better, and they spend more time and effort planning for a writing task.

We can summarize the five pre-writing questions we gave on page 39 as:

- What (in general) is the message I want to convey?
- Why am I writing this document?
- Who will read it?
- What do I expect the readers to do with the document?
- What constraints must I keep in mind?

1. What (in General) is the Message I Want to Convey?

The writer must begin with a general understanding of the task and some ideas about how to proceed. This understanding can come from considering three aspects of the writing task. One is being certain that students understand the assignment; the second is having techniques for generating ideas; and the third is finding and using appropriate sources of information.

Know the assignment. Much of the time in most jobs, the writer does not decide what type of document to write or what to write about. The assignment comes from someone else (usually a supervisor). Even if the assignment is self-generated, the topic (and format) are usually dictated by the situation. In either case, the very first guideline
for creating a clear and useful document is for the writer to understand what he or she is going to write. Students who have been handed papers back with the comment "you've missed the point," will appreciate the importance of clarifying the assignment. In the working world where time is money, a writer who doesn't do the task correctly may not be asked to do it again.

Students should learn to ask questions until they are sure they understand what the scope of the writing task is. They may find the ideas throughout this section on the pre-writing stage to be useful in forming questions to ask others when they are trying to clarify a writing assignment.

An excellent practice is to have students analyze some of your own assignments, asking questions, and possibly revising the assignment. One good technique that helps students clarify the task and topic is to try to write it down in one short sentence. The answer to the question, "What am I writing?" should include two elements—the type of document and a general statement of the message to be conveyed. For example, the writer might be writing:

- a letter to apply for a job
- a memo to the company President justifying a request for permission to hire an additional staff person
- a feasibility study giving the advantages and disadvantages of different computers for a client's company, with a recommendation to buy one of the choices
- a contract form for a bank to use in making loans to consumers
- a brochure explaining the hospital's charges to patients
- a description of a proposed research study
- a textbook on how to write clear and useful documents.

Students should be able to characterize a piece of writing succinctly after reading it quickly. You might have
your students practice writing brief descriptions of several documents.

Generate some ideas to get started. In the real world of writing, professionals have a broad base of information about the topic accumulated from years of experience. Professionals also have the means to find out about the topic by study, and by calling on other professionals and organizations. Students don't have that luxury, so we are giving some techniques they can apply. Very seldom do writers sit down to write with a fully developed notion of what their topic is or what they know and do not know about it. Talking about the topic, reading about it, and thinking it through are ways to get started. Writing also helps to generate and organize ideas. Writing is in itself a way to gain control over a topic. Your students should learn several techniques for using writing as a way of generating new ideas and making meaning. Have them try out and practice

- brainstorming,
- writing freely for a few minutes on a topic or an idea,
- using journalists' questions (who, what, where, when, how, why), and
- using different rhetorical techniques for analysis (definition, compare and contrast, cause and effect, appeal to authority).

You might give your students a topic such as "Should professionals dictate letters or write them out?" and have different students use each of these techniques to generate ideas. Compare the uses of each technique. You will quickly see that each of these activities encourages a different kind of thinking about a topic and produces different kinds of information for the writer. Students should have a repertoire of activities to help them think creatively at the pre-writing stage, when they are exploring a topic and clarifying what they have to say.

Know where to get information; clarify policy and position before you write. For many documents in the working world, the writer's primary sources are not in his or her own head. Brainstorming ideas is not as important for some writing tasks as knowing who has the facts the writer needs.
The necessary sources may be people or other documents. Part of knowing the scope of an assignment is understanding the policy and facts to be included. If the writer's task is to explain policy to the reader (in a letter to a client or in a set of instructions or in a regulation), the writer needs to be certain that he or she understands what the policy is. Writing clearly on a muddled topic is virtually impossible.

Invariably some gaps in the policy won't become apparent until the writer begins to draft the text, but the expert writer presses to get clarification of policies and positions at the planning stage—and as early in the planning stage as possible.

Thus, for the first step in any writing task, the writer should define the scope of the task by

- clarifying the assignment,
- generating ideas to get started, and
- clarifying the policy and position to take in the document.

2. Why Am I Writing this Document?

We have not called this a course in functional writing because all writing is meant to be functional—to serve a purpose for an audience. But most writing on the job has external audiences and purposes that can be objectively defined and measured. Let us call this type of writing transactional, meaning that it is an exchange of information between people. It is addressed to someone other than the writer and it has a definable purpose. In fact, a single piece of transactional writing often has several purposes. We can tell if the writing works or doesn't work by measuring how closely it achieves one or more of its purposes.

You will recognize the term "transactional" from Britton, et al.'s work, The Development of Writing Abilities: 11-18 (London: Macmillan Education, Ltd., 1975). The chief function of transactional writing is to get the work of the world done: to inform, persuade, report. Good transactional writing is clear and direct: its success can be measured in terms of its intended readers. Transactional writing thus differs from expressive or poetic writing. For expressive writing, the writer may be his or her only important audience. For poetic writing, the audience may include
others, but language is important for its own sake. The primary purpose is aesthetic; therefore, the criterion of success must be subjective.

To help students understand what we mean by the purpose of a document and that transactional documents often have multiple purposes, you might have them study these examples.

1) A letter applying for a job. The writer's ultimate purpose is probably to get the job, but the immediate purpose is to be selected for an interview. The writer might even be satisfied if the letter only gets an interview. The interview might give the writer practice in presenting himself or herself and help the writer learn about jobs in that field.

2) A memo summarizing a meeting. One purpose may be to have everyone who was there see on paper what the writer thinks they agreed to before anyone acts on the decisions. Another purpose may be to leave a written record in the file so that, at some later date, when none of the present committee members are around, someone who was not at the meeting can figure out what happened. To satisfy this second purpose, the writer might need to include more background information than would be put in if the writer were only thinking about the first purpose.

3) Forms can serve to enroll people in a program, so they may receive benefits (food stamps, insurance). A primary purpose of this type of form may be to separate eligible people from ineligible people. Forms can serve to get people to provide something—money in the case of tax forms, information in the case of credit application forms.

4) Many legal documents, such as warranties, leases, and regulations spell out the rights and obligations of both parties. They also, however, usually include instructions about procedures. The purpose is to explain who must do what when.
5) Instructions are written to help people operate equipment or perform tasks easily and correctly.

6) A public health booklet might serve the purpose of getting people to take some action; for example, to stop smoking.

7) A brochure that comes in a drug package may serve to explain to the patient what the drug is, to instruct the patient in how to use the drug, to warn the patient about the risks in taking it. The purposes of the brochure are to persuade the patient to follow the prescribed therapy and also to warn the patient to take proper steps if serious side effects or other problems should arise. Balancing the purposes of reassuring the patient and explaining the risks is a difficult job for the person who has to write brochures about drugs.

You might have your students try to determine the purpose(s) of several documents in the corpus that the class has collected. They should very soon ask "purpose for whom?" or raise the notion that documents have different purposes for different audiences. The discussion of purpose thus leads directly to a discussion of audience(s).

The purpose of a document will affect the tone, organization, choice of content, and language that the writer uses. The writer who knows what he or she wants to achieve with the document is likely to make more effective choices. Moreover, a document is far more likely to be effective if the reader understands the writer's purpose. Your students should be able to review documents and either state what the purposes of the document are or that the purpose is unclear and the document needs to be revised. They should also be able to point out specific features of a document that make it particularly effective or ineffective for its purposes.

You might have your students review some of the documents in your corpus and discuss whether or not the purpose is clear to the reader, how effective they think the document is (will it achieve its purpose?), why it is likely to be effective or ineffective. As an example, you might show students the "Dear Patient" card on page 51.
1. **DEAR PATIENT,**
   
   IF YOU ARE HAVING OR HAVE HAD LABORATORY EXAMINATIONS WHILE IN THE HOSPITAL, YOU WILL RECEIVE TWO BILLS.

2. **"YES" — BUT YOU ARE NOT PAYING FOR THE SAME THING TWICE. EACH LABORATORY TEST CONSISTS OF TWO PARTS.**
   
   1. THE HOSPITAL PROVIDES THE TECHNICIANS, EQUIPMENT AND SUPPLIES FOR YOUR TEST.
   
   2. A SPECIALLY TRAINED PHYSICIAN, CALLED A PATHOLOGIST, DIRECTS, SUPERVISES THE ANALYSIS AND QUALITY CONTROL OF ALL TESTS, AND IS RESPONSIBLE FOR ALL RESULTS WHICH ARE GIVEN TO YOUR DOCTOR. (These test results assist your doctor in making a diagnosis in your care.)

3. MANY TIMES THE PATHOLOGIST IS NEVER SEEN BY YOU, HOWEVER, HE IS RESPONSIBLE FOR ALL YOUR TESTS, REGARDLESS OF WHETHER THEY ARE ROUTINE OR VERY COMPLICATED. FOR EXAMPLE IF YOU HAVE SURGERY, THE PATHOLOGIST PROVIDES YOUR SURGEON OR FAMILY DOCTOR WITH A DIAGNOSIS BASED ON HIS PERSONAL EXAMINATION OF THE TISSUE OR SPECIMEN RECEIVED. THIS TYPE OF SERVICE ENABLES THE BEST TREATMENT POSSIBLE FOR THE PATIENT.

4. THE HOSPITAL INCLUDES THEIR PORTION OF THE LABORATORY CHARGE IN YOUR HOSPITAL BILL. SINCE THE PATHOLOGIST IS NOT AN EMPLOYEE OF THE HOSPITAL, HE SENDS "HIS" PORTION OF YOUR BILL TO YOU SEPARATELY.

   **THIS IS WHY THERE ARE TWO BILLS FOR LABORATORY TESTS.**

   **WELL, WHY DIDN'T YOU JUST SAY THAT IN THE FIRST PLACE?**
The "Dear Patient" card is probably a response to many complaints from patients asking why they receive two bills. Both the pathologist and the hospital need to explain the situation to patients. They also need to persuade patients that both charges are necessary and reasonable, that patients should pay both bills without asking questions or complaining. The card is organized as a letter to the patient; it tries to adopt a friendly, informative tone. The smiling patient at the end of the card is a graphic way of conveying the persuasive message. The pathologists are probably responsible for the card, which certainly includes some public relations messages. Do the students notice that the pathologists, as opposed to the cartoon-character patient, are sketched as serious, attractive, working professionals?

3. Who Will Read It?

Your students have probably been told in every English class that they have to pay attention to their audience. But many have not learned how to think about the variety of audiences they may be addressing in a single document, how to analyze different audiences or how to change writing styles to address different audiences effectively.

A variety of audiences. Working writers typically work in organizations and writers in organizations write to people at various levels of the organizational hierarchy. The two memos on pages 53 and 54 are the work of the same writer. Can the students tell where in the organization the audiences are in relation to the writer? What clues are the students using? How has the writer changed style?

Writers in organizations write to people inside the organization and outside. A major problem in much organizational writing is that the writer acts as if all the readers are insiders even when they are not. (Another problem is that even people inside the organization or the profession may not be as much insiders as the writer thinks. A tax lawyer may not understand the intricacies of mortgages; a hospital administrator and a doctor don't necessarily use the same vocabulary.)
MEMORANDUM

To: Area Service Managers
From: Allen Kingman, Corporate Operations Director
Subject: Computer-Processing of Claims
Date: January 10, 1981

We are now reviewing the effectiveness of our system for processing claims by computer. If we do not achieve greater success than we have had to date with the automated system we are now using, we will either have to acquire a system more adaptable to the claims or eliminate features of the claims the computer cannot now handle.

These are major changes. We do not wish to make either of them unless it is necessary. We need information, up-to-date and detailed, about the operations being done manually in your area.

For the next three months, I will expect a report on the last day of the month that shows each operation being done manually in your department and the number of claims handled for each of these operations. Please use the attached format for submitting this information.

Attached: Form for Reporting Manual Operations
MEMORANDUM

To: Doris M. Hand, Area Manager  
From: Allen Kingman, Corporate Operations  
Subject: Computer-Processing of Claims  
Date: January 10, 1981

First of all, let me apologize for not responding to your request of December 15 about processing claims on our present computer system right away. Quite frankly, I have been tied up with other projects, and have not had time to review the various points you made.

In response to your query as to whether a study has been done recently to investigate why certain types of things cannot be done on the computer, the answer is "yes." We are continually reviewing the operations being done manually, and when we can bring cost-benefit data to the BCP committee, we do. We also ask our area services managers to keep us informed about manual operations, as they are often more aware of high volume manual operations than we are. As of today, I am instituting a detailed three-month study.

I have to admit that our success with automated claims processing systems is limited. The detailed report I am attaching should shed some light on this.

If you have any further questions or comments about this subject, or any others, do not hesitate to get in touch with me.

Attached Report
Multiple audiences. One document may have to meet the needs of many groups. In developing a financial aid form for college students, for example, the writers have to be sensitive to the needs of at least five groups:

- the policy makers who decide what must be asked
- the internal reviewers who have to accept the work before it can be printed
- the students and their families who fill out the form
- the processor whose computer analyzes the information on the form
- the school officials who use the information.

Sometimes the writer has to decide which audience to favor; sometimes trade-offs have to be made. In this case, the school officials want more questions on the form, but students want fewer questions to have to answer. The processor wants little numbers by each question, but the extra numbers confuse the students.

You might introduce several techniques students can use to meet the needs of multiple audiences (executive summaries vs. full reports; technical appendices; writing different sections for different audiences; etc.)

We believe that the needs of different audiences can often all be satisfied—or at least far more often than is currently done. Legal documents are an excellent example. They often only satisfy the needs of the lawyer, not the needs of the consumer; but a growing number of revised legal documents show that both audiences' needs can be met in one document. You might want students to compare the two versions of a warranty on pages 56 and 57 and to determine which audience's needs each version meets?
LACO Black and White Television

LIMITED WARRANTY

LACO warrants this new set to be free from defective materials and workmanship, and agrees to remedy such defect or to furnish new parts for any unit which discloses such defect under normal installation, use and service, for a total period of one year after date of sale to original purchaser.

LACO will supply parts and service at no charge for the first 90 days of this warranty and charge a service charge of $9.00 for the balance of this warranty with no charge for parts, provided that your set has not been dropped or abused or damaged during alterations or repairs by any person other than an authorized LACO Service Center, and provided that your set is delivered by its owner to us, or to an authorized LACO Service Center, all transportation charges prepaid. Antenna, power cords and any other accessories used in connection with this product as well as broken cabinets or parts damaged by misuse are not covered by this warranty.

This warranty is in lieu of all other expressed warranties and no representative or person is authorized to assume for us any other liability in connection with the sale of our product.

Your set sent in for repair must be dispatched in original packing together with an original sales receipt to validate the date of purchase. After the first 90 days, the service charge of $9.00 must accompany your set.

Any set sent in for repair without sales slip or dispatched for repair after warranty has expired may be subject to a charge for labor plus cost of parts and transportation charges.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.
MECO Black and White Television

LIMITED WARRANTY

Who Is Covered?
This warranty covers the original buyer of this MECO TV set.

What Is Covered?
This warranty covers your new MECO TV set for any defects in materials or workmanship.

What Is NOT Covered?
This warranty does not cover:
- the antenna
- the power cord
- any accessories used with the TV
- a broken cabinet
- parts damaged by misuse.

This warranty will not apply if the TV set was dropped, abused, or damaged when altered or repaired by anyone except an authorized MECO service center.

What MECO Will Do and For How Long
For the first 90 days, MECO will supply parts and labor free to repair or replace any defects in materials or workmanship.
After 90 days and up to 1 year, MECO will supply the part free but you will pay a $9.00 service charge. The $9.00 service charge must be paid when you bring or send in the TV.
After the warranty period (one year), you will pay for labor and parts.
At all times, you are responsible for bringing or sending your MECO TV in for repairs.

What You Must Do
The set must have been installed and used normally during the warranty period.
If you bring or send the TV in to an authorized MECO service center, it must be in its original packing case.
You must present an original sales receipt, showing the original date of purchase.

How To Get Warranty Service
Look in the Yellow Pages of your telephone book for the authorized MECO service center nearest you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.
The warranty that this product will work normally is limited to one year. No one has the right to change or add to this warranty.
How to analyze the audience. If your students are writing to an individual or a group they know well, they may be able to rely on intuition and personal experience to figure out what their audience needs and wants. But it is also wise to test that perception against reality. For example, do your students believe that they must use jargon to please the professors in their major field? On what do they base that belief? Have they asked the professor? read his or her work? listened to the way he or she talks in class? Have they tried to turn in a paper in clear English and received negative comments? Maybe their perceptions aren't accurate.

You might have your students brainstorm audience characteristics that they think are important. To get them started you might want to suggest some of the characteristics we raise on the sample questionnaire on page 59, which is filled in with some thoughts about the audience for a brochure about Medicaid.

Students should understand that each of these major characteristics may not be relevant to a particular project. We also know that good writers don't engage in this kind of analysis everytime they write, but by occasionally writing answers to these or other questions about audience, inexperienced writers have a chance to become sensitive to issues that may shape prose style.

Transactional writing should have the readers' needs in mind rather than the writer's. Your students have probably not had much experience writing to inform readers except for term papers which sometimes have an unrealistic purpose—they are supposed to be informative, but the reader (the professor) usually knows most of the information in the paper. One of our major goals in this course is to prepare students for the working world by giving them realistic experiences and having them write for real audiences, which includes, of course, instructors who will assess their writing abilities. You might have your students analyze who the audiences are for some of the documents in your class's corpus. They might think up questions that would be relevant to ask to help make the documents more effective for their audiences.

If the students don't know much about their audience, they might be able to find out quite a bit with a minimum of research. For example, the student government rules affect all the students on campus. The student writer could find
Audience Questionnaire
(with some sample issues to consider)

Who will read it (Medicaid recipients, Agency people, case workers in Social Service centers)

Age (Does it matter? Many Medicaid recipients are elderly, that could make a difference)

Native Language (Are a large proportion Spanish-speaking? Should we do the brochure in Spanish?)

Education (Does it matter? Many Medicaid recipients are elderly, that could make a difference)

Native Language (Are a large proportion Spanish-speaking? Should we do the brochure in Spanish?)

Physical Problems (Does it matter? Many Medicaid recipients are elderly, that could make a difference)

Knowledge of the subject (The agency people will know about it, but if it's for new recipients, it shouldn't assume much knowledge of the subject.)

Expectations about the document (Will they be looking for pictures, questions and answers?)

Attitudes and pet concerns (Do they think the government is trying to be helpful or do I have to persuade them of that?)
out whether the audience can understand the rules now and what problems readers have with the document by asking questions of a sample of students. This is very similar to the task we describe at the end of the process model (see Chapter Nine).

In this case, the writers might ask if the students have a copy of the rules, and if they've ever read them. They might have some students read and answer questions to find out what they understand in the rules. Because all students are not equally interested in the rules or equally used to the rules or equally capable of reading complex prose, the writers might want to talk to a few students from each of several groups. Different groups might include commuters and dorm residents, freshmen and seniors, males and females, minority students. The section on evaluation (Chapter Nine) might also give you more techniques for discussing audience characteristics with your students.

How to address different audiences. You might have students look through several documents to see what they can tell about the audience(s) from the document. They should be able to discuss mismatches between the audiences the document should be reaching and the audiences (if any) who could understand the document as it is now written.

A reader should be able to tell easily from the beginning of a document who the appropriate audience is. Then the reader can judge whether or not the writer has effectively reached the audience. Knowing about the audience should help in selecting the content, (information the audience needs but does not know), in organizing, in choosing the tone, the vocabulary and the graphics for a document. Expert writers can vary their style for different audiences and write so that the same document reaches a broad range of audiences.

4. What Do I Expect the Readers to Do with the Document?

Writers should be sensitive not only to who the audience is, but also to how readers will use the document. Depending on the document, readers will

- read to understand
- read to locate information
• read to act immediately (put something together, use a computer),

• read and answer questions to fill out a form.

The reader's task can be made more or less difficult by the way the writer organizes and presents the material.

You might have students analyze the readers' tasks in a group of documents. How would a reader use each document? Is it easy for readers to use? In the section on purpose, we were focusing on the writer's intention and the writer's needs. Here we are focusing on the reader's need, and we are suggesting that the writer's purpose is most efficiently and effectively reached by making the reader's task as easy as possible. For example, many documents in the working world are used for reference, but they are not organized so that readers can find information quickly. The reader wants an index and a detailed table of contents to be able to find a particular section easily.

If readers have to go to other documents or other sections of the document in order to understand the section they are in, they may find the task more trouble than it is worth. Your students might be able to lessen the reader's need for other material by, for example, giving more background information, avoiding obscure terms, defining new terms, or summarizing information from other sources.

You might have students imagine a busy supervisor (or professor!) reading a tray full of reports. How would she treat each one? Perhaps she would read the introductory paragraphs, the headings, or skim the first sentences of paragraphs, and read the conclusion; then go back to the table of contents to find the tables or sections that are most relevant. You might have an executive come in to class and talk about how he uses different documents—memos, reports, letters. What does he look for? What organization and style features does he like and dislike?

Does the person your students are writing to really need to go to last year's files to find your October 22, 1980 letter? Can't the writer remind the reader briefly of the important point in that letter and thus make the reader's task easier?
If readers must use other materials, can writers forewarn them? For example, a supervisor might preface a report on an employee's performance with a note: "You need to read the reprimands in Davidson's personnel folder before you read my report." A response to a complaint letter might begin this way: "You will need copies of all of the letters you have sent us since December and copies of your cancelled checks to answer the questions that follow."

In constructing a form, the writer needs to think about the amount of space the reader needs for different types of responses. Checking yes or no, putting down a date, and explaining why the writer left his or her last job are three typical types of response on forms—they need different amounts of space. Forms to be filled out on a typewriter should be set up so that the reader doesn't need to readjust the typewriter for every line. Obvious as this point seems, it isn't always followed. You and your students have probably all dealt with forms that didn't work easily on a typewriter—forms where the writer didn't consider the tasks from the reader's point of view.

You might share the reprint of Simply Stated 15 in Appendix B with your students. In that issue, a colleague in the Document Design Center at AIR describes how a form can be simplified if the writer considers what the reader must do with the document.

Your students should think about what the reader will have to do in order to follow, understand, and respond to each part of the document. Considering the reader's task may lead them as writers to regroup the information, to give more information (or less), to ask fewer questions (or more), or to redesign the layout of a document.

5. What Constraints Must I Keep in Mind?

All tasks include constraints imposed by oneself, by outsiders, or by the situation. In following the process model, the writer must consider the constraints in the pre-writing stage. Sometimes constraints can be changed—if the writer knows about them early enough to act on them.

The obvious constraints that first come to most student writers' minds are
• deadline and
• length.

In the working world, most writers also very quickly think of

• budget and
• resources (especially other people) who will be available to help.

Here are some typical constraints that your students may want to know about and plan for:

- deadlines, including intermediate deadlines (outlines, drafts)
- length (minimum, maximum)
- format (must it be typed? double spaced? in a binder? do you have to arrange for a typist or to borrow a typewriter? did you leave a margin large enough so that the binder doesn't cover your words?)
- reviewers (who will they be? should you see them about the project early on?)
- photocopying (when is it available? budget?)
- printing (how does that limit the time you have or the paper size or the number of pages?)
- distribution (will it be mailed? does that affect the type or size of paper to use?)
- storage (does it need to fit into a regular file? if so, is it the correct size?)
- use (is it a poster to be put on the wall? have you considered the typesize, colors, pictures that would make an attractive poster? is it a handbook that would be most useful if it fit into a pocket?)
This list is certainly not exhaustive. You and your students may be able to add to it by brainstorming or may want to keep adding to it all semester as examples come up in their projects. Students can benefit from learning how to deal with constraints that have to be accepted. They can also benefit from learning when to fight against constraints. Let's look at cases of both.

Coping with deadlines. Many novice writers have difficulty planning an entire project with enough time for researching, writing, revising, and producing (typing, copying, and delivering) the document.

Writers can cope with time constraints by realistically assessing the demands that important writing tasks will make and by planning accordingly. For documents such as complex reports, proposals that involve several people, applications, and term projects, a writing schedule is useful. Our process model can help student writers identify the demands of a writing assignment and make the best use of the time they are willing and able to give to a project. The figure on page 3 illustrates how a job applicant might use the process model to make sure to allow enough time to prepare a high quality resume.

Coping with reviewers. In most organizations, and even in academic and professional circles, reviewers must approve a writer's work before it can be distributed. Student writers can learn to use reviewers and other aspects of the system they are a part of to enhance themselves as writers—if they are conscious of the constraints and their effects.

You might want your students to see the review process for a journal article shown on page 66. Students, used to working alone on writing assignments, are often unaware of how large a role reviewers play in writing on the job. Writers can cope with review and evaluation by involving people who are going to judge their writing early and continuously. For example, if instructors are willing, students can ask them to look at early drafts of important papers. Students can try to discover the criteria their instructors use to evaluate individual writing assignments before they write. In the work place, writers can show reviewers preliminary notes and outlines, explain what they plan to do and elicit responses before they write. Reviewers who are brought into the project early won't be surprised by the writer's innovations later. Reviewers who get involved
Using the Process Model to Plan a Writing Task

Writing in the Professions

Document Design Project
American Institutes for Research
Three scientists review and respond to typed draft #1 (author revises and edits)

Production staff type draft #2 for second internal peer review and prepare illustrations and graphics (author revises and edits)

Technical editors review for format, design, language, mechanics (author approves)

Production staff prepare draft #3 (author approves)

Editor of scholarly publication accepts or rejects article for review

Anonymous peer review, (2 or 3 scientists, some make substantive suggestions; recommend acceptance, qualified acceptance, or rejection)

Copy editors (author approves galley)

Publication in journal

Review Process for a Scientific Article
early are more likely to support a project because they have a stake in it. Reviewers who come in later are likely to want to make changes if only to show that they've had a hand in the writing.

Summary of the Pre-Writing Steps

In any document, the quality of the final product is as much a reflection of the writer's initial thinking as it is a reflection of the writer's writing skills. The writer who has thought about the scope, purposes, audiences, readers' task, and constraints will probably make more effective choices of content, organization, style, and design than the writer who begins without planning first. Your students can use the outline on the next three pages to write down the plans they make in the pre-writing stage.
Form for Answering Pre-Writing Questions

Pre-Writing Decisions

Ask yourself these pre-design questions about your document. If you don't know the answers, discuss the questions with appropriate others to find the answers.

Brief statement: ________________________________
(type of document and what it is about)

Scope: What is the topic? the message? Where did you go to find out information?

________________________
________________________
________________________
________________________

Purposes: What purposes will your document serve?

________________________
________________________
________________________
________________________

Audiences: Who will read your document? Who else is concerned about what your document is like?

The (primary) readers who are most important to you are:
1. ______________________ 2. ______________________

The (secondary) readers who are also important to you are:
1. ______________________ 2. ______________________
3. ______________________ 4. ______________________
Some important characteristics of the primary audiences that might affect how you write the document are:

1. 
2. 
3. 
4. 
5. 
6. 

For the secondary audiences, you should be concerned about these specific points:

audience concerns

audience concerns

audience concerns

audience concerns

Tasks: What does your primary audience have to be able to do to use your document?

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________
Constraints: What else must you keep in mind when writing? Is it an impediment to your purpose? What can you do about it?

constraint ___________________________ OK? ___yes ___no
If it is not OK, what can you do about it? __________________ 

constraint ___________________________ OK? ___yes ___no
If it is not OK, what can you do about it? __________________ 

Writing in the Professions

Document Design Project
American Institutes for Research
# Organizing

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Organizing

Good organization is critical to a successful writing project at several levels. In order to produce a coherent and effective document, the writer must

- organize the project,
- organize the document as a whole,
- organize within each section of the document, and
- organize the sentences in each paragraph.

We hope that the ideas in this chapter (and elsewhere in the book) help you to help your students improve their skills on all these levels.

Organizing the Project

We have covered many aspects of organizing a writing project in the chapter on the pre-writing stage. All five of the questions that students could ask about any writing assignment are necessary for planning the project. When students have answered the five pre-writing questions (or listed other specific questions to which they need answers), it is time to organize the project. We believe that beginning writers should spend a good bit of time writing, talking, and thinking before they try to prepare a written plan or outline for a piece of writing.

Of course, elaborate written plans like the ones we show here are necessary only for major projects, but students should be able to form a quick mental plan for completing any assignment after the pre-writing stage. To organize a project the writer has to know when it is due and what resources will be available to do it.
Resources include

- the writer's own time (noting conflicting demands on your time)
- the time of others to help with
  - research
  - writing
  - typing
  - design
  - reviewing
  - editing
  - retyping
  - production (photocopying, printing)
- books, articles, and people who will be sources of information (noting any constraints).

A simple form like the one on page 75 can help with this preliminary organization.

Organizing the Document

Students should plan the organization for a given piece of writing early in the project but not as a first step. First, they should answer the pre-writing questions, and write down some ideas or questions about the topic, and some preliminary research to know the major points they want to make. Then, they should look for a tentative way to organize their material for the purpose and the audience. The word tentative is important here. Students should expect to reshape and revise as they find more information in their research and later as they write.

We have found that many of the people with whom we work do not spend time thinking out the organization of their material. They do not appreciate the importance of setting the context for the reader or of using a single organizing principle to develop the document. Using this section of the curriculum guide, you can give your students more or less elaborate instruction on techniques for outlining and grouping material logically within an outline. Research shows that expert writers spend much more time planning their material than do poor writers. Moreover, expert writers revise their plans more often than poor writers do. They
ASSIGNMENT: _____________________________________________

DUE DATE: _______________________________________________

INTERMEDIATE DUE DATES:

_____________ due on ____________

_____________ due on ____________

Notes about my own time

(other deadlines that I must consider)

Resources I need or want and notes about them
plan more but they also are more flexible in the way they use their plans. Good writers are willing to try different plans, to reshuffle, reshape—and reflect about the effects of changes.

You might at least want to review with students the values of outlining and the iterative process that many writers use when they outline, find gaps in the logic of the document, do more research to fill these gaps, and outline again. You might want students to be able to identify the organizing principle used in a given piece of writing (their own or someone else's) and to explain why it does or does not work.

The value of outlining. The best way to organize any document is to write an outline. At the early stage, it need not be a formal outline with roman and arabic numbers. It can be just an ordered list with phrases for the points your students know come under each heading. In this first outline, students should concentrate on finding a unifying organizing principle for the major parts (for ordering the chapters or sections). They can organize the points within each chapter or section later.

When students work on an outline, they have an opportunity to organize (and reorganize) ideas to sharpen the focus and make the logic of their message clear. Outlining can show where they have more work to do. For a research paper, outlining allows the writer to see if all of the critical issues are covered. For a persuasive document, outlining can show up logical inconsistencies or missing links in the argument. Outlining ideas they already have can in itself suggest new ideas and fresh perspectives.

Outlining can also show where students should be doing less work. Looking over the preliminary outline, the writer may decide that an area in which a lot of research had been planned is really a very minor section of the paper—or doesn't fit in at all. In a similar way, the time students invest in an outline at the beginning will save writing time later. An outline can keep them, as you well know, from going off on tangents and can help them develop the necessary transitions from one point to the next.

Always begin by providing a context. The first element in an outline and in any document should be an introduction that provides a context. Research has shown that people learn best when new material is connected to information that
they already know. In the same vein, psycholinguists have found that in conversation, at least, communication is most successful when the speaker begins by referring to old information as a context for new information.

The same principle must hold even more strongly in written communication because the reader can't stop and say to the writer, "Wait a minute, what are you talking about?" Thus, every piece of writing should provide some context for the reader. An appropriate context may be as simple as an informative title or as complex as several pages with subheadings along the way. The length and complexity of the context-setting introduction depends on the length and complexity of the document.

You can use the exercise on page 78 to show students how important even a title can be. In the psycholinguistic experiment where this paragraph was used, the group that read the paragraph with the title recalled twice as much as did the group that read the untitled paragraph. As your students will realize after they have seen the paragraph with and without the title, the original seems very abstract. The title allows the reader to put the words in the context of a familiar experience. Have your students read the untitled paragraph and then turn the page over; discuss what they recall. Then give them the title: Doing the Wash. Have them reread the paragraph, turn the page over and discuss what they now recall.

A context-setting introduction that is longer than a title should

- introduce the topic
- explain the purpose of the document
- clarify any assumptions the writer has made about the audience
- briefly state the thesis (the major point, the result or conclusion, if any)
- lay out "signposts" (provide a roadmap through the document)
The procedure is actually quite simple. First you arrange things into different groups depending on their makeup. Of course, one pile may be sufficient depending on how much there is to do. If you have to go somewhere else due to lack of facilities that is the next step, otherwise you are pretty well set. It is important not to overdo any particular endeavor. That is, it is better to do too few things at once than too many. In the short run this may not seem important, but complications from doing too many can easily arise. A mistake can be expensive as well. The manipulation of the appropriate mechanisms should be self-explanatory and we need not dwell on it here. At first the whole procedure will seem complicated. Soon, however, it will become just another facet of life. It is difficult to foresee any end to the necessity for this task in the immediate future, but then one never can tell.

The introductory passages on pages 80 and 81 are examples of good context-setting introductions. The examples on pages 82 and 83 show signposts—how writers tell readers where to find information in the document.
A business person provides a context in the beginning of a letter:

February 7, 1981

Mr. Michael Bennett, President
Rockville Asphalt and Tile Company,
1194 Dunning Road
Rockville, New Mexico

Dear Mr. Bennett:

Since you engaged our firm four months ago to determine the feasibility of a proposed merger of your company (RA&T) with the Rockville Construction Company (RCC), we have reviewed the information you supplied us, and we have conducted research ourselves.

In this letter we are presenting our recommendations about the proposed merger. In cases where we have made certain assumptions, we have tried to make these assumptions explicit so that you can assess the validity of our conclusions.
How to Index a Document

The purpose of this article is to show you how to index any document. You should follow the indexing process step-by-step:

- examining the document page-by-page and underlining words to be included in the index
- recording the words (or subjects) on note cards and alphabetizing them
- evaluating the finished index for specificity and technicality.

In addition, this article presents several rules about indexing names, being consistent, marking errors, and underlining italicized words.
A government regulation writer provides "signposts" at the beginning of a set of rules:

Rules for Recreational Boaters

Subpart CC - How To Use Your VHF Marine Radio

General

VHF Marine Rule 1
Who are these rules for?

These rules are for recreational boaters who have put VHF (Very High Frequency) marine radios on their boats. A VHF marine radio is a two-way radio for boaters. VHF marine radios operate on channels in the very high frequency band between 156 and 162 MHz.

VHF Marine Rule 2
What do these rules tell me?

Rules 3 through 9 tell you how to get a license for your radio. Rules 10 through 20 tell you how to operate your radio.
Another government writer gives readers a road map:

**Privacy Act Regulations (proposed recodification):**

16.3 How to Exercise Your Rights under the Privacy Act.

The Privacy Act gives you the following rights:

(a) Right to find out what records about you HUD may have. If you want to find out whether HUD is keeping any records about you, follow the instructions in Section 16.5, "How to get information about HUD records".

(b) Right to see or get a copy of any record about you. If you want to see or get a copy of any HUD record about you, follow the instructions in Section 16.6, "How to see or copy HUD records".

(c) Right to correct any record about you. If you believe that there is an error in any HUD record about you and you want to have it corrected, follow the instructions in Section 16.11, "How to correct HUD records".

(d) Rights to appeal a denial of any request that you made. If HUD has denied any request that you made to see or copy a record or correct a record, you may appeal from this decision by following the procedures described in Section 16.10, "What you can do if HUD denies your request to see or copy HUD records," or Section 16.13, "What you can do if HUD denies your request to correct HUD records".

(e) Right to sue HUD in court. Your right to sue HUD in court for violating the Privacy Act is explained in Section 16.15 "Your right to sue HUD".
Some common organizing principles. For the main body of a document (after the context-setting introduction) students need to find a useful organizing principle. Different organizing principles are appropriate for different documents. The appropriate principle depends on the purpose, on the audience, and on what the writer wants the reader to do with the document.

The important point for the writer to remember is to find an effective principle and use it as the framework for the entire document. (You may want your students to use different principles to organize within different sections of the document. We will discuss some principles for organizing within sections later in this chapter. Here we are talking about helping students organize the document as a whole.)

Useful organizing principles include:

- a time sequence
- steps in a logical process
- issues (questions or characteristics or topics) raised and discussed in order of importance or relevance
- elements or objects being compared on several factors
- a chain of cause and effect
- sources of information
- audiences or roles
- the format of the document the writer is responding to
- a traditional format that the audience will recognize.

On pages 85-88 we show sample outlines for documents using four of these organizing principles.
OUTLINE OF A DOCUMENT
ORGANIZED BY STEPS IN A PROCEDURE

The Student Loan Program

Context - setting Introduction
    What is in this package?
    What is a guaranteed student loan?

Step 1 - Deciding whether or not to apply
    Who is eligible for this loan?
    How much money may I borrow?
    What will it cost me?

Step 2 - Applying for the loan
    When must I apply?
    Where must I apply?

Step 3 - Getting and using the money
    How may I use the loan money?
    How does my progress in school affect my loan?
    What if I transfer to another school?

Step 4 - Repaying the loan
    When must I start to pay the money back?
    How must I pay the money back?
    After I start paying the money back, may I stop for any reason?
    What happens if I don't pay the money back?
OUTLINE OF A DOCUMENT
ORGANIZED BY ISSUE

Which Typesetting Machine Should XYZ Company Buy?

Context-setting introduction
The question
The recommendation
A brief statement of the reasons for the recommendation

Background
Current capabilities of the system
- facts
- analysis
- conclusion
Needs for a different system
- facts
- analysis
- conclusion
Options that were investigated and issues that were considered

Issue 1: What each machine can do
Machine A
Machine B
Machine C

Issue 2: What each machine costs
Machine A
Machine B
Machine C

Issue 3: What options are available to expand each machine in the future
Machine A
Machine B
Machine C

Conclusion
Recommendation
Justification for recommendation
(summary from each issue)
OUTLINE OF A DOCUMENT
ORGANIZED BY AUDIENCE

Sections from a government regulation that has three audiences:

Part 126—Health Education
Assistance Loan Program

Subpart A—General Program Description
Sec. 126.1 What is the HEAL program?

Subpart B—The Borrower
126.5 Who is an eligible student borrower?
126.6 Who is an eligible non-student borrower?

Subpart C—The Loan
126.10 How much can be borrowed?

Subpart D—The Lender
126.30 Which organizations are eligible to apply to be HEAL lenders?

Subpart E—The School
126.50 Which schools are eligible to be HEAL schools?
OUTLINE OF A DOCUMENT WITH A STANDARD FORMAT

(A Resume)

You can use one of many patterns of organization to prepare an effective resume. What follows is a standard format, one that you might wish to vary, depending on the job you're seeking and your own background.

<table>
<thead>
<tr>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name, address, telephone number</td>
</tr>
</tbody>
</table>

| Personal data | (You should give your Social Security number; giving date of birth and marital status is optional.) |
| Career objectives | (Give immediate and long-range plans.) |
| Education | (Give college or colleges you attended, dates and honors; give high school, location, date.) |
| Work experience | (List most recent and work backwards; give brief details and job title.) |
| Reference | (You may list references who have agreed to recommend you or offer to provide references upon request.) |
Organizing Within Each Section

Once students have an overall framework for the document, they can begin to organize each section. First, of course, they must group the points, placing each where it belongs in the outline. Remember that we are talking here as always about a process. You may find it best to have students plan the outline first—brainstorming the major topics and selecting an organizing principle—and then fill in the sections of the outline as the research progresses. Or they may need to do quite a bit of the research or thinking first and then develop major topics (the general outline) by sorting research notes into logical groups.

If it is appropriate for students to use the same organizing principle within each section of the document, the resulting parallelism can be very effective. For example, for a procedure, the best technique may be to put both the large steps (the document outline) and the small steps (the outline for each section) in sequential order. In a memo comparing and contrasting options on different features, the best internal organization is to repeat the same structure in each section.

However, students should recognize that it is not always necessary or even most effective to use the same organizing principle within each section. In a proposal for a research project, for example, the first three chapters might be:

I. Introduction

II. Statement of the Problem

III. Description of the Proposed Research

For the statement of the problem, the best organizing principle may be by issues, presented in order of importance. For the description of the proposed research, the best organizing principle may be by chronology, where the writer explains what will be done in the order in which the events will happen.

Students should have a preliminary outline for all the sections after they have completed pre-design stages but before they begin to write their first full working draft. On a large project, they may need to reoutline each section
several times. Indeed their outlines are sure to change during the writing.

**Showing the Organization to the Readers**

It is important for students to learn to share their organization with their readers. In part, of course, a well-written document leads the reader from one point to the next with the underlying organization as hidden and unobtrusive as the internal steel structure of a building. However, showing the internal organization quite openly to the reader helps the reader find information quickly and follow the writer's pattern of thought.

How does a writer share the document's organization with the reader? One useful technique is to tell the reader about the document's organization at the beginning. We've already described this method of including a roadmap or signposts in the context-setting introduction. Another useful technique for students is to develop informative headings for each section of the document. Because the section headings automatically become the Table of Contents for the document, they make the writer's organization explicit to the reader at the very beginning and again throughout the material.

The value of informative headings. If the material is often used for reference, informative headings will allow the reader to find the applicable information quickly. You might remind your students how much of the written material they see is primarily used for reference—for example, manuals, guidebooks, most public documents, and brochures.

For other types of writing (reports, academic papers, textbooks, memos), the reader often wants to be able to understand the framework and the gist of the material at a glance. Informative headings help the reader to do just that.

As the reader goes through a text, informative headings provide brief context-setting titles for each section. If they are well-constructed, the headings alert the reader to the content that is coming and make connections for the reader to previous experience or materials. Thus, they serve the same function as the title does on the paragraph we used for the exercise on context earlier in this chapter.
Because headings mark the beginning of a new topic, they provide convenient stopping places for the reader who has neither the time nor inclination to read the entire piece at one time. A text with headings seems to be more manageable to the reader because it can be digested in chunks. Informative headings throughout the document allow the reader to quickly review material already read and thus to pick up the thread of the argument or discussion quickly after an interruption.

A very useful technique to teach your students is to have them recheck the organization when reviewing their written product. (We'll raise this point again in the chapter on reviewing, revising, and editing, but let us just introduce it here.) When the writer has finished a draft, he or she should go back through it and create an outline from the headings in the paper. The writer can then see at a glance if he or she has used a consistent principle inside each section. The writer should check to see if there are at least two headings at each level in each section. As in an outline, if there is only one heading at any level, it should be made part of the heading at the next higher level. The writer can also see if he or she has used parallel grammatical structures in the headings and if the headings make sense to the reader. To help students appreciate the value of headings, you might do the following in-class exercise with them: Select a well-organized document with useful headings and a poorly-organized document with the headings at incorrect levels. Have students outline both from the headings, putting each heading into the outline as it is used in the paper. Discuss the impression that the students have of how readable, understandable, and effective the two papers are likely to be based on reading the headings.

How to write informative headings. Two very useful ways to write headings are

- to present the question that the section answers, and
- to provide a brief summary statement of what the section says.

First, let us look at questions as headings. On pages 93-95, we show the headings from the information sections of three student loan forms. You might ask students to decide which agency's package they would find most useful.
Your students may have had to read material like this in applying for money to help with their college expenses. They (your students) are the audience for this material. If you ask your students which information page is more useful and why, they will probably see for themselves how useful questions can be as headings.
Headings in Information Section of Form A

TERMS AND CONDITIONS OF LOANS
DEFERMENTS
REPAYMENT
ELIGIBILITY NOTICE
IF YOU DO NOT MEET THESE REQUIREMENTS
YOU SHOULD NOT COMPLETE THIS FORM
IF YOU DO NOT MEET THESE REQUIREMENTS
YOU SHOULD NOT COMPLETE THIS FORM
ELIGIBLE LENDERS
PROGRAM OPERATION
INSURANCE FEE
DEFAULT
Headings in Information Section of Form B

- What is the guaranteed student loan program?
- Who is eligible to apply for a guaranteed student loan?
- To whom do I apply for a loan?
- How much can I borrow?
- How much should I borrow?
- What are the terms of a guaranteed student loan?
- What will my monthly repayment be after graduation?
- When should I apply for a loan?
- How do I apply for a guaranteed student loan?
Headings in Information Section of Form C

- PRIVACY ACT NOTICE
- RIGHT TO FINANCIAL PRIVACY ACT NOTICE
- CRIMINAL PENALTIES NOTICE
- GUARANTEED STUDENT LOAN PROGRAM
- TERMS AND CONDITIONS OF LOANS
- GUARANTEE FEE
- ELIGIBLE STUDENT BORROWERS
- ELIGIBLE LENDERS
- ELIGIBLE EDUCATIONAL INSTITUTIONS
For another example of how questions make appropriate headings, you might want students to look at the before and after versions of the tables of contents of the Citizens Band radio regulations on pages 97 and 98. The rules come in the package with every CB radio; the owner is expected to comply with them. Ask students to imagine the audience of CB radio owners. Which set of rules would they be more likely to read and follow? What difference do your students think there would be in the number of calls, complaints, and questions from readers of these two documents? Here is a case where clear writing and good reorganization benefited both the readers and the writers.
Rules for Owners of CB Radios

BEGIN

TABLE OF CONTENTS

GENERAL

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- Standard forms to be used .................................. 3
- Filing of applications ....................................... 3
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- Who may sign applications .................................. 4
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- Types of operation authorized .............................. 5
- Changes in terms of license ................................ 5
- Transfer of license prohibited ............................. 5
- Operation by, or on behalf of, persons other than the licensee .......................... 5
- Limitations on antenna structures ......................... 6

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- Acceptability of transmitters for licensing ............. 8
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- External radio frequency power amplifiers prohibited ........................................ 9
- Telephony only ............................................... 9
- Civil defense communications .............................. 10
- Prohibited communications ................................ 10
- Telephone answering services .............................. 10
- Prohibited communications ................................ 10
- False signals ................................................ 11
- Prohibited communications ................................ 11
- Emergency and assistance to motorist use ................ 11
- Operation by, or on behalf of persons other than the licensee .................................. 12
- Duration of transmissions .................................. 12
- Station identification ....................................... 13
- Station location ............................................. 13
- Dispatch points and remote control ....................... 13

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END
Rules for Owners of CB Radios

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CB Rule 44 What are my station records? ............................................................... 22
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CB Rule 46 How are the key words in these rules defined? .................................... 24
Questions make good headings; so do statements. Your students can turn almost any set of questions into short sentences.

What must I do to qualify?

would become

What you must do to qualify.

In most cases, it is appropriate to keep headings short (less than ten words). On occasion, however, long headings can be very effective. You might ask students to look at page 100, which is the a table of contents from a report. When they think about what this table of contents accomplishes, they may realize that the headings summarize the report. A table of contents (and set of headings) as detailed as this is probably only appropriate for a report that is more than a hundred pages long (as this one is).
Statements can make useful headings  
A report on the life insurance industry  

TABLE OF CONTENTS  

INTRODUCTION  

I. THE LIFE INSURANCE INDUSTRY AND ITS SERVICES  

A. Description of the Industry  
B. Basic Types of Life Insurance Policies  
1. Term Insurance  
2. Cash Value Insurance  
C. Life Insurance As A Savings Medium  

II. CONSUMER PROBLEMS IN LIFE INSURANCE  

A. The Rate of Return Consumers Receive on the Savings Component of Cash Value Insurance Policies Is Often Very Low  
1. Many New Cash Value Policies Earn Relatively Low Rates of Return  
2. Substantially Lower Rates of Return Are Being Paid on Older Whole Life Policies, Especially Non-Participating Policies  
B. Consumers Lose Substantial Amounts of Money Through Termination of Whole Life Policies Within the First Years of Coverage  
C. The Cost of Similar Life Insurance Policies Varies Widely  
1. Evidence of Cost Dispersion Among Similar Policies  
2. Cost Dispersion Among Similar Policies Exceeds That Found for Other Products  
3. There Is Little Relation Between the Cost of Policies and Their Market Share  
D. Consumers Often Receive a Small Amount of Protection Against Premature Death Relative to the Premiums Paid for Ordinary Insurance
How to write uninformative headings. Your students should also learn how NOT to write headings. They may find it useful to see examples of poor headings as well as examples of effective ones. Students might gain something from studying examples of poor headings to learn what not to do.

The chapter headings in a report should be used for the table of contents and they should tell the reader about the content of the report. The "all purpose table of contents" on page 102 which comes from a senior's term paper for example, is not informative. Headings should also cover the most important information in the section. If the heading does not convey the meaning of what follows, the reader may be confused. For example, what information would readers be looking for if they found the heading OWNERSHIP in a warranty? Students might decide if that's an appropriate heading for this paragraph:

OWNERSHIP

This appliance PARTS warranty remains in force for one (1) year, and the EXTENDED PORCELAIN FINISH warranty for five (5) years, from the initial delivery of the dishwasher, and continues in force even if relocated by the first or subsequent purchaser(s).

The heading "ownership" is inappropriate here. In fact, headings of one or two words are often uninformative because they do not give the reader clues to the relationships or the results involved in the section. To cite another example, one government program begins its guidelines for applying for a grant with these headings:

Purpose
Authority
Applicability and scope
Publications
Copies
Citation
Public comment
Grant information

Do students find these headings to be informative or useful?
A table of contents that gives no information is useless.

### TABLE OF CONTENTS

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<td>Footnotes</td>
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<td>Bibliography</td>
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</table>
Phrases that include actors and actions are usually more informative than phrases made entirely of nouns. Furthermore, they help both the reader and the writer. The writer who organizes with a clearly articulated organizing principle and who writes headings that inform the reader about the organization is more likely to notice missing pieces of the document.

On page 104, we reproduce the entire table of contents for the guidelines to this same government program. Because this is a grants program, a reader's first interest in the document is likely to be "Am I eligible to apply?" The answer to that question is not in the document. If the writer had used an appropriate organizing principle for a procedural document like this one (providing a context and then following the steps of the procedure), he or she might have produced the outline (table of contents) on page 105. With this second outline, the writer would not have neglected to write on such a fundamental topic as who is eligible.
### Table of Contents

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**Subpart A—Basic Policies**

| 30.200  | Grant simplification goals and policy. |
| 30.201  | Role of EPA. |
| 30.210  | Role of the grantee. |
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   A. What kinds of grants are there?
      1. grant programs
      2. unsolicited proposals
   B. Who is eligible to apply?
   C. General policies of immediate interest

II. How to apply for a grant
   A. Overview of the process
   B. Detail of the steps
   C. Allowable costs in a grant
   D. Deadlines

III. How will EPA process grant applications?
   A. Criteria for awards
   B. Procedure

IV. How does EPA award the grant?

V. How does EPA pay the grant?
   A. How recipient puts in claims
   B. How EPA pays

VI. What requirements must recipient satisfy while receiving the grant?

VII. Patents, Data, and Copyrights

VIII. Changing the grant
   A. Changes that the recipient may make
   B. Changes that EPA may make
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by David Schwartz
## Writing Clearly

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What are document design guidelines?
Guideline 11. Rewrite multiple negatives as positive sentences when you can.

chapter 6

Writing Clearly

In most college courses, students write for instructors who are "expert" readers, but, as they follow this syllabus, your students will write for audiences outside the classroom as well as for you. Chapter 9 ("Evaluation") presents a framework for having students take what they have written to outside readers. The information about clear writing that comes from this kind of evaluation helps students make meaningful changes as they review, revise, and edit their papers. Your students' greatest challenge will be to write clearly and directly so that their intended readers can understand and use what they write.

With special guidance and much practice, even students with little experience analyzing audiences (or completing other steps at the pre-writing stage) will soon begin to see a relationship between the needs and expectations of their readers and the linguistic choices they make as writers.

To understand the nature of these choices, students need to have mastered basic writing skills. We assume that your students are fairly competent writers, so this book does not include grammar lessons. We do include some guidelines for clear writing, which we selected for three main reasons:

- First, experienced writers and editors widely agree that these principles strongly influence the clarity of prose. The principles have all been included in writing and design manuals aimed at practitioners.

- Second, researchers have investigated how these principles affect how easily people understand text.

- Third, we have found many instances of the problems that these guidelines help solve in student papers and in the writing of professionals in government, business, law, and other fields.
What are Document Design Guidelines?

This chapter presents 12 guidelines that can make documents easier to read and understand by solving three kinds of writing problems:

- readers can't picture themselves in the text;
- the writer chooses words that readers can't understand, the text is inexact and wordy;
- readers can't make sense of convoluted, impenetrable sentences;

The 12 guidelines that we have selected for this section of the course are:

Helping readers to picture themselves in the text

Guideline 1. Address the reader directly, by name, or by using a pronoun.

Guideline 2. Write in the active voice.

Guideline 3. Use action verbs rather than nouns made out of verbs when you can.

Choosing words that readers can understand

Guideline 4. Choose your words with care. Avoid jargon. Define or explain technical terms that you cannot change.

Guideline 5. Don't rename for the sake of variety.

Guideline 6. Don't use extra words.

Writing clear, easy-to-follow sentences

Guideline 7. Write short sentences.

Guideline 8. Put the parts of each sentence into logical order.

Guideline 10. Use lists when you have several items to discuss.

Guideline 11. Rewrite multiple negatives as positive sentences when you can.


In the remainder of this chapter, we present each of these 12 document design guidelines, explain and exemplify them, and show students how to apply them.

For the remainder of this chapter, we address the student directly, so that instructors who want to share our approach to these guidelines and our examples with their students may do so easily. We know that clear writing is one area of an advanced composition course in which most instructors have a great deal of experience. We hope that you will feel free to extract from our approach whatever ideas or examples supplement your own material in teaching clear writing. At the request of our reviewers, who had used this material in their classes, we have also included our set of exercises for the clear writing guidelines. The exercises are in Appendix C.
Helping Readers to Picture Themselves in the Text

Some recent research in cognitive psychology has suggested that one technique people use to understand written messages is to create a scenario (Flower, Hayes, and Swarts 1980).* Put quite simply: in trying to understand difficult, abstract prose, readers translate the words into a "scenario" in which somebody does something.

Original:

A lender or Associate may charge an applicant reasonable fees for necessary services actually performed at the request of the applicant, including fees for necessary services actually rendered in the preparation of the application.

Scenario:

If I ask the lender to help me prepare my application, the lender can charge me a reasonable fee for necessary work he actually does.

This reader has restructured the information as he is reading it in order to make the meaning concrete enough to be functional for him. By using the three guidelines that follow, a writer can build scenarios to help readers understand even complex messages.

Guideline 1. Address the reader directly, by name, or by using a pronoun.

The easiest way to create a scenario is to address the reader as "you". The following sentences express the same meaning, but the first is obscure and the second clear and direct:

Indirect
Reimbursement for each breakfast served which meets minimum nutritional standards is available.

Direct
The Food and Nutrition Service will reimburse you for each breakfast you serve which meets minimum nutritional standards.

In the second sentence, the writer has created a sequence in which it is easy to follow the logic of who will do what to whom. The second sentence is more natural than the first, and, therefore, easier to understand. You may want to test this principle by thinking aloud as you read a piece of difficult prose.

Personal pronouns give a document a tone of directness and personal interest. People may be more likely to read a document if they feel that it is addressed to them. Using personal pronouns also helps you write active sentences (see the next guideline).

You may have found a wide-spread prejudice against personal writing in academic settings. You should review the editorial policies of professional journals in your field to see what is myth and what is fact before you just accept the notion that you must write an academic article without any personal pronouns.

If you address the readers as "you," you can use "I," or "we," or a specific name if you are speaking for a group.

In a question and answer format, you may use both "I" and "you" for the reader. Then you need to use a name or abbreviation for the other party (here the Federal Communication Commission).

Example
VHF Marine Rule 9
What must I do if I sell my boat?

If you sell your boat, you must send your ship station license to the FCC, Gettysburg, PA 17213 for cancellation. You cannot transfer your ship station license to another person or boat.
The U.S. Department of Transportation made an effort to engage readers directly by using "you" in their brochure on automobile restraints:

Example:
You can't believe every story flying around these days. The truth is that all driving can be dangerous.

More than 80 per cent of all accidents occur at speeds less than 40 mph.

Fatalities involving non-belted occupants of cars have been recorded at as low as 12 mph. That's about the speed you'd be driving in a parking lot.

Three out of four accidents causing death occur within 25 miles of home.

Belt up before driving to your shopping center—just as you would for a long trip.

As a rule, it is better to avoid "one" as a pronoun in on-the-job and academic writing.

Don't write:

One hesitates to rely on the 1980 report since it has a number of inaccuracies.

Write:

I hesitate to rely on the 1980 report since it has a number of inaccuracies.

Guideline 2. Write in the active voice.

Your writing will be more direct and vigorous if you write in the active voice.

In active sentences the subject is also the agent or doer:
The applicant pays a $25 fee.

In passive sentences, the sequence is reversed: the subject expresses the goal or object of the action; there may or may not be an agent identified.

A full passive has three telling features:

1. a form of the verb "to be" (is, are, been, is being, has been, etc.)

2. a past participle of the main verb (given, shown, sent, received, earned, etc.)

3. the preposition "by" and the "doer" or agent of the action (by-phrase)

Full passive:
The form should be filled out by the student.

Active equivalent:
The student should fill out the form.

A peculiar feature of passives is that you may omit the by-phrase and not name the agent of the action.

Passive with no by-phrase:
The form should be filled out. [by ____]

Active equivalent:
X (not stated) should fill out the form.

By leaving out the by-phrase you can avoid saying who is responsible for the action. The reader, however, can't tell who does what. Sometimes you don't know who the "doer" is or it doesn't matter; but, if you can, find out who should be responsible and write an active sentence with the agent as subject.
You can also cut off part of passive sentences by leaving out the first feature, the verb "to be."

Passive without "be":

The form, filled out by the student, . . .

The phrase without the "be" verb becomes a relative clause, part of a larger sentence which may also be in the passive. For example, this next sentence has two passive verbs. The first is a relative clause without any "be" verb but with the agent. The second is the main verb of the sentence; the "be" verb is there, but there is no agent.

The form, filled out by the student, should be sent to the Basic Grants processor.

You can reduce the passive verb in a relative clause even further by leaving out both of these features, the "be" verb and the agent. This leaves only the past participle to stand for an entire passive sentence.

The form, filled out completely, should be sent to the Basic Grant processor.

The active sentence including all the necessary information is much more easier to understand.

Active equivalent for both of these examples:

The student should fill out the form and send it to the Basic Grant processor.

Using the active voice, you give readers information quickly and emphatically. A crisp, direct style is especially important in writing instructions.

Passive voice:

Recognizing an active sentence may be done in two simple steps:
1. The subject of the sentence and the verb must be found.
2. Whether the subject is the doer of the action expressed by the verb must be determined.

Active:

You can tell if a sentence is active by doing two simple steps:
1. Find the subject of the sentence and the verb.
2. See if the subject is the doer of the action expressed by the verb.

Because the passive changes the usual word order of English sentences, readers sometimes have trouble understanding sentences in the passive voice, but in some cases, passive sentences are OK.

For instance, you may use the passive voice if the agent or doer is either unknown or is unimportant.

The policy was established early in the 1900's.

In other cases, you may use the passive voice

- when you want variety in your writing, or
- when the sentence is simple and short.

Guideline 3. Use action verbs rather than nouns made out of verbs when you can.

One of the most telling features of abstract, turgid writing is the overuse of nouns. Writers use nouns made out of verbs instead of pronouns and verbs. These derived nouns, called "nominalizations," act very much like passives. They need no subject.

In government, business, and education we commonly find this:
nominalization

Issuance of a check will follow receipt of your vouchers.

nominalization

rather than:

When we receive your vouchers, we will send you a check.

To recognize nominalizations, look through your sentences for words that end in:

<table>
<thead>
<tr>
<th>Suffix</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ment</td>
<td>repayment for repay</td>
</tr>
<tr>
<td>-ion</td>
<td>investigation for investigate</td>
</tr>
<tr>
<td>-ance</td>
<td>reliance for rely</td>
</tr>
<tr>
<td>-ence</td>
<td>dependence for depend</td>
</tr>
<tr>
<td>-al</td>
<td>referral for refer</td>
</tr>
<tr>
<td>-ing</td>
<td>signing for sign</td>
</tr>
</tbody>
</table>

When you are writing about an action, put the word describing the action into a verb form: don't turn the verb into a noun. If you follow this simple rule, your sentences won't sound like this:

There are four major characteristics that influence consumer information seeking and utilization behavior.

Note here that the actions of the sentences are seek and use, but these words have been made into nouns that make the sentence ambiguous and hard to read. You have to pause to figure out just what is being influenced. When the actions are restated as verbs, a shorter, more direct version of the sentence results:
Four major characteristics influence how consumers seek and use information.

Applying this guideline (express actions in verb forms) and the other two guidelines you've read, you can make these sentences clearer and more direct.

1. Completion of the subtotal item is mandatory only for those applicants proposing housing rehabilitation goals.

2. Responsibility is placed on the intending immigrant to obtain the Secretary of Labor's clearance.

3. Utilization of this card constitutes acceptance of the terms and conditions set forth when issued.

The three guidelines we have just covered all work together. When you use personal pronouns, write in the active voice, and express actions in verb forms, you'll find yourself creating scenarios and writing directly and effectively to readers.

Choosing Words that Readers can Understand

Another way to reduce the reader's burden is to adjust your vocabulary to match your readers' needs. To apply these guidelines, you have to think again about the answers you gave to questions about your audience in the pre-writing stage. Who will read the document? Will different people read different parts?
When you evaluate your documents with intended readers, you should be able to find out if you have chosen words that your readers understand. Remember, when you write, that even highly sophisticated readers appreciate clear prose.

Guideline 4. Choose your words with care. Avoid jargon. Define or explain technical terms that you cannot change.

Jargon by definition is the specialized language of a trade or profession. Textile physicists have to talk about warp, brush, and fiber blend. Computer scientists have to talk about inputs, CRT's and bytes. Technical terms may be fine if you are sure that all of your potential readers regularly use them. If you are trying to communicate with a general audience or with specific groups whom you know may find it easier to deal with everyday language, replace fancy words such as those below, with more familiar ones.

- additional = more
- applicant = you
- assistance = help
- cease = stop
- contingent upon = depend on
- combined with = used with
- complete = filled out
- constitutes = makes up
- deem = think
- determine = decide
- employ = use
- envisage = see
- exclusively = only
- endeavor = try
- financial assistance = money, aid
- facilitate = help
- furnish = give
- educational institution = school
- indicate = show
- institute = begin
- necessitate = require
- notification = notice
- originate = start
- omit = leave out
- possess = have
preserve = keep
prior to = before
provide = give
reside = live
retain = keep
request = ask
submit = send
terminate = end
transmit = send
utilize = use
would like = want

If you need the technical term, but think that some of your readers need an explanation, add one in parentheses or after a dash:

Example:
The Library of Congress has one of the largest collections of *periodicals* (magazines and journals) in the country.

Example:
You can get a Basic Grant for 1980-81 if all these things are true:

1. You show that you have financial need (your education costs more than you can pay).

You should not deprive yourself of the subtleties and nuances of the English language in your efforts to be simple and direct. Readers are as annoyed by flat, condescending writing as they are by pompous, fuzzy writing.

Students use technical language justifiably in many situations: using the technical terms of a discipline shows that you are becoming a part of the discipline. From your freshman year onward you will be tempted to imitate the language you read in your textbooks, in professional journals, and in the writing of academics in your field. Often this language is ungrammatical or unnecessarily complex. Choose your words carefully: don't indiscriminately follow the models you see just because they
sound professional. Using the process model will help you make a distinction between using technical language correctly in a context that will communicate with readers and using jargon that is a barrier to understanding.

In all cases, use straightforward language. For example, write writers, not those engaged in producing written language. Get rid of faddish words like prioritize and interface. Write to inform your readers, and you will in the process impress them.

Guideline 5. Don't rename for the sake of variety

If your chief aim is clarity, be consistent in what you call something. Precision is best served by repeating subject nouns. Variety has a place in prose style but not when you're trying to help readers understand complex or highly technical messages. The elegant variation that is appropriate for fiction is not appropriate for business, technical, or academic prose. The reverse of this guideline is also important. Once you have reserved a name for one thing, do not use it to mean something else.

Example:

Don't write:

The prescribing physician should be told about any allergies you may have. Also tell the doctor if you are pregnant.

Write:

Tell the doctor about any allergies you may have. Also tell the doctor if you are pregnant.

Don't write:

Student single lunch $1.35
Adult price per lunch $1.75

Write:

Student price per lunch $1.35
Adult price per lunch $1.75
Don't write:

Several recent analyses support our conclusion. These studies cast doubts on the economics of large scale advertising. The reports are theoretical and empirical.

Write:

Several recent theoretical and empirical studies support our conclusion. These studies cast doubts on the economics of large scale advertising.

Guideline 6. Don't use extra words

The temptation to say things twice is often hard to fight, but you should cut out extra words that add length and no real information:

- personal opinion
- honest opinion
- express opinion
- positive benefits
- each and every

Some of these words are truly redundant; you could not use the opposite of the adjective and have a meaningful phrase. What are negative benefits? In other cases, the adjective is important only if you are stressing that attribute (e.g., "This is my personal opinion, not that of the group.")

Don't bury an important idea in several unnecessary words.

Don't write:

Thirty teachers lost their jobs due to the fact that enrollment dropped.

Write:

Thirty teachers lost their jobs because enrollment dropped.
Don't write:
The agency is not able to release the report at the present time.

Write:
The agency cannot release the report now.

Don't write:
Congressman Howe's speech was in reference to the new zoning laws in his district.

Write:
Congressman Howe's speech was about the new zoning laws in his district.

Cut down on meaningless modifiers. Overused words and phrases such as really, very, actually, practically, virtually, definitely obscure meaning.

Don't write
Actually, the X-210 copier is not really the machine the company needs, since the X200 has the capability of meeting virtually all of our needs.

Write:
We do not need the X-210 copier since the X200 meets most of our needs.

Look through your early drafts critically for padded phrases. What you lose in pomposity and length, you gain in clarity. Jargon, excessive formality, and wordiness do not give writing authority. Natural, straightforward writing is always suitable.

Applying these three guidelines will help you express yourself exactly in direct, well-thought-out language. If you recognize wordiness and inflated writing and revise with your readers in mind, you will communicate effectively.
Don't write:

The new program has a framework which has the ability to meet the needs of students whose interests are in the fields of marketing, communication, and computer science.

Write:

The new program serves students in marketing, communication, and computer science.

Writing Clear, Easy-to-Follow Sentences

Guideline 7. Write short sentences

Use short sentences (under 25 words) when

- your readers are unfamiliar with your topic, or
- your readers are unskilled, or
- your topic is complex,
- you need variety or emphasis.

Research and practice show that the average reader can remember only a few ideas at a time. After every few thoughts, readers need to pause and chunk together what they have read. The period at the end of a sentence is one signal for such a pause. Phrases and clauses that make sense in themselves also provide closure, but joining more than two or three closed phrases usually makes a sentence too long.

In many documents, particularly legal ones, you will find sentences of 100, 200, and even more, words. Anyone trying to read and understand these sentences must break up the material into smaller sentences in his or her mind. Even lawyers have to stop and translate these sentences as they go along. Although lawyers think that these sentences have precise meaning, in fact, in every rewriting project we have worked on, we have found ambiguities in these long sentences that the lawyers did not realize were there.
Even when you write short sentences, you have to vary the style to get writing that flows. A passage made up entirely of extremely short sentences can sound choppy and immature. Further, the relationships among the ideas may be unclear if you use only very short sentences.

Don't write:

Since you cannot patent an idea by itself, you must show that the idea is operative. You must show that the idea can be put into effect in a practical way. Keeping good records will help you meet these conditions.

Write:

You cannot patent an idea by itself. You must keep good records which show that the idea is operative and practical.

The second passage, in which we have combined and rearranged the sentences, is easier to follow than the passage made up of three short, choppy sentences.

Guideline 8. Put the parts of each sentence into logical order.

If you break up a sentence by additions, exceptions, or parenthetical remarks, your reader may have difficulty making sense of it. Sometimes even short sentences violate this guideline.

Looking at the following example, you will see that the underlined words in this sentence make up the main idea. However, the date comes in the middle of the verb and the address comes between the verb and its object.

Don't write:

You should before May 15, 1981 take to the ABC Printers at 483 Main Street the plans for layout and cover design.
Write:

Before May 15, 1981, you should take the plans for layout and design to ABC Printers, at 483 Main Street.

Guideline 9. **Untangle convoluted sentences**

Sometimes long sentences carry so many thoughts embedded in each other that it's hard to figure out what the writer is saying. If you write long, convoluted sentences, readers may not care to invest the time and energy to work out your meaning, or they may be intimidated by a dense prose style.

Don't write:

Integrated color scanning systems, which are able to eliminate conventional methods of color separation, combine single images and texts on a video display terminal, automatically producing a full page, of any shape, on either photosensitive film or paper.

Unpack this long sentence and write:

Integrated color scanning systems are able to:

- eliminate conventional methods of color separation,

- combine single images and texts on a video display terminal, and

- automatically produce a full page of any shape on either photosensitive film or paper.

Here is an example from a medical insurance plan. Because the original is loaded with conditions (if . . . or), it is virtually impossible to understand.
EXTENSION OF BENEFITS

If at the date of termination of Employee or Dependent Insurance you are disabled by sickness or injury so as to be unable to perform the normal duties of your employment, or one of your Dependents is confined to a hospital for sickness or injury; and if before the end of three months after such termination Covered Charges are incurred for such sickness or injury for which benefits would be payable except for such termination; then benefits shall be payable as if such insurance had not been terminated, for Covered Charges incurred for such sickness or injury before the end of one year after such termination.

You can continue to receive benefits after the insurance ends, if, on the day the insurance ends,

- you can't work because of sickness or injury

or

- one of your DEPENDENTS is in the hospital because of sickness or injury.

If you or the DEPENDENT incur a COVERED CHARGE for the sickness or injury within 3 months after the insurance ends,

- we will pay for those charges at the same rate as if the insurance had not ended

and

- we will continue to pay for benefits for the sickness or injury for up to one year after the insurance ends.

Make the words (or, and, if) stand out when you list conditions. If there are several conditions, state the rule first and list the conditions or exceptions afterwards.
Guideline 10 Use lists when you have several items to discuss

Readers can find and use patterns in your writing if you give them cues. Even a passage packed with information will be easy to follow if you list, in advance, points you plan to discuss.

Lists are particularly useful when you are discussing a sequence of actions or steps and when you are discussing an entity that has several components. When you construct a list, you should use parallel structure. Sentences or clauses that are linked in the same way to some major idea should have the same grammatical constructions—all infinitives, or all gerunds, etc.

Don't write:

Writing an effective regulation is a process, not a single activity. The process includes at least six steps:
1. Plan before you write
2. Selecting the appropriate content
3. You should organize and make the organization clear to readers
4. Write a clear first draft
5. You should review and revise
6. Evaluating the regulation

Write:

Writing an effective regulation is a process, not a single activity. The process includes at least six steps:
1. Planning before you write,
2. Selecting the appropriate content,
3. Organizing and making the organization clear to readers,
4. Writing a clear first draft,
5. Reviewing and revising,
6. Evaluating the regulation

By using lists which have parallel structure, you will save your readers time and effort.
Guideline 11. Rewrite multiple negatives as positive sentences when you can.

Even well-educated readers have trouble translating negatives into positives. Negatives are indirect: they imply what we should do by telling us what not to do.

Check your writing to see if you use double negatives such as these that can be changed easily into positives:

<table>
<thead>
<tr>
<th>Double Negative</th>
<th>Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>not until</td>
<td>only when</td>
</tr>
<tr>
<td>not unless</td>
<td>only if</td>
</tr>
<tr>
<td>not prevent</td>
<td>permit</td>
</tr>
<tr>
<td>not reject</td>
<td>accept</td>
</tr>
<tr>
<td>not disagree</td>
<td>agree</td>
</tr>
<tr>
<td>not illegal</td>
<td>legal</td>
</tr>
<tr>
<td>not fail</td>
<td>succeed</td>
</tr>
</tbody>
</table>

Compare the first sentence below, which is negative and indirect, with the second.

Don't write:

The chapter will not accept student members unless they are enrolled half-time in a regular undergraduate course of study.

Write:

The chapter will accept student members only if they are enrolled half-time in a regular undergraduate course of study.

If you are writing forms, instructions, or rules for readers with weak skills, affirmative sentences will work better for you than negatives.

Don't write:

FFP is not available for medical care, other than family planning services.
Write:

FFP available only for the cost of family plan.

You can use simple negatives for emphasis or when you want to contradict, correct, or deny something.

Example:
Your writing is not direct and concise. I do not have time to read through your essay to search for your major points.

Example:
Computer privacy is not a new issue. It is a problem which the industry has not addressed, despite statements to the contrary.

Guideline 12. Avoid noun strings

If you pile up several nouns in a row, your reader may have trouble discovering what you mean.

Don't write:

You must prepare a group technical consumer report which includes an executive summary.

It usually takes extra words to rewrite a long string of nouns, but in this case the longer version is clearer than the shorter. In the example above it is impossible to tell whether the report is for consumers or about consumers. You can rewrite the sentence to be unambiguous.

Write:

Your group must prepare a technical report for consumers which includes an executive summary.

Noun strings are a common characteristic of bureaucratic and academic writing.
Don't write:

Not all information is available to the consumer for consumption or purchasing choice decisions.

Write:

Consumers do not have all the information they need to decide what to eat or what to buy.
## Using Design Well

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The importance of design</td>
<td>135</td>
</tr>
<tr>
<td>The elements of design</td>
<td>138</td>
</tr>
<tr>
<td>Typeface</td>
<td>138</td>
</tr>
<tr>
<td>Type size</td>
<td>141</td>
</tr>
<tr>
<td>Upper and lower case vs. ALL CAPITALS</td>
<td>142</td>
</tr>
<tr>
<td>Line length</td>
<td>142</td>
</tr>
<tr>
<td>Margins</td>
<td>145</td>
</tr>
<tr>
<td>Spaces between lines</td>
<td>146</td>
</tr>
<tr>
<td>Page layout</td>
<td>146</td>
</tr>
<tr>
<td>White space</td>
<td>153</td>
</tr>
<tr>
<td>Color</td>
<td>153</td>
</tr>
<tr>
<td>Charts, photographs, and illustrations</td>
<td>153</td>
</tr>
<tr>
<td>Variety can clutter</td>
<td>154</td>
</tr>
<tr>
<td>An example</td>
<td>155</td>
</tr>
</tbody>
</table>
Using Design Well

The Importance of Design

Another aspect of producing documents that are easy to use and understand involves how the document looks physically. We have all seen pamphlets, booklets, forms, and reports that "look good"—that look interesting, refreshing, visually exciting. This chapter covers some of the typographic techniques and graphic elements that help make documents "look good."

Some material discussed here presumes that the author of a document has access to professional graphic artists and printing facilities. Such facilities often are available in offices. Most of your students, however, won't have these kinds of resources available to them for this course. Nevertheless, some design techniques can be applied using only a typewriter, and some students may be able to go way beyond that if given a chance. Whatever the opportunities, the design of documents is an important consideration and all students should be introduced to the principles of design offered in this chapter.

Design is a crucial element in the creation of simple, effective printed materials. It has been neglected for far too long. Fortunately for the public, this situation is changing. British psychologist Patricia Wright, an expert on written communications, wrote in 1978:

Increasingly it is being recognized that effective communication depends not only on the content of what is said but on the way that the information is physically presented. Illegible or badly presented information can reduce the user's efficiency and may result in negative reactions to the information and its perceived source.

You can see for yourself and show your students what this means by glancing at the documents on pages 136 and 137—the old and new versions of a bank's customer loan agreement. Before you even read the words, these two
**First National City Bank**

**Consumer Loan Note**

Date __________ 19__________

(In this note, the words I, me, mine and my mean each and all of those who signed it. The words you, your and yours mean First National City Bank.)

**Terms of & Conditions**

To repay my loan, I promise to pay you _______ Dollars in installments of $ _______ each. Payments will be due _______, starting from the date the loan is made.

Here’s the breakdown of my payments:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Amount of the Loan</td>
<td>$ _____</td>
</tr>
<tr>
<td>2</td>
<td>Property Insurance Premium</td>
<td>$ _____</td>
</tr>
<tr>
<td>3</td>
<td>Filing Fee for Security Interest</td>
<td>$ _____</td>
</tr>
<tr>
<td>4</td>
<td>Amount Financed (1 + 2 + 3)</td>
<td>$ _____</td>
</tr>
<tr>
<td>5</td>
<td>Finance Charge</td>
<td>$ _____</td>
</tr>
<tr>
<td>6</td>
<td>Total of Payments (4 + 5)</td>
<td>$ _____</td>
</tr>
</tbody>
</table>

**Annual Percentage Rate _____ %**

Even though I can’t pay more than the fixed installments, I have the right to prepay the whole outstanding amount of this note at any time, or do so if this loan is refinanced—i.e., replaced by a new note—you will refund the unearned finance charge, figured by the rule of 78—a commonly used formula for figuring rebates on installment loans. However, you can charge a minimum finance charge of $10.

**Late Charge**

If I fail more than 10 days behind in paying an installment, I promise to pay a late charge of 5% of the overdue installment, but no more than $15. However, the sum total of late charges on all installments can’t be more than 2% of the total of payments or $25, whichever is less.

**Security**

I hereby give you what is known as a security interest in my O Motor Vehicle and/or O Stocks, O Bonds, O Savings Account (more fully described in the receipt you gave me today) and any account or other property of mine coming into your possession.

**Insurance**

I understand I must maintain property insurance on the property covered by the Security Agreement for its full insurable value, but I can buy this insurance through a person of my own choosing.

**Default**

I’ll be in default if:

1. If I don’t pay an installment on time, or
2. If any other creditor tries by legal process to take any money of mine in your possession.

You can then demand immediate payment of the balance of this note, minus the part of the late charge which hasn’t been earned figured by the rule of 78. You will also have other legal rights, for instance, the right to repossess sell and apply security to the payments under this note and any other debts I may then owe you.

**Irregular Payments**

You may accept late payments or partial payments, even though marked “payment in full”, without losing any of your rights under this note.

**Delay in Enforcement**

You can delay enforcing any of your rights under this note without losing them.

**Collection Costs**

If I’m in default under this note and you demand full payment, I agree to pay you interest on the unpaid balance at the rate of 1% per month, after an allowance for the unearned finance charge. If you have to sue me, I also agree to pay your attorney’s fees equal to 15% of the amount due and court costs. But if I defend and the court decides I am right, I understand that you will pay my reasonable attorney’s fees and the court costs.

**Comakers**

If I’m signing this note as a comaker, I agree to be equally responsible with the borrower. You don’t have to notify me that the note hasn’t been paid. You can change the terms of payment and release any security without notifying or releasing me from responsibility on this note.

**Copy Received**

The borrower acknowledges receipt of a completely filled-in copy of this note.

**Signatures**

Borrower ______________________ Comaker ______________________

**Addresses**

_________________________  __________________________

_________________________  __________________________

_________________________  __________________________

_________________________  __________________________

**Post Line**

If something should happen and you can’t pay on time, please call us immediately at (212) 559-3061.

Personal Loans Department

First National City Bank

[Signature]

**Writing in the Professions**

American Institutes for Research

and Siegel & Gale, Inc.
documents give you very different impressions. The old note looks downright threatening. The words are packed so tightly on the page that they seem confusing and impenetrable. It obviously isn't meant to be read. The simplified version is a refreshing contrast. The information looks digestible. "Design" makes the difference.

The important thing that you should emphasize is that good design not only makes the document more inviting, it can help make language clearer. The old loan agreement (page 136) was written in traditional legalese that was difficult for most people to understand. But even that language seems more accessible when printed in the format of the new note (page 139). Conversely, bad design can reduce the effectiveness of clear language. From the point of view of the reader the advantages of good design are obvious.

The Elements of Design

Design is a set of specialized skills of commercial artists, illustrators, printers, and others. You are not in this course going to make your students design specialists. But even without special training in design, it is easy for your students to learn the fundamental elements that go into designing a well-conceived document. Being familiar with these elements will enable them to participate intelligently in the process, and to keep any eye out for design problems and opportunities.

Typeface. A typeface is a single style of type. There are hundreds of different typefaces, each with its own subtle characteristics. Here are some commonly used typefaces:

This sentence is set in Times Roman.
This sentence is set in Century Schoolbook.
This sentence is set in Helvetica.
This sentence is set in Univers.
"Old" Words in a "New" Design

In the Event

In the event this note is prepaid in full or refinanced, the borrower shall receive a refund of the unearned portion of the prepaid finance charge computed in accordance with the rule of 78's "act of the dates" method, provided that the bank may retain a maximum finance charge of $50, whether or not earned, and, except in the case of refinancing, no refund shall be made if it amounts to less than $5. In addition, upon any such prepayment or refinancing, the borrower shall receive a refund of the charge, if any, for group credit life insurance included in the loan equal to the unearned portion of the premium paid or payable by the holder of the obligation computed in accordance with the rule of 78's, provided that no refund shall be made of amounts less than $5.

As Collateral Secured

As collateral security for the payment of the indebtedness of the undersigned borrower and all other indebtedness or obligations of the undersigned to the bank, whether joint, several, absolute, contingent, secured, unsecured, matured or unmatured, under any present or future note or contract or agreement with the bank (all such indebtedness and obligations hereinafter collectively called the "obligations"), the bank shall have, and hereby grants, a security interest and/or right of set-off in and to (i) all monies, securities and/or property of the undersigned now or hereafter held by or coming to the possession or under the control of the bank, whether held for safekeeping, collection, transmission or otherwise or at casualty, including the proceeds thereof, and any and all claims of the undersigned against the bank, whether now or hereafter existing, and (ii) the following described personal property (all such monies, securities, property, proceeds, claims and personal property being hereinafter collectively called the "collateral"): O Motor Vehicles, O Boat, O Aircraft, O Bonds, O Savings, and/or __________ (specify customer's copy of security agreements or collateral receipts relevant to this loan for full description).

If This Note is Prepaid

If this note is prepaid in full or is refinanced, and the borrower may obtain the same through a person of his own choice.

In the Event of Death

In the event of death or of any other Obligation or the performance or observance of Unanimity or of Definite of any term or covenant contained herein or of any note or other contract or agreement evidencing or relating to any Obligation or any Collateral on the Borrower's part to be performed or observed, or the undersigned Borrower shall die or of any of the undersigned become incapacitated or make an assignment for the benefit of creditors, or a petition shall be filed by or against any of the undersigned under any provisions of the Bankruptcy Act; or any money, securities or property of the undersigned now or hereafter on deposit with us or in the possession or under the control of the Bank, shall be attached or become subject to distraint proceedings or any order or process of any court, or the Bank shall deem itself to be necessary, then and in any such event, the Bank shall have the right to exercise, without demand or notice of any kind, to declare all or any part of the Obligations to be immediately due and payable, whereupon the Obligations shall become and be immediately due and payable, and the Bank shall have the right to exercise all the rights and remedies available to a secured party upon default under the Uniform Commercial Code (the "Code") in effect in New York, as the time, and such other rights and remedies as may otherwise be provided by law. Each of the undersigned agrees that, in purposes of the "Code," that creates notice of any proposed sale or of the Bank's election to refuse Collateral related to the undersigned Borrower (who is hereby appointed agent of each of the undersigned for such purposes by firm demand), a notice, proposal to sell, as the address of the undersigned Borrower indicated below, against the undersigned Borrower under the Uniform Commercial Code, and to be deemed notice upon the undersigned Borrower under the Uniform Commercial Code, and to be deemed notice upon the undersigned Borrower under the Uniform Commercial Code, and to be deemed notice upon the undersigned Borrower under the Uniform Commercial Code, and to be deemed notice upon the undersigned Borrower under the Uniform Commercial Code.
"New" Words in an "Old" Design

PREPAYMENT OF WHOLE NOTE. EVEN THOUGH I DIDN'T PAY MORE THAN THE FIXED INSTALLMENTS, I HAVE THE RIGHT TO PREPAY THE WHOLE OUTSTANDING AMOUNT OF THIS NOTE AT ANY TIME. IF I DO, OR IF THIS NOTE IS REFINANCED—THAT IS, REPLACED BY A NEW NOTE—YOU WILL REFUND THE UNAMORTIZED FINANCE CHARGE. FIGURED BY THE RULE OF 78—A COMMONLY USED FORMULA FOR FIGURING INTEREST ON INSTALLMENT LOANS. HOWEVER, YOU CAN CHARGE A MINIMUM FINANCE CHARGE OF $10.

LATE CHARGES. IF I FALL MORE THAN 15 DAYS BEHIND IN PAYING AN INSTALLMENT, I PROMISE TO PAY A LATE CHARGE OF 5% OF THE OVERDUE INSTALLMENT, BUT NO MORE THAN $20. HOWEVER, THE SUM TOTAL OF LATE CHARGES ON ALL INSTALLMENTS CAN'T BE MORE THAN 2% OF THE TOTAL OF PAYMENTS OR LESS, WHICHEVER IS LESS.

SECURITY. TO PROTECT YOU IF I DEFAULT ON THIS OR ANY OTHER DEBT TO YOU. I GIVE YOU WHAT IS KNOWN AS A SECURITY INTEREST IN MY: [ ] Motor Vehicles and/or...

SEE THE SECURITY AGREEMENT I HAVE GIVEN YOU FOR A FULL DESCRIPTION OF THIS PROPERTY. [ ] STOCKS. [ ] BONDS.

[ ] SAVINGS ACCOUNT (MORE FULLY DESCRIBED IN THE RECEIPT YOU GAVE ME TODAY) AND ANY ACCOUNT OR OTHER PROPERTY OF MINE COMING INTO YOUR POSSESSION.

INSURANCE. I UNDERSTAND I MUST MAINTAIN PROPERTY INSURANCE ON THE PROPERTY COVERED BY THE SECURITY AGREEMENT FOR ITS FULL INSURABLE VALUE. BUT I CAN BUY THIS INSURANCE THROUGH A PERSON OF MY OWN CHOOSING.

Default. I'll be in default: 1. If I don't pay an installment on time; or 2. If any other creditor tries by legal process to take my property or mine in your possession.

You can then demand immediate payment of the balance of this note, minus the part of the finance charge, which hasn't been earned (Figured by the rule of 78). You will also have other legal rights, for instance, the right to repossession, sell and apply security to this payment on this note and any other debt I may owe you.

Irregular Payments. You can accept late payments or partial payments, even though marked "payment in full", without losing any of your rights under this note.

Delay in Enforcement. You can delay enforcing any of your rights under this note without losing them.

Collection Costs. If I'm in default under this note and you demand full payment, I agree to pay you interest on the unpaid balance at the rate of 1% per month after an allowance for the unearned finance charge, if you have to sue me. I also agree to pay your attorney's fees equal to 15% of the amount due, and court costs. But if I defend and the court decides I am right, I understand that you will pay my reasonable attorney's fees and the court costs.

Conduct. If I'm signing this note as a co-signer, I agree to be equally responsible with the borrower. You don't have to notify me that this note hasn't been paid. You can change the terms of payment and release any security without notifying or releasing me from responsibility on this note.

Copy Received. The borrower acknowledges receipt of a completely filled-in copy of this note.
You should point out the two basic categories of typefaces illustrated in the example. Serif typefaces such as the top two have projections—called serifs—sticking out from the main strokes of the letters. For instance, if you look closely, you'll see the tiny serifs at the ends of all three legs of this letter "m." Serifs provide extra clues that help the eye recognize letters and words. Serif typefaces are used for most newspapers, magazines, and books.

Sans serif typefaces, such as the bottom two in the example, lack the distinctive serif projections. Developed only in this century, they have a cleaner, more modern look. The letters are drawn to look proportionately bigger and clearer, even when printed in a small type size.

Both serif and sans serif typefaces have their advantages. A typeface should be chosen for its appropriateness to a particular document. Some typefaces project dignity and straight-forwardness; others may be designed to make advertisements more eyecatching; still others are used only on billboards.

Standard typewriters may come with only one typestyle or with interchangeable elements that offer different styles. You and your students may want to look at a variety of typed pages and discuss the readability of different typewriter styles.

Type size. Typeface and type size should be considered together, for one affects the other. Type size is commonly measured in points: a point is 1/72nd of an inch. But the point-measure is less important than the impact of a particular type in a particular size. Certain typefaces look larger than others, even when printed in the same point size. Fourteen-point Helvetica, for instance, looks larger than 14-point Garamond:

This is an example of 14-point Helvetica.
This is an example of 14-point Garamond.

Remember that typeface should be chosen based on visual size and not on point size alone.
Traditional legal documents tend to use type that is too small—8-point or less. Today, the minimum type size for some documents is set by law in some states. In general, clear text should be printed in at least 8-point type, preferably larger, but not larger than 12-point.

Standard typewriters come in pica and elite. Pica type generally looks larger but that is because there are fewer characters to the horizontal inch (10 per inch) and therefore more space between letters. Elite type gives the writer 12 characters per inch. On a standard typewriter each letter takes up a uniform amount of space; an i uses just as much space as an m. In typesetting, you get proportional spacing; an m takes up more space than an i.

Upper and lower case vs. ALL CAPITALS. This is an aspect of design that your students can deal with because even the simplest typewriter is capable of printing prose in all capital letters.

THERE IS A WIDESPREAD ASSUMPTION THAT CAPITAL LETTERS ARE A GOOD WAY TO EMPHASIZE IMPORTANT INFORMATION. SOME PEOPLE SET LARGE BLOCKS OF TYPE ENTIRELY IN CAPITALS. BUT TYPE LIKE THIS SOON LOSES CLARITY. IT LOOKS INTIMIDATING RATHER THAN IMPRESSIVE.

You should caution your students against setting passages in capital letters. Written prose set in capitals is harder to read. That's because the shapes of upper and lower case letters offer the reader more distinctive clues to their identities.

When the word "example" is set in upper and lower case, for instance, the "l" ascends and the "p" descends, creating more distinctive shapes than all caps. When all caps are used, those shapes are lost. The example on page 143 illustrates this point.

Line length. The length of the typed lines is another element of design that your students can control even with a typewriter. One reason why many written documents are hard to read is that their lines of type are too long. In the example on page 144, we show the bank form from the previous example in the old design. Note how difficult it is to read the long lines. Long lines are accompanied by small margins, so that the whole page looks crowded and tight. Your students should understand that it is hard for the reader's
TYPOGRAPHY

typography
PROPAYMENT OF WHOLE NOTE. EVEN THOUGH I DIDN'T PAY MORE THAN THE FIXED INSTALLMENTS, I HAVE THE RIGHT TO
PREPAY THE WHOLE OUTSTANDING AMOUNT OF THIS NOTE AT ANY TIME. IF I DO, OR IF THIS LOAN IS REPAYED—THAT IS, RE-
PLACED BY A NEW NOTE—YOU WILL REFUND THE UNEARNED FINANCE CHARGE, PURSUED BY THE RULE OF 78—a COMMONLY USED
FORMULA FOR PRORATING INTEREST ON INSTALLMENT LOANS. HOWEVER, YOU CAN CHARGE A MINIMUM FINANCE CHARGE OF 12%.
LATE CHARGE. IF I FALL MORE THAN 15 DAYS BEHIND IN PAYING AN INSTALLMENT, I PROMISE TO PAY A LATE CHARGE OF
8% OF THE OVERDUE INSTALLMENT, BUT NO MORE THAN $5. HOWEVER, THE SUM TOTAL OF LATE CHARGES ON ALL INSTALLMENTS
CAN'T BE MORE THAN 2% OF THE TOTAL OF PAYMENTS OR $500, WHICHEVER IS LESS.
SECURITY. TO PROTECT YOU IF I DEFAULT ON THIS OR ANY OTHER DEBT TO YOU, I GIVE YOU WHAT IS KNOWN AS A SECURITY
INTEREST IN MY: 1) MOTOR Vehicles and/or
2) THE SECURITY AGREEMENT! I HAVE GIVEN YOU FOR A FULL DESCRIPTION OF THIS PROPERTY. 1) STOCKS, 2) BONDS,
3) SAVINGS ACCOUNT (MORE FULLY DESCRIBED IN THE RECEIPT YOU GIVE ME TODAY) AND ANY ACCOUNT OR OTHER PROPERTY
OF MINE COMING INTO YOUR POSSESSION.
INSURANCE. I UNDERSTAND I MUST MAINTAIN PROPERTY INSURANCE ON THE PROPERTY COVERED BY THE SECURITY AGREE
MENT FOR ITS FULL INSURABLE VALUE, BUT I CAN BUY THIS INSURANCE THROUGH A PERSON OF MY OWN CHOOSING.
Default. I'll be in default: 1. If I don't pay an installment on time; or 2. If any other creditor tries by legal process to take any money of value in your possession.
You can then demand immediate payment of the balance of this note, minus the part of the finance charge which hasn't been earned figured by the rule of 78. You will also have other legal rights, for instance, the right to repossess, sell and apply security to the payments under this note and any other debts I owe
from you own city.
Irregular Payments. You can accept late payments or partial payments, even though marked "payment in full", without losing any of your rights under this note.
Default in Repayment. You can delay enforcing any of your rights under this note without losing them.
Collection Costs. If I'm in default under this note and you demand full payment, I agree to pay you interest on the unpaid balance at the rate of 16% per month, after an allowance for the unearned finance charge. If you have to sue me, I also agree to pay your attorney's fees equal to 15% of the amount due, and court
costs. But if I defended and the court decides I am right, I understand that you will pay my reasonable attorney's fees and court costs.
Assignment. If I'm signing this note as a guarantor, I agree to be equally responsible with the borrower. You don't have to notify me that this note hasn't been paid. You can charge the terms of payment and release any security without notifying or releasing me from responsibility on this note.
Copy Received. The borrower acknowledges receipt of a completely filled-in copy of this note.
eye to keep "on course" from margin to margin, without straying above or below the line being read.

On the other hand, very short lines may be hard to follow. They require more eye movement and create awkward breaks in the text.

A line containing from 50 to 70 letters and spaces is a happy medium. It's not so long that it tires the eye and not so short that the eye must keep jumping back and forth. The lines in this book are 55-60 letters (and spaces) long.

Margins. On a standard typewriter, your students can make the left margin flush, but they cannot justify the right margin. However, they should be able to recognize the difference between justified and unjustified type when they see it.

When the spaces between words and/or letters are varied to make each line of type on a page the same length, the lines are said to be justified. Lines of type are justified in order to produce a symmetrical block of text with even margins on both sides. The beginnings and ends of the lines are said to be "flush" with each other. This book is not justified. The lines are flush on the left, except for the first line of each paragraph, but run "ragged" on the right. The example below shows what justified type looks like.

This paragraph illustrates text set flush left and flush right. This is called justified type. The left- and right margins are both even. To make the right margin even, the printer puts extra spaces between words and letters all along the line.
Generally, a flush left, ragged right style is more appropriate for use in written documents. Justified type sets up rivers of white that can be distracting. Text set flush left, ragged right, however, gives the document as a whole a more informal feeling that many readers find inviting.

Spaces between lines. Again, this discussion refers to professional typesetting that requires special equipment. You might discuss in class the relative ease of reading long single spaced or double spaced typewritten passages.

The horizontal spaces between the lines, called leading, also affect a document's readability. Lines of text that are jammed together are hard to read. Even a large type size is hard on the eye when the lines are set too close together. In fact, the larger the type is, the more leading it requires.

The amount of leading that's necessary depends on the typeface, type size, and line length. (For instance, sans serif type requires more leading than serif type does.) The examples on page 147 show how proper leading can make a text easier to read. As you can see, too much leading is not desirable either. Beyond a certain point, the lines of type seem to float apart from each other.

Page layout. The way information is laid out on a page is more than just a matter of aesthetics. Layout can help convey the structure of the text, the relative importance of its various parts. It guides the reader's eye.
Text with Different Amounts of Leading

This example illustrates a block of text set with different amounts of leading: solid (no leading), 1 point of leading, and 4 points of leading. Different typefaces require different amounts of leading. This example is set in Helvetica, a sans serif typeface, which reads best with 1 point of leading.

Too little leading

This example illustrates a block of text set with different amounts of leading: solid (no leading), 1 point of leading, and 4 points of leading. Different typefaces require different amounts of leading. This example is set in Helvetica, a sans serif typeface, which reads best with 1 point of leading.

Proper leading

This example illustrates a block of text set with different amounts of leading: solid (no leading), 1 point of leading, and 4 points of leading. Different typefaces require different amounts of leading. This example is set in Helvetica, a sans serif typeface, which reads best with 1 point of leading.

Too much leading
To arrange the elements on a page, designers develop a grid. This means dividing the page vertically and horizontally into proportional areas. On pages 149 and 150, we show a blank two column grid and a form that uses this grid. All the parts of the document—such as headlines, paragraphs, blocks of text, fill-in areas, and illustrations—are then placed on the page in relation to the grid. This creates an orderly sense of structure.

The two columns don't always have to be equal. If you look at the old bank loan agreement on page 136, you can see that it wasn't designed on a grid. The new agreement, page 137, was designed on a two-column grid, with one narrow column for headings and a wide column for text. On page 151, we show a blank two-column grid for a document with a narrow column for headings and a wide column for text. On page 152, we show another example of a document using this grid. This is often the most useful layout for documents that the reader is likely to scan quickly. In other situations a grid with two or three equal columns might be preferable: they make for shorter, more readable lines of type. Developing the right grid depends on knowing the type of material (text, photos, charts), its length, and its intent.
Two-Column Grid with Equal Size Columns
Dear Customer:

Welcome to Union Trust. We're glad you've decided to take out a Flex-a-loan. This is a new type of loan specially designed for your convenience. It also gives you a chance to save money.

We've written this agreement in simple, easy-to-read English so you can familiarize yourself with its unusual features. The words you and your mean everyone who signs the agreement. We, our and us refer to Union Trust.

Please read this agreement carefully. If it meets with your approval, sign it. If more than one person signs this agreement, each will be liable up to the full amount of the loan.

Promise to pay. To repay this loan, you promise to pay us or our order at one of our branches $______ dollars) plus simple interest on the unpaid balance at an annual percentage rate of ____%. You'll pay this amount in ______________ consecutive monthly installments of $______ except for the final installment, for which you'll get a final bill about 10 days before it's due. It may be somewhat higher or lower than the others, depending on your payment record. Your installments will be due the same day every month starting on ______________.

We'll apply each payment first to the finance charge and then to principal.

How much you'll pay
1. Amount financed
2. Finance charge
3. Total of payments (1+2)

Annual percentage rate ____%.

There'll be no other fees or charges.

Early or late payments. The finance charge shown above is based on the assumption that you'll make all monthly installments on the due date. If you make installment payments before or after the date they're due, we'll use the exact date we receive your payment for figuring the finance charge you'll actually pay on your loan. That means that your finance charge will be less if you pay an installment early. If you're late, the finance charge will be greater. Any adjustments in your total finance charge will be made on your final bill.

We'll send you a notice if you haven't paid an installment within 10 days of the due date.

Right to prepay. You can prepay the outstanding amount any time in full or in part. We'll figure the finance charge up to the date of your payment. We'll apply your payment first to the finance charge and then to the principal. If it's a partial prepayment we'll credit it to your outstanding balance. If you make a partial prepayment, you'll continue to pay your regular installments until the whole loan is paid.

Minimum finance charge. There's a minimum finance charge of $25 even if you pay the whole loan back before that amount has been earned.

Payment holidays. If your loan runs for a year or more, you may request payment holidays. To qualify for a payment holiday you must make at least 3 scheduled payments and not be behind in your payments.

If your loan is for 12 to 17 months, you can skip one installment. If it's for 18 to 29 months you can skip two. And if it's for 30 months or longer you can skip three. To request a payment holiday, simply send in a payment holiday coupon from your loan book instead of your regular payment.

When we grant you a payment holiday, we'll send you a notice that'll show you final installment will be postponed and adjusted. For instance, if you take two payment holidays, you'll take two months longer to pay off the whole loan and you'll pay some added finance charge with your final payment.

Credit life insurance. If we've initiated the space at the beginning of this sentence your loan is covered by credit life insurance. The insurance will not exceed $10,000 and you do not pay any extra charges for it. We absorb the cost.

Whole balance due. If you fail more than 10 days behind in a payment, we can without notice declare the whole outstanding balance, including any unpaid finance charge, due and payable at once. We can also do this if you break any of your promises under this agreement or fail behind on any other obligation to us. If this happens, we can without notice take the outstanding balance out of your checking and/or savings accounts.

Collection costs. If we have to go to court because you fail to comply with the terms of this agreement, you'll pay all collection costs plus lawyers' fees of 15% of the unpaid balance.

Delay in enforcement. We can delay enforcing any of our rights without losing them.

If you have any questions about this agreement, write us at ___

You can contact us by telephone by calling ___

Thank you for taking out this loan with us.

Sincerely,

Union Trust Company

I've read this agreement and received a duplicate copy on the day I signed it with all blank spaces filled in

Borrower X

Address

Borrower X

Address

I guarantee the repayment of this loan

Guarantor X

Address

Date
Two Column Grid with Un-Equal Columns
4. We won't cover liability of anyone who is insured as a corporate officer or a member of the board of directors of any corporation except a religious, charitable or civic nonprofit corporation.

5. We won't cover uninsured motorists or no-fault auto insurance claims.

A Closer Look at Your Coverage

Now that we've given you a bird's-eye view of how this policy will protect you and your family, let's go into details. In the following sections we'll show you how this policy covers your auto, homeowners and other liability.

If you've any doubts whether a specific claim is covered or not, go back to these opening sections to make sure.

Scattered through this policy you'll find examples printed in green ink. Of course these examples are just a handful of illustrations out of many possible situations.

Your Extra Auto Liability Insurance

If you have an accident covered by your auto insurance, we'll pay the difference between what's payable under that policy and the sum total of what you legally have to pay, up to the liability limit shown on the attached declarations page.

You miss a stop sign and crash into a motorcycle. Its 28-year-old married driver is paralyzed from the waist down and will spend the rest of his life in a wheelchair. A jury says you have to pay him $1,300,000. Your standard insurance liability limit is $300,000 for each person. We'll pay the balance of $1,000,000.

This policy covers any kind of private motor vehicle—cars, trucks, station wagons, jeeps, motorcycles, trailers, semitrailers and so on. It covers private cars even if they're used for business or carpooling. But it doesn't cover private cars used as taxis or for hire or any other motor vehicles, such as trucks, used for business.

If you're a farmer, this policy covers any kind of motor vehicle used for your farm, such as trucks and tractors. Coverage for recreational motor vehicles such as golf carts and snowmobiles is explained under "Your Extra Golf Cart and Snowmobile Insurance."

Broad Auto Coverage for You And Others

You're covered for any accident involving an auto you own, borrow, rent or use as a temporary substitute. We'll also cover accidents during maintenance, loading and unloading. And we'll cover your liability to the owner for damage to an auto you borrow or rent.

We'll also cover anyone else who uses a covered car with your permission provided it's used for the purpose you intended.

You're transferred from New York to California. You and your family go by plane, so you hire Mike, a college student, to drive the family car west. Mike has an accident in which a passenger of the other car loses his right arm. Mike is sued for $500,000. Mike has no insurance, but he's covered by your automobile policy up to $300,000. We cover him too, and negotiate a settlement for $100,000 for our part of the coverage.

Under this section we'll cover all relatives living with you and anyone under 21 in your or their care. They're covered for any accidents involving an auto they own, rent, or use as a temporary substitute. But if they borrow a car, they're covered only if they drive or use it with the owner's permission. Even then they have to use it for the purpose intended by the owner.

Your teenage daughter borrows a car belonging to her friend's father with the understanding that she's to drive to the airport. She's covered if she goes to the airport but not if she goes on a 400-mile trip.
White space. A successful, well ordered form will use the "white space"--the blank area where no type appears--as an element of its overall design. This leftover space can be used functionally. For instance, a large left-hand margin can be provided for headings; type isolated in white space appears more important. White space is not wasted space, for it helps make the text comfortable for the eye. To see what happens with too little space, look again at the old bank agreement on page 136. Students can create white space in a typewritten report, too, by using wide margins on the top, bottom and sides and by leaving space between sections.

Color. Documents needn't all be printed in black ink on white paper. Imaginative use of colored ink or paper can make a form look less coldly official. Color can also be used to provide emphasis; unify a group of documents; or distinguish one document from another. Of course, it usually costs more to print a document in two colors.

Charts, photographs, and illustrations. Not everything is best said in words. Charts, photos and Illustrations can communicate many types of information more effectively than paragraphs of text or columns of figures. In addition, they can make a publication more appealing by offering visual relief from large bodies of type.

You should encourage students who are good photographers and artists to make use of these graphic elements, but only if they add something to their documents. The important concept you should stress is that these graphic elements can increase the ease of use and understanding of a document. Generally, though, these graphic elements should not be used just for their own sake. They should add information to the text, not merely repeat what has already been said (unless special emphasis is needed). Each should present information about just one subject; four simple graphs are better than one that is four times as complicated. Each must be clear and easy to understand.

Charts and graphs are useful ways to show statistical information such as trends and sizes or relationships of data. Diagrams may convey complicated ideas or operations. They should be kept simple and straightforward. You should point out that different kinds of charts and graphs serve special functions. For instance, line or curve charts show movements over time; bar charts compare the sizes of different items at the same time; and the familiar pie chart shows how parts relate to a whole.
Photographs can be used to show detail accurately, to create a mood, or to add aesthetic appeal. Good technical quality is essential: this means clear focus, interesting composition, a clear range of tones, distinct contrast, and easily recognizable subjects. Lighting should be consistent from photo to photo in a series. Like every kind of illustration, they should not contain distracting details. Snapshots from cheap cameras, or photos taken from a book or article, rarely reproduce well enough for publication, although they may be adequate for the purposes of the class.

Drawings show a more selective view of a subject than photographs do. By omitting unnecessary details and accentuating important points and relationships, they can effectively direct the reader's attention to a particular subject. But for drawings to be effective, they must be of high quality. However, for instructional purposes, you should be willing to accept drawings from your students even if they are not professional quality.

Each kind of graphic device offers its own special opportunities and problems. Before deciding to use one kind, the writer should consider the advantages of the others for what he or she is trying to communicate.

Variety can clutter. Many things can be done to a document to make it look different. Each design element we've discussed can make documents easier to use and understand. Some combinations of these design elements can improve the document even more. But this is not to say that merely adding design elements to a document, or using all design elements in one document, necessarily improves the document. The opposite happens—too much variety clutters the document and detracts from both usability and comprehension.

Point out to your students how much can be done to a piece of paper with a simple typewriter. Words can be capitalized, underlined, and set apart. Left and right margins can be set to show a little or a lot of white space. Right margins cannot be justified, but left margins can be either flush or ragged. Sentences can be single spaced, double spaced, triple spaced, or sometimes something in between. Paragraphs can be separated by headings and by a little or a lot of white space between them. Passages can be indented from the main text, boxed, or made into a table. If the typewriter has interchangeable elements, different type sizes and faces are available. (However, designers caution
against using more than one or at most two typefaces. They use size, boldness, and italics in the same face to show headings and important information.) If you add to this the graphics elements available from professional printers and graphic artists—color, shading, bold printing, fancy arrows, checkmarks, etc.—the possibilities increase many fold.

The teaching point you should make is that a document with too many styles and sizes of type, lines, boxes, and other emphatic variations looks confusing and is confusing. Clutter should be avoided. But you should also make the point that a document's physical appearance can make its message clearer and make readers more receptive to its message.

An Example

The examples on pages 156 and 157, from the inside of an old and new insurance policy, show how design can help make complex material more digestible. The old policy has an intimidating technical appearance featuring an outline style with five indents; long lines of fine print with too little leading; and headings printed in capital letters. The new policy uses a larger type size (10 points instead of 8), a shorter line length, and a modified two-column grid. This grid provides visual structure and uses white space intelligently, with an area in the left-hand column to highlight the headings. Examples, printed in green italics, are clearly distinguished from the rest of the text. The new policy looks and is easier to read.
In any country where the Company may be prevented by law or otherwise from carrying out this agreement, the Company shall pay any expense incurred with its written consent in accordance with this agreement.

The Insured shall promptly reimburse the Company for 50% of any amount of ultimate net loss paid on behalf of the Insured but the amount payable by the Insured (hereinafter referred to as the retained limit) shall not exceed the maximum retained limit stated in Item 4 (a) of the Declarations.

III. LIMIT OF LIABILITY

A. As respects Coverage A, the Company's liability shall be only for the ultimate net loss in excess of the "underlying limits" defined as the greater of:

1. an amount equal to the limit(s) of liability indicated beside underlying policy(ies) listed or insurance described in Schedule A hereof, plus the applicable limits of any other underlying insurance collectible by the Insured;
2. the retained limit as defined in the last paragraph of Insuring Agreement II if the occurrence is not covered in whole or in part by such underlying policy(ies) or insurance;

and then up to an amount not exceeding the limit indicated in Item 4(a) of the Declarations as the result of any one occurrence, provided that the Company shall not be required to assume any obligation of any underlying insuror which shall be deemed uncollectible or invalid by reason of bankruptcy or insolvency of such insuror. There is no limit to the number of occurrences during the policy period for which claim may be made.

B. As respects Coverage B, the Company's liability shall be only for loss in excess of the "underlying limits" defined as the greater of:

1. the total amount of insurance collectible by or payable to the Insured under other Uninsured Motorists, Underinsured Motorists or Automobile Liability insurance; or
2. the minimum amount specified by the financial responsibility laws of the state in which the accident shall occur;

and then up to an amount not exceeding the amount stated in Item 4(b) of the Declarations as the result of any one accident, provided such liability shall be reduced by the amount of the "underlying limits."

DEFINITIONS

"NAMED INSURED" AND "INSURED"

"Named Insured" means the individual named in the Declarations and also includes the spouse thereof if a resident of the same household.

The unqualified word "Insured" includes the Named Insured and also:

(a) Automobile and Watercraft Liability:

1. any Relative with respect to (i) an Automobile owned by the Named Insured or a Relative, or (ii) a Non-owned Automobile, provided his actual operation or (if he is not operating) the other actual use thereof is with the permission, or reasonably believed to be with the permission, of the owner and is within the scope of such permission, or
2. any person while using an Automobile or watercraft, owned by, loaned to or hired for use in behalf of the Named Insured and any person or organization legally responsible for the use thereof, if the actual use is by the Named Insured or with the permission of the Named Insured, provided his actual operation or (if he is not operating) his other actual use thereof is within the scope of such permission;

provided, the insurance with respect to any person or organization other than the Named Insured does not apply

1. with respect to any Automobile (other than a temporary substitute automobile) or watercraft hired by or loaned to the Insured, to the owner or a lessee thereof other than the Named Insured, or to any agent or employee of such owner or lessee. (This sub-paragraph does not apply to a Relative with respect to a Non-owned Automobile.);
2. to any person or organization, or to any agent or employee thereof, operating an Automobile sales agency, repair shop, service station, storage garage or public parking place, with respect to any occurrence arising out of the operation thereof;

(b) Other Personal Liability

1. if residents of his household, his spouse, the Relatives or wards of either, and any other person under the age of twenty-one in the care of an Insured (except with respect to the ownership, maintenance or use, including loading and unloading, of Automobiles while away from the premises owned by, rented to or controlled by the Named Insured or the ways immediately adjoining, or of aircraft); or
2. with respect to animals owned by an Insured, any person or organization legally responsible therefor, except a person using or having custody or possession of any such animal without the permission of the owner.
SIMPLIFIED

4. We won't cover liability of anyone who is insured as a corporate officer or a member of the board of directors of any corporation except a religious, charitable or civic nonprofit corporation.

5. We won't cover uninsured motorists or no-fault auto insurance claims.

A Closer Look at Your Coverage

Now that we've given you a bird's-eye view of how this policy will protect you and your family, let's go into details. In the following sections we'll show you how this policy covers your auto, homeowners and other liability.

If you've any doubts whether a specific claim is covered or not, go back to these opening sections to make sure.

Scattered through this policy you'll find examples printed in green ink. Of course these examples are just a handful of illustrations out of many possible situations.

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If you have an accident covered by your auto insurance, we'll pay the difference between what's payable under that policy and the sum total of what you legally have to pay, up to the liability limit shown on the attached declarations page.

You miss a stop sign and crash into a motorcycle. Its 28-year-old married driver is paralyzed from the waist down and will spend the rest of his life in a wheelchair. A jury says you have to pay him $1,300,000. Your standard insurance liability limit is $300,000 for each person. We'll pay the balance of $1,000,000.

This policy covers any kind of private motor vehicle - cars, trucks, station wagons, jeeps, motorcycles, trailers, semitrailers and so on. It covers private cars even if they're used for business or carpooling. But it doesn't cover private cars used as taxis or for hire or any other motor vehicles, such as trucks, used for business.

If you're a farmer, this policy covers any kind of motor vehicle used for your farm, such as trucks and tractors. Coverage for recreational motor vehicles such as golf carts and snowmobiles is explained under "Your Extra Golf Cart and Snowmobile Insurance."

Broad Auto Coverage for You and Others

You're covered for any accident involving an auto you own, borrow, rent or use as a temporary substitute. We'll also cover accidents during maintenance, loading and unloading. And we'll cover your liability to the owner for damage to an auto you borrow or rent.

We'll also cover anyone else who uses a covered car with your permission provided it's used for the purpose you intended.

You're transferred from New York to California. You and your family go by plane, so you hire Mike, a college student, to drive the family car west. Mike has an accident in which a passenger of the other car loses his right arm. Mike is sued for $500,000. Mike has no insurance, but he's covered by your automobile policy up to $300,000. We cover him too, and negotiate a settlement for $100,000 for our part of the coverage.

Under this section we'll cover all relatives living with you and anyone under 21 in your or their care. They're covered for any accidents involving an auto they own, rent, or use as a temporary substitute. But if they borrow a car, they're covered only if they drive or use it with the owner's permission. Even then they have to use it for the purpose intended by the owner.

Your teenage daughter borrows a car belonging to her friend's father with the understanding that she's to drive to the airport. She's covered if she goes to the airport but not if she goes on a 400-mile trip.
Reviewing, Revising, and Editing

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Reviewing, Revising, and Editing

In this course, we suggest that you emphasize having students work together. Interactive assignments are important for two reasons. On the job, professionals have to work with other reviewers and writers. Therefore, students should learn to make collaborations into positive rather than negative experiences. Secondly, input from readers who represent the audience can, in fact, be very helpful to the writer who wants to make his or her document understandable and effective.

In this chapter, we describe techniques for evaluating and revising material in the classroom. In Chapter Nine, we describe techniques for going outside the classroom to evaluate documents. You should remind your students that, in the post-writing stage (review, revise, edit, and evaluate), the steps are truly recursive. Students should use the feedback from reviewers and from evaluations with readers outside the classroom to further revise their documents.

Because most students are unfamiliar with the kind of collaboration that is common in work settings, in this chapter we show how you can use writing workshops to simulate the review process. We demonstrate how evaluation leads to revision and multiple drafting that is essential to good writing. We also outline some exercises that your students can use to develop techniques for revising and editing both other people's documents and their own work.

Using the Review Process

If students follow our suggestions, they'll take every opportunity they can to talk to others about a piece of writing that is important to them. From some they'll get suggestions about content, perspective, and tone. From others they'll get specific advice about style or format. Finally, in an academic setting, you, the instructor, will assess their writing.

It would be helpful if students could bring in sample review procedures, from working professionals or published sources. We recommend forming working groups that serve each
other as content reviewers and as technical editors, allowing each student to take each role before the end of the term.

In work settings, writers do much the same thing. They get feedback informally, from peers who know the subject, from people who are expert editors and writers, from colleagues they trust. In many large organizations, the review process is mandated. Every piece of writing that goes outside the organization must be read and approved by a number of people with varying expertise.

The more skilled your students become at involving reviewers early in the writing process and listening to what they have to say, the more effective they will be as writers. It would be highly useful for your students to know something about review processes in the fields they plan to enter. A 30-minute interview with an experienced, working professional will yield a good bit of information. Many writers, especially in colleges and universities, save drafts of working papers and save comments and reviews. If you can show students a paper of your own passing through review or acquire papers from colleagues in other disciplines, you can demonstrate what it means to use the review process.

Revising Other People's Documents

Your students should get practice in reviewing and revising documents that others have written. They should get this practice in two ways--by serving as reviewers for their peers and by revising documents in your class's corpus.

In reviewing their peers' work, your students' goal should be to develop skills that will let them show others how to write clearly and forcefully. This is quite different from helping another writer clean up a draft--spotting spelling, grammar, or usage errors. When they revise, your students may want to do major cutting and rearranging and adding. As they work with other people's writing, from their peers or from published documents, they'll also develop a good eye for weaknesses and strengths in their own writing.

Students will want to revise documents to meet their own standards, but they need to keep in mind that when they revise someone else's work they are collaborating with the writer. If the writer is present they will have the advantage of being able to discuss issues that are troublesome and raise questions about audience, intentions,
content, and other matters. If not, they must be scrupulous about keeping information and issues intact as they revise.

For many of the documents in your class's corpus, the students should be able to find a responsible person on campus who can collaborate in the revision by checking on the accuracy of the students' revisions. Students should make the contacts necessary to establish a working relationship with an appropriate writer/reviewer for each document.

If you use our syllabus for part of the course, you will ask students to select a poorly written document and move through all the steps of the document design process model to evaluate and rewrite the document. Revising a document will give them a chance to apply their skills in the context of a real audience with actual purposes in mind.

Before they begin a rewriting project, students should study a document that has been revised according to document design principles. The form in Appendix B is one example you can use.

In learning how to revise a document, we suggest that students practice these steps in a collaborative effort with three or four other students:

- answer the pre-writing questions about the document
- read the document and use the checklists at the end of this chapter to focus on particular problems (see pages 162 to 171)
- write up their plans for revising the document
- present their plans to the entire class to discover areas of agreement and to raise issues about clear writing and revision.
- revise the document
- read the revised version of their documents and work in groups to describe how Version A is different from Version B.
We suggest that students work on a range of documents—memos, letters, and instructions—as well as forms. Urge students to get together and practice using the checklists to revise each other's drafts. By doing this, they learn to give good feedback to other writers as well as to do the hard job of revising.

Revising the Writer's Own Documents

Many writers and editors find it easier to shape the meaning and correct the mechanical errors in other people's writing than in their own. If your students use the document design process model, they will, as a matter of course, write with their readers and purposes in mind. Revising for them will be ongoing, for they will make changes from the time they begin to write until they submit the final versions of their papers.

Nevertheless, we think it is productive for students to practice revising their own documents before they pass them on to reviewers or evaluate them. Many students do not read their own writing carefully; they have trouble describing what they've done. If your students learn to revise their own writing thoroughly, they will be able to make more sense of the feedback they receive from others, whatever form it might take.

After they have written an initial draft, your students should

- put aside what they have written for a day or so—let it rest
- read their document aloud, noting instances when they stumble or are forced to pause because they can't follow what they've written
- use the checklists at the end of this chapter to focus on specific problems
- write up a plan for revision before they write a second draft.

It's a good idea to have students work in small groups after writing up their plans to see if they have common problems, to discuss solutions for these problems, and to get
informal feedback about how well their writing is working. This informal feedback may suggest new approaches and new ideas.

The revising we are suggesting is hard work, and very few writers are willing to do it. Most revising and editing we see in schools is a student's response to a teacher's comments and marks. We want students to develop a habit of revising their own work automatically—as a step in every project that they do—before they bring the document to the reviewers or to the readers for whom they wrote the document.

Revising with Feedback from Evaluation

In this course, we suggest that students must evaluate their ability to get their meaning across to real readers. Instead of imagining how hypothetical readers might respond, and in addition to having reviewers, your students should use the evaluation procedures presented in Chapter Nine to take particular pieces of writing to readers outside the classroom. Finding out how well the document works for its intended audience should add to the students' motivation to revise their own writing efficiently.

As we explain in Chapter Nine, if many of the people who participate in the evaluation can't answer a student writer's questions correctly, something is wrong. The student may have a poor test question. If the test question is good, however, and if it asks about important content, the fact that many people get the answer wrong probably means that the passage that is being tested with that question is not clear. Evaluation will not tell students what the problem is, nor will it prescribe changes they must make, but from the results of evaluations, students will learn to look again at troublesome parts of their documents. Then they can revise—and retest, if necessary.

An important advantage of evaluation is that students have a chance to get feedback from readers outside the classroom. They test principles of clear writing and organization in real situations, a practice hard to achieve in most classroom situations.
Editing

Students should use feedback to help them avoid errors in grammar and usage on final drafts, even if they've done a good bit of revising and editing throughout the process.

When students ask for editing help, they need to be specific about the type of editing they want. They need to let their editors work on several levels. They need to ask their editors to find mistakes in spelling, grammar, and usage. They need to ask for advice about bits that need to be left out or rearranged. They need to ask their editors to add needed clarification and to insert transitions.

Allowing students to edit each other's papers has obvious benefits. The chief is that students become sensitive in their own writing to flaws and errors they find in others' writing. This practice in close critical reading can't be had by analyzing fine prose models. If students must do their own editing, one teacher has an approach for copy editing that might work for your students. She has students read their papers backwards, one sentence at a time. This process forces them to look sentence-by-sentence at what has become familiar territory to them. They have a fresh "eye" and are able to find mistakes that slipped by when they read front-to-back.

Using the checklists on language and style on pages 168 to 171 is another approach to editing. The checklists will give students a basic tool for polishing their own documents, if they use them before they type their final draft.

If you can, have a professional editor visit the class and conduct a workshop on editing techniques. Since word processors are in wide use, it would be helpful if you could arrange for a demonstration and, if possible, have students use a word processor to write and edit a document. Skilled editors are to be treasured. They are people who can look at other people's writing--and their own--and see what is almost there or what ought to be there. And they can do this without violating the writer's intentions. The example on page 167 shows how an editor transforms a page from this book with a number of editorial changes.
Guideline 1. **Address the reader directly, by name, or by using a pronoun.**

The easiest way to create a scenario is to address the reader as "you". The following sentences express the same meaning, but the first is obscure and the second clear and direct:

**Indirect**
Reimbursement for each breakfast served which meets minimum nutritional standards is available.

**Direct**
The Food and Nutrition Service will reimburse you for each breakfast you serve which meets minimum nutritional standards.

The important difference between these two sentences is in how the writer organizes the second to create a sequence in which it is easy to follow the logic of who will do what to whom. The second is more natural than the first, and easier to understand.

Personal pronouns give a document a tone of directness and personal interest. People may be
CHECKLIST FOR A CLEAR DOCUMENT

<table>
<thead>
<tr>
<th>Yes (Good)</th>
<th>I. Purpose / Audience / Content</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Is it clear who is supposed to read, use, or fill out the document?</td>
</tr>
<tr>
<td></td>
<td>2. Is it clear what the document is for?</td>
</tr>
<tr>
<td></td>
<td>3. Is it clear what the document is about?</td>
</tr>
<tr>
<td></td>
<td>4. Is it clear what the user is supposed to do with the document?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Yes (Good)</th>
<th>II. Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5. For letters and memos: Is the format correct?</td>
</tr>
<tr>
<td></td>
<td>For all reference documents:</td>
</tr>
<tr>
<td></td>
<td>6. Does it have an informative title?</td>
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<tr>
<td></td>
<td>7. Does it have a useful table of contents?</td>
</tr>
<tr>
<td></td>
<td>8. Can the reader easily find the answer to specific questions?</td>
</tr>
<tr>
<td></td>
<td>9. If there are separate audiences, are the sections organized so that each audience only has to read part of the document and are the different sections clearly marked?</td>
</tr>
<tr>
<td></td>
<td>10. In a long document, is there a roadmap or signposts to tell the reader where to find different information?</td>
</tr>
<tr>
<td></td>
<td>For all documents:</td>
</tr>
<tr>
<td></td>
<td>11. Is the important information first?</td>
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<tr>
<td></td>
<td>12. Is the organization logical? (Could you outline the major points?)</td>
</tr>
</tbody>
</table>
III. Typography / Layout

13. Is the copy legible?

14. Is the typesize large enough to read easily?

15. Is there enough white space for the reader to find separate sections easily?

16. Are the headings set off physically from the text (extra space, in the margins)?

17. Are the headings different from the text: different color, different size, bold, underlined, or all caps? (Should be one or two of these, not more.)

18. Is the text in upper and lower case? (There should be no long passages in all caps.)

19. If illustrations are used, are they compatible with the text (in style, tone, sophistication, detail)?

For Forms:

20. Is there enough space to write in answers?

21. If it is meant to be filled in at a typewriter, are the lines spaced for a typewriter?
## CHECKLIST FOR LANGUAGE PROBLEMS

<table>
<thead>
<tr>
<th>Yes (Faulty)</th>
<th>A. Paragraphs and Sentences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Document is impersonal (doesn't use &quot;you&quot;)</td>
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<td></td>
<td>2. Paragraphs are too long</td>
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<td>3. Paragraphs cover unrelated topics</td>
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<td></td>
<td>4. Main idea of paragraph is buried</td>
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<td>5. Writer changes focus within paragraph</td>
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<td>6. Transitions between paragraphs are unclear</td>
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<td>7. Passive is overused—sentences have no actors</td>
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<td>8. Sentences are too long (run-on sentences)</td>
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<td></td>
<td>9. Sentences are too complex to understand easily (too many embedded or relative clauses)</td>
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<tr>
<td></td>
<td>10. Negative sentences could be stated positively</td>
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<tr>
<td></td>
<td>11. Sentences are ambiguous</td>
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<td>12. Lists lack parallelism</td>
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</tr>
<tr>
<td><strong>Yes</strong> (Faulty)</td>
<td><strong>B. Words</strong></td>
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<tr>
<td></td>
<td>13. Uses nominalizations instead of action verbs</td>
</tr>
<tr>
<td></td>
<td>14. Uses nouns to modify nouns when they should be possessives or prepositional phrases</td>
</tr>
<tr>
<td></td>
<td>15. Uses jargon without defining it</td>
</tr>
<tr>
<td></td>
<td>16. Uses two words where one would do (redundant)</td>
</tr>
<tr>
<td></td>
<td>17. Uses unnecessary legalisms (herein, said)</td>
</tr>
<tr>
<td></td>
<td>18. Uses more than one name for the same object</td>
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<tr>
<td></td>
<td>19. Uses the same name for more than one object</td>
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**Makes grammatical errors:**

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<td>20. dangling participles</td>
</tr>
<tr>
<td></td>
<td>21. misplaced modifiers</td>
</tr>
<tr>
<td></td>
<td>22. sentence fragments</td>
</tr>
</tbody>
</table>

**Other language (style) problems:**
# Evaluating the Document

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Evaluating the Document

Introduction

The post-writing stage of the document design process model focuses on evaluation. In this course, we are advocating an empirical approach to evaluation that uses quantitative data and research procedures. We are primarily concerned with audience-centered evaluation, which means finding out whether a document is understandable and usable by testing it on a sample of the document's intended users. The research concepts and procedures employed are very basic and simple, but care has to be taken in teaching this content. We don't expect either the instructors or the students to have had any prior training in statistics or research methodology. We also assume that the course is being taught in a humanities department, a setting not likely to have much tradition with empirical evaluation.

Because of these conditions, this material should be presented in two distinct phases. The first will introduce the concept of evaluation and teach some basic empirical techniques and procedures that are used in evaluation. This phase includes putting students at ease with what is essentially "foreign" subject matter and convincing them that the empirical evaluation approach is reasonable to apply to the art of writing. The second phase of the instruction will build on the first and will focus on how actually to conduct audience-centered evaluations by two methods--the validation method and the comparative method. These methods will be taught in "cookbook" fashion. The aims are to give students a chance to practice the procedures of each method and to reinforce the notion that the methods can be applied to the evaluation of documents, even without prior specialized training in statistics or research. The instruction must use many practical exercises and illustrative examples in order to get the ideas across and to serve as models that can be followed step-by-step by the students.

A word of caution to you and your students: While we present some concepts and techniques that will enable students to conduct a useful evaluation of the documents they develop in class, we only scratch the surface of evaluation. Evaluation is a complex undertaking that requires a firm
grasp of test development, inferential statistics, and research design to be done well. The ability to conduct rigorous evaluations and to interpret evaluation findings depends on a good background in these areas. The situation is analogous to a statistician who is asked to teach his or her class to write for public audiences. The statistician might well be able to teach some of the writing principles taught in this course, but it would be very hard for this person to recognize all the features that make writing unclear and to teach students to be polished writers. The point is that your students should not be misled in thinking that they will be "polished" evaluators because of what they learn about evaluation in this course.

Because the topic is "evaluation," you must be clear about what you are trying to achieve in this portion of the course. For one thing, you should judge your students on the steps they follow in conducting an audience-centered evaluation of a document, not just on what they write. At this stage, students are not writing for their instructor as much as they are performing prescribed evaluation procedures and techniques to evaluate a document they have developed. Second, the actual results of the evaluation are not important. It is the process the students follow to obtain the results that is critical. The students do not necessarily have to show by their evaluation that their documents are clear and usable. They only have to generate evaluation results that empirically demonstrate the degree to which their documents are clear and usable. If their evaluation results indicate the document is clear and readable, fine; if the results show it has to be rewritten, that too is fine. In either case, the evaluation has served its purpose.

This means that you have to be prepared to deal with situations you likely have not encountered before. A document developed by a student, and judged well written by you, could be found to be unclear when tested on a sample of its intended users. This is what evaluations are for; they provide the writer with feedback about how good the document being tested is, and what needs to be revised to make the document better. Students shouldn't be penalized for generating this diagnostic information. You have to maintain the distinction between the ability to write clear English as taught in this course and the ability to conduct an audience-centered evaluation that tests how clear the English is to the people expected to read it.
You should follow a specific sequence in teaching this course. The sequence takes into account that the typical student has no prior preparation in research methodology or statistics. We cover these topics:

- the concept of evaluation, the meaning of empirical evaluation, and how the empirical approach relates to scientific methodology and differs from traditional classroom evaluation;
- concepts and techniques about the four components essential for audience-centered evaluation—the document, the sample of users, the test that measures understanding of the document, and the ways of analyzing test results;
- the application of these concepts and techniques to two different audience-centered evaluation methods—the validation method and the comparative method.

As a reflection of the recommended sequence of instruction, and as an aid to you for preparing your lectures and assignments, these materials are organized into three sections.

Section I presents some basic points about evaluation, the context of evaluation in document design, and the empirical approach to evaluation. This unit is really an overview and an orientation to evaluation.

Section II introduces concepts and procedures common to all audience-centered evaluations of documents. These are concepts and procedures that students need to understand before attempting to conduct an actual document evaluation. This unit involves considerable practice exercises and student activity.

Section III presents the steps to be followed for two audience-centered evaluation methods—the validation method and the comparative method. The concepts and procedures taught in the preceding section are applied to both of the methods. This unit should involve an actual evaluation of a document.
For each of these sections, we present an outline of the specific topics that will prepare students to conduct audience-centered evaluation of documents that are written for specific purposes and identifiable audiences. We have inserted brief "instructor notes" and make reference to exhibits that suggest practical exercises and handout materials that you might use or adapt in your instructional presentations.

Some Basics about Evaluation

There are many definitions of evaluation but all include the notion of finding out how good something is. Simply, evaluation is a way of establishing the merit of the program, curriculum, automobile, or whatever is being evaluated. The evaluation of a document establishes the merit of the document by determining how well it communicates to those intended to read and use the document.

Evaluation plays a prominent role in today's world. With the increase in government support of all kinds of social programs in recent decades, and with the ever-present concern of businessmen, educators, health professionals, and many others, that their dollars produce the desired outcomes, evaluation will continue to be important. All professions are affected by evaluation; all professionals ought to have a basic appreciation of the evaluation process.

Evaluation in the context of document design. Evaluation is the major activity of the post-writing stage of the document design model. Earlier stages of the model are concerned with finding out the audience(s) of the document, what purpose the document serves, and with the actual writing and designing of the document itself. Evaluation is simply an extension of the document design process. After the document is planned and written, we take the next step and find out whether it fulfills its purpose and the needs of its audience.
You will recall that in earlier stages of the process you took great care to identify what the document is meant to do, for whom, and under what constraints. Evaluation provides the link back to that earlier process, because it is the process for finding out whether the document actually does what it was supposed to do. Evaluation thus provides feedback to the writer or designer of the document. (The feedback loop is illustrated in the process model by the arrows flowing out of the post-writing stage boxes to the "draft document" box.) Evaluation essentially generates information that in turn can be used by the writer to decide whether the document is OK or whether it needs to be revised.

A document can be evaluated at any stage of its development. Evaluations of early draft versions help spot unclear sections or paragraphs that need revision; evaluations of more polished versions show how different sections "hang together" and how well the document as a whole communicates to its audience. In both cases evaluation plays a diagnostic role. It uncovers what is wrong and highlights what needs to be fixed.

The students in this course are being taught evaluation because most of them will end up in professional careers, and most professionals routinely produce written documents that directly affect the well-being of other humans. In some cases they affect the lives of thousands of people. It follows, then, that professionals ought to create documents that are as clear and useful as possible. Evaluation helps the professional do this.

Characteristics of empirical evaluation. The evaluation approach taught in this course is empirical. This means that the evaluation is based on observed facts and numerical data rather than solely on personal judgment. Empirical evaluations generate objective information on which to make decisions about what to do next with a document. The decision.
might be to accept the document as is, to revise some portion of it, or to scrap the document and start over. In any case, the decision is justified by other than subjective information.

The procedures and techniques used in empirical evaluations are borrowed from scientific research. This means that the procedures and techniques are applied systematically and make use of numerical data whenever feasible. These procedures and techniques in an empirical evaluation of a document are used to help identify the needs of the intended audience, to develop a test that measures the audience's ability to understand or use the document, to analyze the test results, and to organize the results so that they can be interpreted and reported. The procedures and techniques used in empirical evaluations are quite distinct from those traditionally used in classrooms where the instructor assesses student work on the basis of internalized, generally accepted professional standards.

This discussion of empirical evaluation may have introduced some words and phrases that could be unsettling to many students who take this course and the instructors who teach it. For example, the concern with "empirical processes," with "quantification" and the use of numerical data, with the "systematic application of scientific research procedures," are not what the average student expects to hear in a Department of English. It is important at the outset that two things are made clear: 1) the words and phrases indeed are foreign to humanities departments, and 2) this is no cause for alarm.

It certainly is true that the ability to conduct scientific experiments and to conduct complex evaluations requires skills in statistics and research methodology that the typical student in this course does not have. Most students taking this course, and the instructors teaching it, are interested in...
writing as an art, as a form of individual expression. They do not intend to pursue scientific careers. The students must understand, therefore, that what is taught here are portions of the scientific research process, and only a few of the empirical techniques, which can be applied by almost anyone to evaluate documents. The students should understand as well that they are being given only some very basic information on evaluation in this course, and they need much more training to be competent evaluators.

The intent is to teach students how to conduct useful evaluations that will help them create better documents; they are not expected to conduct scientifically rigorous evaluations. Complex statistics and sophisticated experimental research methodology are not requirements. To plan and conduct empirical evaluations of documents in this course, your students need some common sense, some skills in simple arithmetic, and a willingness to invest some time and energy in the task.

Common Evaluation Concepts and Procedures

The ultimate aim of this portion of the course is to teach students how to use two different methods of audience-centered evaluation to evaluate documents--the validation method and the comparative method. Both methods evaluate documents by testing how well members of the intended audience understand and use the document. It is for this reason that they are known as audience-centered evaluations.

It is for the same reason that both methods also are examples of empirical evaluation. The act of testing members of the intended audience generates objective information which then can be analyzed and interpreted. This objective information, typically converted into some form of numerical data, is the empirical foundation...
for later decisions about what to do next with the document.

Several common concepts and procedures can be applied to both the validation method and the comparative method. It is essential that students master this material before they are asked to evaluate a document by either of the methods.

The concepts and procedures are associated with the only four components that have to be considered in planning and conducting an audience-centered evaluation. If the students truly understand the essentials of these four components, they will be capable of evaluating a document at a rudimentary, but useful, level. They will know what has to be done to evaluate a document, why it has to be done, and how to go about doing it. The four components of an audience evaluation of documents are:

1. the document (or part of) to be evaluated,
2. the sample of intended document users,
3. the test used to measure the user's understanding of the document, and
4. the ways of scoring and analyzing the user's test results.

The first and second are mainly conceptual in nature; the third and fourth components are mainly procedural in nature.

The Document

It should be obvious that not all documents deserve to be evaluated. Only some of the documents that professionals in any
career field develop are worth the effort, time, and cost of evaluating. The kinds of documents that are worth evaluating are those that inform or instruct large numbers of people about matters that directly affect their well being. Sometimes these documents present information that is important to be understood at the time it is read. Sometimes these documents are meant to help people locate specific, important information from a much larger body of information. And sometimes these documents are intended to help people apply for services that they are eligible for or are in need of.

The particular documents worthwhile evaluating will vary by profession and the setting in which they are used. The important thing is that when a document does have a significant impact on the safety, welfare, or livelihood of large numbers, it should be evaluated to ensure that it is comprehensible to the people it is supposed to serve. It is precisely because many students in this course will end up in professional careers and will help develop socially important documents that the topic of evaluation is included in this course.

College students obviously do not have the same opportunity to write socially important documents as professionals. Even so, there is a large variety of factually-oriented documents that affect college students and that are readily accessible. These documents are sufficient for teaching the rudiments of audience-centered evaluation. Examples of documents that fall into this category include student loan applications, descriptions of degree requirements, eligibility requirements for campus medical services, and apartment rental contracts. It is these kinds of documents, the documents that have identifiable audiences, that students ought to write or revise and evaluate in course assignments.

An important point here is that the traditional writing done in college classrooms—the library research papers, the themes, the creative writing assignments—is not suitable for empirical evaluation. The writing has to be purposive, factual, and aimed at an identifiable audience.

You can use the documents that your class has collected and used throughout this course.
The Sample

The very core of audience-centered evaluation is testing a group of people who are the expected users of the document to see if they understand the contents of the document or if they can use the document as intended. The development of tests that measure comprehension and other user activities is covered extensively in the next section. In this section we concentrate on identifying the group of document users who will be tested.

The task is straightforward: the evaluator first has to identify who the audience is for any given document, and then select a sample of these users to test. Samples of document users are important because it is too difficult and too costly to test real world documents on the entire population of intended users.

A sample is a relatively small number of people who are taken from a much larger population. The sample represents the larger population. The population could be any aggregate of people we might be interested in--sophomores at State University, applicants for food stamps in a certain city, owners of 1981 Ford cars, etc. The population of users obviously will vary by the particular document being evaluated. For income tax forms the user population is taxpayers, for homeowner insurance policies it is homeowners, for a university's admissions requirements it is the individuals seeking admission to the university. Obviously, it is almost impossible to test all taxpayers, or all homeowners, or all students seeking admission to a large university. The best we can do is to select a small number of individuals from this population to test.

The underlying principle for selecting samples is to ensure that the sample is representative of the population. The sample should be similar in all important respects to
the population it is drawn from. The reason for this is that evaluators want to generalize what they find out from the sample to the entire population. This is possible only when the sample represents the population. It would be absurd to claim that tax forms are unclear to U.S. taxpayers if they only were tested on a sample of non-English speaking immigrants who never before filed U.S. tax forms.

There are at least three different kinds of samples that can be discussed. While only one kind of sample is really of any practical value for evaluating documents, all three ought to be presented in order to give students a perspective on sampling.

One kind of a sample is a random sample. A sample is random when every member of the defined population has an equal chance of being selected as a member of the sample. It is analogous to drawing names from a hat under the condition that the names of the entire population are in the hat. Random samples are scientifically ideal because powerful statistical procedures can be applied to estimate the results that would be obtained for the entire population. In the context of document evaluation, this means that one could predict very accurately how well all undergraduates of a university would understand a document on student rights if we knew how well a random sample of undergraduates understood it.

Except for rare instances, true random sampling is too expensive to even be considered in evaluating documents. Just the initial step of enumerating all members of the population will often go beyond the available resources of time and funds. For most if not all students taking this course, random sampling simply will be impractical.

Another kind of sample, and one much more feasible to consider for evaluating documents, is a purposive sample. A purposive sample is...
formed when the evaluator uses logic and common sense to select a sample that represents the population on a set of important characteristics. These characteristics typically include such things as sex, age, educational level, ethnicity, etc. To go back to the example of the document of student rights for university undergraduates, it would not be sufficient to form a sample of only white, female, sophomores. A more representative sample would consist of both females and male students, all four undergraduate grades, and blacks and hispanics as well as white students. In this case, the evaluator has decided that sex, grade level, and ethnic background are important characteristics to include in the purposive sample.

The decisions as to what particular characteristics to include in a purposive sample is really up to the evaluator. There is no one correct set of characteristics that apply in every case; the relevant characteristics vary from document to document depending on the intended audience.

Detailed information about the audience and the purpose of the document are two pre-writing questions we mentioned in Chapters Three and Four. The answers to these questions posed in the pre-writing stages provide clues for the important audience characteristics to consider in the evaluation stage. A document meant to convey written rules to senior citizens eligible for social security benefits suggests that age, sex, and reading ability are important audience characteristics to consider for an evaluation sample. To evaluate a form for migrant farm laborers to apply for work permits, we would probably include sex and English language proficiency as important characteristics to include in the sample.

For purposes of this course, the use of purposive samples should be encouraged. Most colleges and universities enroll students who

This is a good place to refer to the Document Design Model and reinforce the notion of document design as process--what is found out at one step shapes what happens in another stage.
vary on many dimensions. As such, there is ample opportunity to form purposive samples.

The last kind of sample to discuss is a convenience sample. These samples are evaluation groups that are formed by selecting people who are readily available rather than because they are representative of the intended audience. Any convenient group of individuals--friends, fraternity brothers, family--can be used for the sample.

It is possible for convenience samples to provide useful evaluation information. A plausible argument is that testing documents on anybody is better than relying solely on subjective judgement. However, convenience samples clearly are inferior to purposive samples.

A concomitant issue that arises whenever any kind of sample is contemplated is sample size. How large does a sample have to be to be adequate? There are formulas that can be applied to answer that question, but those are beyond the scope of this course. The practical question for students enrolled in this course is, how large a sample is needed to conduct evaluations of documents? As a rule of thumb a good sample size would consist of 20-30 members of the intended audience. Given the constraints on time and access to people who might be appropriate for an evaluation group, a more reasonable sample size would be 6-10 people. There is no specific rule for sample size that we can give that will hold for all possible evaluations, for all classrooms, and for all students who might take this course. Some general guidelines that might help are:

- In a college setting where students are learning empirical evaluation procedures, the sample size should be at least between 6-10 people.

Convenience samples should be permitted only if a student cannot form an appropriate purposive sample. It is tempting to use people who are convenient rather than find people who are appropriate for samples. A convenience sample, however, at least will permit relevant practice for scoring and analyzing tests.

Samples and sampling procedures are among the many technical areas we have simplified for this course. You should make clear to the students that there is much more to sampling than is presented here.

See Exhibit #2: Forming Purposive Samples.
Purposive samples almost always are larger than convenience samples because important characteristics of the audience should be represented.

In audience-centered evaluation there always is a trade-off between obtaining a desirable sample size and the time and resources available to conduct the evaluation.

The Test

The purpose of an audience-centered evaluation is to find out how well the people who are expected to use a document actually understand it. This means we need some way of measuring user's comprehension. The most common way is to develop a test that measures the kinds of things we want to know about the document.

The only type of test taught in this course is objective tests. Document evaluations are not concerned with essay or open-ended tests because the concern is not in knowing how well users can organize thoughts and integrate ideas in their written answers. Depending on the document being evaluated, document evaluations seek to find out whether the users understand the meaning of the material contained in the document, or whether they can locate specific information in the document, whether they can fill out forms or follow procedures in the way prescribed by the document. Objective tests are suitable for this.

What the test should measure. The test items (or test questions) that make up the test should measure the important points presented in the document. Your student evaluators have to be capable of distinguishing the essential parts of the
document from the trivia, and they have to decide how to test the essential. In earlier chapters we mentioned two pre-writing questions that concern the purpose of the document and the reader's expected task when he or she reads the document. An analysis of the answers to these two pre-writing questions will help you identify the important topics in the document and whether the reader is supposed to:

- read and understand the content so it can be used when needed later on,
- read and locate other information elsewhere,
- read and act at once (like filling in a form or following a set of instructions).

With this information you can determine both the important content to test and the kinds of test items that are appropriate.

The test used to evaluate a particular document thus has to conform to the purpose of that particular document. We can test and measure comprehension, the ability to locate specific information, or the ability to complete forms accurately or to perform activities in the right sequence. What you teach in this course will enable students to construct any of these tests.

Test item formats. Test items can take a variety of formats. The four most common formats are sufficient for the purposes of this course. These are True-False items (or Yes-No), Multiple Choice items, Short Answer items, and Fill-in items.

To novices, it often seems a very easy task to write test items in any of these formats. Experienced test developers know, however, that writing "good" test items--items...
that are not ambiguous, or misleading, or trick questions--is a difficult task. This course cannot make testing experts out of the students, but it will teach some basic skills for writing test items that will help students create useful tests for evaluating their documents.

The appropriate number of test items to include in a test depends on the number of points in a document that are considered important enough to test. That decision is left to the test developer. The mix of test item formats to use in a test is also up to the test developer. A test can have only one test item format or a mix of two or more. For learning purposes and to give your students practice with writing a variety of test items, you should encourage them to use more than one test item format in their assignments.

When your students administer their test, it most likely will be appropriate for them to let the people being tested to refer to the documents while answering the test items. This is because document designers are interested in knowing if people can find information in documents and understand it when they do. The ability to recall information from memory is not usually a concern.

Use of paraphrase. The test items themselves should be paraphrased statements of the text of the document. That is, the test item should use different words and phrases from those in the text, but still mean essentially the same thing. If the words and phrases used in the test items are identical to those in the document text, it is possible that the test item can be answered solely by rote memory.

When we evaluate documents our real concern is whether the users understand the content, not whether they have memorized it. Do the users understand the meaning of the content in the document? Do they understand

The concern with comprehension and understanding documents is obvious. People are not expected to
how to locate information that they need? Do they understand how to complete the application form or to perform the steps of an operation described in a document? Unlike many academic testing settings, document evaluators are not interested in the ability to memorize content. Test items that paraphrase the document increase the chances that any correct answers given on the item are due to understanding rather than memory.

There are at least three ways of writing test items so that they paraphrase the document's original text. The first is to change the order and words of the original statement by mixing or substituting words and phrases in the test item but keep the same meaning as the original text. The second is to convert the test item into a scenario that involves a neutral third party who is required to make use of information presented in the document (e.g., John Doe is assigned to do X and Y. How should he proceed?). The third way of paraphrasing is to make the test items into an hypothetical problem solving situation that involves the person taking the test (e.g., You are such and such and have been given the responsibility for X and Y. What should you do?). In all three instances, the paraphrase test items require that the test taker recognize the concept or principle being called for and then apply it in another situation. The ability to generalize from the document to another situation is taken as evidence of understanding.

Performance test. The tests and test items we have discussed so far are for measuring comprehension of facts and principles presented in documents; this is the most common form of test in either academic or document evaluation situations. A performance test is another kind of test that is particularly appropriate when the document instructs the reader in how to perform an operation or follow a procedure. For example, if the document being evaluated is a form and instructions for filling out the form, the
appropriate test is to see if intended users actually can complete the form. The "test item" is the form and accompanying instructions. As another example, if the document being evaluated explains how to operate a two-way radio, the proper test is to determine if typical users can operate the radio as instructed. The "test item" here is the radio and its knobs and dials, and the evaluation is measuring comprehension of the document's instructions by observing actual performance. Performance tests such as described here are still objective and empirical. They can be scored by counting the number of errors made, the time required to complete, the particular sequence of steps followed, among other ways.

Your students should consider performance tests if they are appropriate to the documents they are constructing.

Scoring and Analyzing Tests

The test is the instrument by which a document is evaluated; it tells us how well the users who are being tested perform on the document. A high score on the test is taken as evidence that the user can understand or use the document and, in which case, the document needs little or no revision. A low score on the test is taken as evidence that the user doesn't understand some part or parts of the document and, in which case, it needs to be revised. To be able to make these kinds of evaluative interpretations we need a way to score the users' performance on each test and a way to analyze the test scores of the entire group.

Scoring tests. The scoring of tests for evaluating documents is similar to scoring any other kind of test. Each test item is assigned a numerical value. If the item is answered correctly the student gets credit for the value of that item. The total test score is the sum of the values of all test items...
answered correctly. The total test score for any given person is an indicator of that person's comprehension; the average test scores for all individuals in a group is an indicator of that group's comprehension.

The numerical value of any test item is a decision for the document evaluator to make. The only requirements are that 1) there must be a rationale for assigning numerical values, and 2) test items of equal difficulty should be worth the same number of points. We cannot cite any hard and fast rules for assigning values to test items that will apply in all cases, but here are a few general guidelines that your students can use.

1. Test items with the same format and of equal difficulty should have the same numerical value. All "True/False" items, for example, or all multiple-choice items should be worth the same number of points.

2. Be consistent in applying numerical values to similar test items.

3. Multiple choice items may be assigned greater weight than true-false items. This is because an individual has a 50-50 chance of getting a true-false item correct by sheer guessing, whereas the chance of guessing correctly is only 1 in 4 for a 4-choice item.

4. Test items that cover a large portion of a topic area should be assigned greater values than items that cover a small portion.
5. Test items that involve multiple ideas and integrating concepts are better tested by short answer formats.

It basically makes little difference if a test item is assigned a value of 1 or 100, as long as the same rule is consistently applied to all other test items. Test developers often assign values between 2-5 for test items and, for purposes of this class, these values might be recommended to the students.

Analyzing test scores. Once the test scores for each member of the sample have been figured we are ready to analyze these data. The analysis step consists of organizing the test scores and performing arithmetic calculations on them so that the evaluator can judge if the document is clear and usable. There are any number of statistical analysis techniques for this, many of them complex. We do not cover these complex statistics because they require several semester courses to learn and are beyond the scope of this course. The analytic techniques needed for this course are restricted to basic arithmetic calculations (i.e., addition, division, multiplication, percentages, averages).

When your students analyze their test scores, their main interest will be to determine if the document they are evaluating fulfills its purpose for the intended audience. The students should focus on using the test as a diagnostic tool, to spot the parts of the document that are weak and strong. From the analysis of test data, the students will make decisions about the quality and usefulness of the document, whether it is OK or needs revising. Significantly, these decisions are made independently of any subjective judgements of how well the document is written, or how fancy it looks, or the amount of effort that went into producing the document.

See Exhibit #6: Assigning Values to Test Items.
Listed below are several techniques that will help students organize test scores and perform useful calculations for evaluating documents. All techniques normally would not be used in an actual document evaluation. For learning purposes, however, students should be encouraged to use as many of these techniques as possible in their class assignments.

(1) Determine how many times each test item was missed. This is the first thing that should be done after the tests are scored. It is an easy task to do and requires a simple matrix like the one shown below.

<table>
<thead>
<tr>
<th>Sample Member</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>…</th>
<th>K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Person B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Person C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>…</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Person J</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When filled out, the matrix shows at a glance the number of times a particular item was incorrectly answered.

This kind of analysis is useful for diagnosing potential problem spots in the document. If, for example, a large number of people in the sample missed item #4, it might be an indication that the content related to this test item in the document is not clearly written or designed. The evaluator may want to examine that portion of the document to see if it is ambiguous or not well written.

Frequently missed test items might also indicate poorly written, unclear items. Test
takers may miss an item because they are misled or can't tell what is wanted, not because they do not understand the content in the document related to the item. In all cases when an unusually high percentage of the sample misses a test item, the evaluator ought to review it to see if the item itself is the cause of the problem. If so, the item should be discounted from any further scoring and analysis, or revised for any future testing.

(2) Array test scores in rank order. A simple way of getting a visual overview of how the entire sample of document users performed on the test is to rearrange individual scores in rank order (either descending or ascending order, but the former is more typical). This will quickly reveal different trends in test performance. The range between the highest score and lowest score indicates the degree of variability in test performance. If we also add to this simple array the number of people who attained each score, (called "frequency" in statistics) we can get a clear picture of where the test scores cluster. If most of the scores cluster toward the high end, we have some reason to think the document is understandable; if the cluster is at the low end, the opposite is indicated.

Arraying scores in rank order is a useful technique if the sample size is fairly small (say, up to 15 people). Large sample sizes get too unwieldy to simply array in rank order. To deal with larger samples, a variation is to break down the scores into intervals, to group the scores into broader categories, as shown below.

<table>
<thead>
<tr>
<th>Score Interval</th>
<th>Number of Samples in This Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 5</td>
<td>2</td>
</tr>
<tr>
<td>6 - 10</td>
<td>7</td>
</tr>
<tr>
<td>11 - 15</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>x · y</td>
</tr>
</tbody>
</table>

See Exhibit #8: Rank Order and Frequency Distribution of Scores.

See Exhibit #9: Grouped Frequency Distributions.

The interval here is 5 points. The evaluator may select any number for the interval but 3 or 5 points is sensible for most document evaluations.
This makes it easy to find the number of people in the sample whose scores fall in each interval. As before, the evaluator can tell at a glance whether most of the sample falls into higher or lower score intervals, or are evenly distributed. Both of these simple visual techniques of arranging test scores can help the evaluator draw conclusions about the quality of a document being evaluated.

(3) Calculate average performance (mean). Most document evaluation decisions will not be based on how a specific individual performs on the test, but rather how well the sample users perform as a group. An average score is the score that indicates how an entire group did on a test and is very useful for judging how effective a document is. The concept of averages should be a familiar one to instructors and students alike.

There are several different kinds of averages. We will discuss two. The first kind of average is the mean. To calculate the mean, all individual test scores are added and the sum is then divided by the number of individual scores. If the mean score is high the evaluator might interpret this to mean that, as a group, the sample understood or used the document as intended. The appropriate conclusion would be that the document is understandable. A low mean score invites the opposite conclusion, while a mid-level average score suggests that some portions of the document may be clear and others may need revision.

The mean is the most versatile and widely used measure of average performance. The students should be encouraged to calculate means in their document evaluations.

(4) Calculate average performance (median). Another kind of average is the median. The median is the point where one-half of the test scores are above, and one-half are below. Stated another way, the median is the middle test score when all test
scores have been arranged in either descending
or ascending order.

Like the mean, the median is an indicator
of how the sample as a group performed on the
test. The mean and median of the same set of
test scores may not be the same, but in most
instances they will be close.

The mean typically will be the
appropriate statistic for your students when
they calculate average performance. It is
easily calculated and widely used in research
and evaluation. The median, however, is
preferred when the array of test scores
includes one or a few scores that differ
greatly from the other scores. The extreme
score(s) will affect the value of the mean
because they are used in calculating the mean.
This will make the mean misleading.

Consider the test scores 2, 25, 26, 27,
30. The score "2" is quite atypical of the
other scores and it greatly affects the mean.
The mean is 22, a value smaller than any of
the other test scores. The mean clearly is
misleading. The median is 26, a value that
reflects the value of the other test scores
because it represents the mid-point of the
distribution of scores and discounts the value
of the extreme score of "2." When your
students have a set of test scores that are
grossly asymmetrical they should consider
using the median.

(5) Figure the percent getting acceptable
scores. Another kind of analysis is to find
out the percent of the people in the sample
who scored at or above the score that the
evaluator thinks represents the level of
acceptable performance. This means that the
evaluator first has to define the particular
score that represents "acceptable
performance." The evaluator makes this
judgement and is somewhat akin to college
instructors deciding the point at which
students pass or "fail."

See Exhibit #11:
Percentage Attaining
Acceptable Scores.
This procedure requires only simple arithmetic. For example, assume that the level of acceptable performance selected is 90% of the test items correct. If there are 40 test items on the test, a score of 36 or better would constitute acceptable performance (\(0.90 \times 40 = 36\)). The next step is to count the number of people in the sample who got test scores of 36 or higher. If a large number (or percentage) of the sample attained a score of 36 or higher, the evaluator might conclude that the document is understandable.

This technique could be used in lieu of or as a supplement to averages. It has a distinct use in the validation method of audience-centered evaluation.

Audience-Centered Evaluation Methods

In the previous section you concentrated on specific concepts and procedures that can be used when evaluating documents. The aim of that instruction was to teach the prerequisite skills for actually conducting document evaluation. In this section you are ready to combine and apply these prerequisite skills in two specific audience-centered evaluation methods. These are the validation method and the comparative method.

The validation method. When a document is being evaluated by the validation method, the evaluator wants to establish that the document is effective for its intended audience. If the document is designed to inform college students about the school’s group health insurance, the evaluator seeks to verify that students understand the provisions of the insurance policy. If the document is designed to show students how to use reference sources for finding research in specialized areas, the evaluator seeks to determine that students can use the reference document and can locate the appropriate research studies. If the document is designed to serve as an application form for student loans, the

See Exhibit #1: Case Study of a Document Evaluation
evaluator seeks to establish that students can fill out the form accurately.

In using the validation method, the evaluator is not concerned that someone else might be able to design a better document or that a "better" document might already exist somewhere. (This kind of evaluative information is generated by the comparative method, which is discussed in the next section.) Instead, the evaluator's concern centers on finding out if a particular document does what it is supposed to do.

The process of validating a document follows a fairly straightforward procedure, as shown below.

Simply, a sample of intended users is given the document and a test that measures what the document is supposed to convey. The evaluator specifies a standard of performance that must be attained for the document to be considered effective. The document is "valid" and considered effective if the analyses of the test performance indicate that the sample met the performance standards.

The "performance standard" step is the key to validating a document, and is a step only briefly mentioned before. A performance standard is an explicit statement of acceptable performance. The evaluator sets the performance standard before the sample of users is tested, because it is the baseline against which the sample's test performance is compared. It is what the evaluator will accept as evidence of a document's effectiveness.
Performance standards include two different parts: (1) a statement about the level of performance that must be attained, and (2) a statement about the percentage or number of people in the sample who must reach this performance level. Examples of performance standards are:

- X% of the sample must get Y% of test items correct,
- X number of the sample must attain a score of Y or higher,
- X number of the sample should complete the form with fewer than Y errors.

The values for "X" and "Y" are up to the evaluator and must be set with the document's purpose in mind and with common sense. While we cannot give hard and fast rules, you should consider at least three factors in setting performance standards:

1. Criticality--documents that contain essential information should have a higher performance standard than when there is margin for error (e.g., the performance standard for evaluating applications for food stamps should be higher than applications for credit cards).

2. Frequency--documents that contain information used by many people should have higher performance standards than those used by few (e.g., the performance standard for evaluating apartment rental agreements should be higher...
than regulations governing trust funds).

(3) Consequences of error—documents that contain information that leads to serious consequences if not correctly applied should have higher performance standards than information with minor consequences (e.g., the performance standard for aircraft pilot instructions should be higher than instructions for assembling a bicycle).

Performance standards conventionally used in training and education range from 90/90 (i.e., 90% of the sample must get 90% of the test items correct) to 80/80. For purposes of this class, these values or variations of them (e.g., 90/85; 85/80) should be suitable.

The underlying rationale of performance standards is twofold. Performance standards make clear the basis for accepting a document as effective, and they reflect the document designer's commitment to create a document that truly communicates to its intended audience. By setting a very low performance standard (say, 10/10) it would be very easy to demonstrate that a document met or exceeded the performance standard. But to do so is unprofessional and would be akin to a college professor counting "D" work as acceptable. By the same token, extremely high performance standards (say, 100/100) are unrealistic and, except for very rare and very special situations (like training jet pilots), should not be used. The key notion in setting performance standards is that "most users should understand or perform most of what the document sets out to convey."

See Exhibit #12: Writing Performance Standards.
Evaluation by the comparative method.
When most people hear the word "evaluation," they think of evaluations performed by the comparative method. The comparative method is used in two different settings:

(1) to test two or more versions of a document on similar groups of intended users,

(2) to test one document on two or more groups of intended users who differ in certain characteristics.

In the first situation, the evaluator's concern is with selecting the "more effective" document from two or more possibilities. The procedure is shown below.

```
Document A  Sample of Users  Test  Analyze Test Results

Document B  Sample of Users
```

The two documents are different versions of the same essential content. Half of the sample receives Document "A" and the test and half gets Document "B" and the test. The identical test is given to both groups. Each test is scored and the test performance for each group is analyzed for differences. If the group with Document "B" performs better, the evaluator concludes that Document "B" is clearer and more usable than Document "A." The opposite, of course, would also be true.

There are several issues to note about the comparative method. First, more than two
documents could be evaluated. For this class, two documents are sufficient and the added complexity of evaluating more than two documents should be discouraged. The typical case will be where a student rewrites and redesigns an existing document and compares the revised version with the original to see if there is any difference.

Second, the user sample typically will be larger than in a validation effort because two test groups are formed; half the group is tested on the original document and half on the revised one. Once the sample is identified and selected, the documents should be assigned to individuals in a random fashion.

Third, the same test is given to each test group. Care must be taken to insure that the test can be answered from information contained in both documents. This is another reason why paraphrased test items are important. The test items must tap the principle or concept presented, not the exact words of either document.

Fourth, the test scores can be analyzed by any of the techniques discussed earlier. The scores can be rank-ordered, they can be grouped into score intervals, clusters of scores for each group can be compared, the percentages of each group scoring at or above the level of acceptable performance can be compared, and means or medians can be calculated for each group and compared.

Fifth, the proper interpretation of the scores will depend on what is found. If the mean score, for example, of one group is considerably higher than the other, it can be claimed that that particular document is easier to understand (normally, the student hopes the revised document scores higher).

It is not so clear cut when the scores of the two groups do not differ by much. For example, if one group has a mean of 75 and the
other group 72 it is difficult to judge the former document "better." There are statistical techniques that will indicate whether such a difference is "real" or due to chance, but these techniques are beyond the scope of this course.

Your students should be very cautious in deciding one document is better than another on the basis of differences in means/medians. Most students will test their documents on quite small samples and the results can be misleading. When your students compare two documents and find small differences, the safest procedure is to have them get more information to supplement the test scores. They might, for example, ask their sample of users to discuss the relative merits of the two documents and try to make a decision with this added information.

In the second comparative evaluation situation, the evaluator is concerned about whether the document that has been developed is sufficient for the needs of a diverse audience. An example is the student who has rewritten a college's rules for student behavior and now needs to find out whether the revised rules are understood by freshmen as well as seniors, and by hispanic students as well as anglos. The procedure is shown below.

[Diagram of the evaluation process]

In this type of evaluation situation the important consideration is how the sample groups are formed. Both sample groups must
represent the intended audience of the document (e.g. undergraduate students), but the groups will differ on some critical audience characteristic (e.g. class year; English speaking ability).

To justify the formation of two or more sample groups, there must be some reason to think that the intended audience differs in some meaningful characteristic. This characteristic will vary by document and intended audience. For documents presenting mostly verbal information, reading ability might be a critical characteristic. The evaluator will want to check that the document is understandable to persons with varying levels of reading ability. For documents that instruct how to perform a sequence of operations, work experience might be a critical audience characteristic. For still other documents, years of education, or size of high school attended, or age, or income level might be the important characteristic. Whatever the critical characteristic is, the intent of the evaluation is the same: to determine whether the document adequately meets the needs of a diverse audience or whether different versions of the document are needed for different subgroups of the audience.

The analyses of the test scores are the same as before. The scores of each test group can be arrayed in rank order and compared, means and medians can be calculated, and so on. The interpretation of the results, however, is different from the previous comparative method situation. In this case if the scores are similar, the evaluator can conclude that the document works equally well (or poorly, depending on the score) for both groups. If the groups performed quite differently, the evaluator might conclude that there is a need for another version of the document to meet the needs of a specific subgroup.
This describes two brief case studies of hypothetical document evaluations. The case studies apply many of the specific techniques and procedures that are covered in the instruction and discuss why they are used. You should read the other materials and exhibits before you read the case studies and try to use them in your class. The case studies represent document evaluation requirements that easily could be met by a student in your class.

The first case study depicts the use of the validation method to evaluate a document. The second case study is an adaptation of the first and illustrates the use of the comparative method.

CASE STUDY 1: Validation Method

Background

John Smith is a junior at State University, enrolled in an advanced composition course. A requirement of this course is either to design a document or revise an existing one by using the document design principles taught in the course. The document is to be evaluated empirically by an audience-centered method of evaluation. This case study summarizes the evaluation effort.

The Document

John chose to revise State University's Regulations for Student Conduct which governs undergraduate behavior on campus. This document was written many years ago in legal language and has been revised repeatedly during the years. John reorganized the content, added a table of contents, replaced technical language with common everyday words, used headings and subheadings throughout, inserted tables, and generally incorporated other "good" document design principles.

As John was revising the document he informally tried out some of the draft text passages on friends to see if they understood them. The complete revised document is 30 pages long, which is considerably shorter than the original. The rewritten document is organized into sections that cover specific rules of conduct, the university's and the student's rights, and appeal procedures.
EXHIBIT NO.1: Case Study of a Document Evaluation

To meet the evaluation requirement, John elected to use the validation method. His evaluation goal was to find out whether undergraduate students at State University understand the revised Regulations for Student Conduct.

The Sample of Users

John decided to form a purposive sample to evaluate his document. Since State University enrolls 15,000 undergraduates, he realized that a sample size of 150-300, which would represent 1% to 2% of undergraduates, would be ideal. However, a sample this size was completely beyond the scope of available time and resources and could not be considered for his advanced composition course. He chose a sample size of 20, because this number was feasible to recruit and test and was still large enough to go through the evaluation steps and generate some tentative conclusions.

The population (or audience) being served by the document is State University undergraduates so John wanted a sample of undergraduates. One audience characteristic he thought important to represent in the sample was class year, since upper classmen may be more knowledgeable about specific rules through experience. John recruited five students from each class (freshmen, sophomores, juniors and seniors) for his sample. The State University undergraduates population is close to 50% male/female so John decided to have 10 males and 10 females in his sample. Minority status was the final audience characteristic he deemed important. About 10% of State University's undergraduates are minorities so John decided that his sample should have at least 2 minorities represented (10% of 20 = 2).

The Test

To measure comprehension of his document, John wrote an objective test made up of 20 test items. The test consisted of a combination of True-False and multiple-choice test items. Each test item was worth 2 points making a total possible score of 40.

The test items covered the major rules presented in the document, student rights, and appeal procedures. The test items were paraphrased as student (third party) scenarios that required the test taker to apply information from the document to the test scenarios.
EXHIBIT NO. 1: Case Study of a Document Evaluation

After recruiting the sample, John met individual members at the agreed upon time and place to collect test data. Each member of the sample, either individually or as a small group, received a copy of the document and the test. Each individual was instructed to read the document and then answer the test items. They could use the document to answer the test items because John reasoned that it is more important for students to be able to locate relevant information and understand it than to answer test items from memory. John collected the test and document from each individual when they finished.

Scoring Analysis

John specified the performance standard he would use to evaluate the document before he scored the tests. Since the Regulations concern all undergraduates and could have unfortunate consequences if misinterpreted, John reasoned that he had an obligation to make the document as clear as possible for the majority of students. The performance standard should be quite stringent. Accordingly, John set this performance standard:

80% of the sample should get at least 85% of the total possible points on the test.

For John to judge the document effective, 16 people in the sample (80% x 20 people = 16 people) would have to obtain a score of 34 or higher on the test (85% x 40 points = 34 points).

John then scored each test. Correct answers received 2 points, incorrect answers 0 points, and, for some items, partially correct answers 1 point. Each individual's test score was the sum of the points for correct answers with 40 the maximum score.

John's first step after scoring the tests was to see how many people missed each test item. The matrix below shows this result. John used this information as a diagnostic tool to locate potentially unclear sections of the document. Many people missed test item #5, which covers the rules governing drug use. John first reviewed this test item to see if it was unclear or misleading. This did not seem to be the case so John concluded that the poor performance must be due to unclear writing in the section of the document that deals
EXHIBIT NO. 1: Case Study of a Document Evaluation

with the rules governing drug use. John decided that this section should be rewritten. None of the other items was missed frequently enough to indicate any other unclear passages in the document.

John next arrayed the test scores from highest to lowest so that he could get a visual impression of the test performance of the entire sample and also see whether the performance standard he set was met. This array of test scores is shown on the next page.
EXHIBIT NO. 1: Case Study of a Document Evaluation

John concluded from this array that most of the test scores cluster in the higher score range with only three people attaining very low scores (i.e., less than 30). Moreover, since 16 people attained scores of 34 or higher the performance standard was met (i.e., 80% of the sample got at least 85% of total points). From this information, John concluded that, on the basis of the performance of the user sample, the revised Regulations for Student Conduct, with the exception of the section on drug use, would be understood by the majority of the undergraduates at State University.

A final analysis that John thought might be interesting to report was the average test performance for the sample. The mean performance was 34.4 (688 ÷ 20) and the median performance was 36. The averages were sufficiently high to support John's conclusion that most State University undergraduates would be able to understand the revised document.
CASE STUDY 2: Comparative Method

The following case study demonstrates the use of the comparative method to evaluate documents. The same basic information as above is used, but is changed to illustrate the requirements for the comparative method.

Background

Same as above—John Smith is required to evaluate a document he developed in an advanced composition course.

The Document

Same as above—John revised State University's Regulations for Student Conduct. The difference is that to meet the course's requirements to evaluate his document, John decided to use the comparative method. He compared the original document with his revised one. His evaluation goal was to find out whether his revisions made the Regulations clearer and more understandable to undergraduates.

The User Sample

For his sample, John decided that six undergraduates from each grade would be sufficient, for a total of 24 people. John selected the sample so that male and female students were about equally represented. John recognized that a larger sample size would be desirable but time limitations made a larger sample impractical. (For example, if he had doubled the sample size described in the validation study, he would have had 40 people to recruit and test. For most students, this would be a demanding undertaking.)

Half of the sample (or 12 students, comprised of 3 from each grade level) used the original document to answer the test and the other half used the revised document. To the extent feasible, John collected the test data from both groups under similar conditions.
EXHIBIT NO. 1: Case Study of a Document Evaluation

The Test

John used the same test that we described for the validation method (that is, an objective test made up of 20 items, each of which was worth 2 points). John ensured that the test items could be answered from either document and that the test did not favor one document over the other.

Scoring and Analysis

John scored the tests and analyzed the scores for each group. The aim of the analyses was to determine whether one group performed differently than the other, and whether this difference was due to the documents.

As the first step, John arrayed the test scores for each group from highest to lowest, as shown below. Just by scanning the score arrays, John can see that the group using the revised document performed better. The scores of the revised document group cluster at the high end with only one individual scoring below 30. In contrast, 8 of the 12 people using the original scored below 30. From this information alone John might conclude that the revised document is clearer than the original.

<table>
<thead>
<tr>
<th>Test Scores for Revised Document Group</th>
<th>Test Scores for Original Document Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>36</td>
</tr>
<tr>
<td>40</td>
<td>35</td>
</tr>
<tr>
<td>40</td>
<td>35</td>
</tr>
<tr>
<td>38</td>
<td>31</td>
</tr>
<tr>
<td>38</td>
<td>27</td>
</tr>
<tr>
<td>36</td>
<td>22</td>
</tr>
<tr>
<td>36</td>
<td>20</td>
</tr>
<tr>
<td>median = 36+36/2=36</td>
<td>median 22+20/2=21</td>
</tr>
<tr>
<td>36</td>
<td>18</td>
</tr>
<tr>
<td>35</td>
<td>16</td>
</tr>
<tr>
<td>30</td>
<td>16</td>
</tr>
<tr>
<td>25</td>
<td>14</td>
</tr>
<tr>
<td>430</td>
<td>290</td>
</tr>
<tr>
<td>Mean = 430/12 = 35.83</td>
<td>Mean = 290/12 = 24.16</td>
</tr>
</tbody>
</table>
John next calculated both the mean and median performance to determine the differences in test performance for each group. (John need not have figured both averages— one would have been adequate.) As can be seen above, the group using the revised document performed much better than the group using the original document (35.83 vs. 24.16 mean performance; 36 vs. 21 median performance). John concluded that the revised document is clearer and better understood by State University undergraduates than is the original document.
EXHIBIT NO. 2: Forming Purposive Samples

Your students should spend time thinking about samples and about the kinds of audience characteristics that are important to represent in a sample. You might use or adapt the two situations below to give your students practice in this area.

Situation A

The Athletic Department at your University asked you to develop a pamphlet that describes who is eligible to buy football tickets at special rates, where they can be bought, how paid for, and when. The pamphlet also describes the sections of the stadium, the exits, the locations of refreshment stands, and how to enter and leave the parking lot to reach different highways. The pamphlet will be available to university students and to people who have recently bought season tickets.

You will evaluate this document with a purposive sample:

(1) What are the important audience characteristics you would include in the sample?

(2) Describe the size and composition of your sample.

Situation B

You have been asked by a school superintendent to write a set of instructions for grades 7, 8, and 9 on classroom behavior, hallway etiquette, and keeping restrooms, hallways, and study rooms clean. The instructions will be posted in both of the city's middle schools.

You will evaluate this document with a purposive sample:

(1) What are the important audience characteristics you would include in the sample?

(2) Describe the size and composition of your sample.
EXHIBIT NO. 3: Guidelines for Writing Objective Test Items

Some basic, widely accepted guidelines for writing test items in the four objective test formats covered in this course are given below. You might use these materials or adapt them for presentations or use them for handouts.

Writing True-False (or Yes/No) Test Items

1. Make sure that the test item does not include statements that are true and others that are false. The first part of the statement below is true; the second part is false.

Example:
Form 1040 is used for income taxes and, therefore, is completed by all taxpayers.

2. Do not use all-inclusive terms like "all," "never," and "always" because they are signals that the statement is false. It is rare for anything to be "never" or "always."

Example:
All working Americans have to file income tax returns.

3. Beware of using terms that qualify statements, such as "often," "sometimes," and "many," because they are clues that the statement likely is true.

Example:
Many working Americans have to file income tax returns.

4. Do not use double negatives because they are confusing.

Example:
A non-taxpayer is not one who pays taxes.

Writing Multiple-Choice Test Items

Note: multiple-choice test items consist of two parts: (1) the stem, which asks the question or presents the problem and (2) the options, or list of possible answers.

1. It is best to have four answers for each test item in order to reduce guessing. But do not add an obviously incorrect answer so that you have a total of four answers. (It is better to have 3 good answers for an item than to have four, one of which clearly is wrong.) In the example, "C" obviously is wrong.
EXHIBIT NO. 3: Guidelines for Writing Objective Test Items

Example:
What channel of your radio should you use to talk to another boat:
A. Channel 12
B. Channel 22
C. Channel XYZ
D. Channel 10

2. Make the stem clear; do not add irrelevant detail. In the example below the stem simply could have asked "What tax form is designed for yearly incomes of $10,000 or less?"

Example:
In 1947, after much debate in Congress and over the objection of the Commissioner of Internal Revenue, a tax form was designed for people making $10,000 or less a year. This form is:
A. 1040A
B. 2440
C. 1040
D. 2159

3. Do not give clues to the right answer by the form of the words in the stem. In the example below "C" is correct because it is the only grammatically correct completion of the stem (the article "a" precedes the consonant in "tax").

Example:
Form 1040 is an example of a:
A. operational form
B. interstate agreement form
C. tax form
D. application for a job

4. Make sure that the right responses do not form a pattern. For example A-A-A-B-B-B; or A-B-C-D-A-B-C-D.

5. The possible answers should be about the same length. An answer that is considerably longer than the other answers tends to be the correct answer because it contains the qualifications needed to make the answer true. In the example, "B" illustrates this point.

Example:
The major distinction between Form 1040 and 1040A is that:
EXHIBIT NO. 3: Guidelines for Writing Objective Test Items

A. the 1040 is longer
B. the 1040 can be filed by any taxpayer but those who make $10,000 or less have the option of filing 1040A
C. the 1040A is longer
D. the 1040 is quicker to complete

6. Minimize the use of "all of the above" or "none of the above" as options. Too often these options are used merely to provide a fourth optional answer. Never use both of these options together.

7. Try to avoid negatively stated items. They are confusing and hard to understand.

Example:
Which tax form is not used by people making more than $10,000?
A. 2441
B. 1040A
C. 1040
D. 2159

8. If you must use negatively stated items (which sometimes happens), underline the negative word to force attention on it.

Example:
All of the following must be reported on the Form 1040 except or
Which of the following does not have to be reported on Form 1040?

Writing Fill-In Test Items and Short Answer Items

Note: The fill-in and short answer test item formats are discussed together because they are very much alike. They differ only in how the test question is presented. If the question is presented as an incomplete statement that needs to be completed, it is a fill-in test item; if it is presented as a question, it is a short answer item.

1. Leave blanks only for key words or major concepts--do not leave many blanks because the statement becomes hard to understand.
EXHIBIT NO. 3: Guidelines for Writing Objective Test Items

Examples:
Weak: A ______ radio is a book in which you keep about your ______.
Better: The book in which you keep information about your radio is the ______.

2. Make sure the statement is sufficiently defined so that there is only one sensible and correct answer. In the example, "neat and orderly" or "up to date" could be correct answers.

Example:
Weak: You must keep you radio log (one year).
Better: The length of time you must keep your radio log is ______.

3. Make sure it is clear whether a blank can have one word only or can have several words. Either is OK as long as test takers know the rules.

Example:
The book in which you keep information about your radio is the (radio) (log).

vs.
The book in which you keep information about your radio is the (radio log).

4. It generally is better to put the blanks at the end of a statement because it makes it more like a normal question.
EXHIBIT NO. 4: Ways of Paraphrasing Test Items

Shown below are examples of test items that are paraphrased in three different ways. You might use or adapt these in your instruction.

The Document's Original Text

Form 631-DD is used to tabulate the number of people who apply monthly for medical services under the provisions of the state's Aid-to-Citizens program.

(1) Paraphrased Test Item: Mixed Order

The number of monthly applicants in the state who request medical service from the Aid-to-Citizens program is listed on what form?

(2) Paraphrased Test Item: Third Party Scenario

Jane Doe has the responsibility for keeping track of the number of people who apply for medical services each month under the Aid-to-Citizens program. She selects Form 631-DD for this. Is this correct?

(3) Paraphrased Test Item: Test Taken Scenario

You want to compile each month the number of people who ask for medical services under the Aid-to-Citizens program. What form should you use?
EXHIBIT NO. 5: Paraphrased Test Items in Different Formats

Shown below is a paraphrased test item that is written in four different objective test formats. You might be able to use these as models for assignments to students to write paraphrased test items.

The original text (from a government regulation for radios in recreation boats).

VHF Marine Rule 15

You must keep a radio log. A radio log is a book in which you keep information about your radio. The radio log must be neat and orderly. Each page in the log must be numbered, signed by the operator, and show the name and call sign of your boat. You must keep your radio log for at least one year after the day of the last entry in the log.

(1) True/False Test Item

It is sufficient for Harold Brown to sign the first and last page of his radio log.  T  F

(2) Multiple Choice Test Item

What pages of a radio log must be signed?
  A. The first page
  B. The last page
  C. All the pages
  D. The first and last pages

(3) Fill-In Test Item

Tony Owens has a radio in his boat. Every page of his radio log must contain his boat's call sign, be numbered, and be ____________.

(4) Short Answer Test Item

What are the requirements for signing the page of a radio log?
EXHIBIT NO. 6: Assigning Values to Test Items

The values that you attach to test items are relative. There is no automatic method that can be followed. The principle is simply that "difficult items ought to be weighted more than easier items."

For you to provide students with a perspective for assigning test values and to give them an opportunity to practice assigning values to different test items, you might consider an exercise something like that described below.

The exercise (either classroom activity or formal assignment) would require your students to write several test items for a text passage from a document. The test items should be worth different values. Your students should explain why they assigned the values they did. The example below is a model of what you might do.

Example Exercises

The Document Text

Assume that the one part of the document being tested is the same VHF Marine Radio Rule 15, that is presented in Exhibit #5.

Test Item (2 Points)

An owner of a boat radio must have a radio log. This log must be kept

A. for one month  
B. for one year after the last entry  
C. for two years  
D. until a new log is started

Reason for assigned value: This test item is given a value of two points because the test taker only has to identify one fact; there is no need to organize concepts and integrate more than one idea. ("B" is the correct answer.)

Test Item (5 Points)

List at least three things you need to do when you keep a radio log.
Reason for assigned value: The test requires the test taker to recognize requirements for radio logs, to distinguish requirements from non-essential information, and to organize an answer that includes at least several points.
EXHIBIT NO. 7: Test Items Missed

Your first step in a document evaluation is to organize test results so as to get an overview of test performance. The matrix below shows how many of the 10 people taking a test missed each of six test items. You may use or adapt this material in your instruction.

Procedure: (1) Score tests. (2) Construct matrix. (3) Note test items missed by each person in sample.

<table>
<thead>
<tr>
<th>Sample Member</th>
<th>Test Item Missed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>X</td>
</tr>
<tr>
<td>2</td>
<td>X</td>
</tr>
<tr>
<td>3</td>
<td>X</td>
</tr>
<tr>
<td>4</td>
<td>X</td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Total Missed</td>
<td>7</td>
</tr>
</tbody>
</table>

Possible interpretation of above data: Since 70% of the sample missed item #1 (7 out of 10 = 70%), the evaluator should first review the test item to see if it is unclear or misleading. If so, the sample's performance on this item should be discounted. If the item is clear, the evaluator should read the document text that is related to this test item to see if it can be rewritten and made clearer.
EXHIBIT NO. 8: Rank Order and Frequency Distribution of Scores

You should arrange test scores from highest to lowest and tally the number in the sample who got each score. This gives you an easy way to generate an overall visual picture of test performance. The example below shows the test scores for a sample of ten people on a test having 40 possible points. You might use or adapt this material in your instruction.

Test scores received by sample of ten (40 points possible):

21, 38, 15, 40, 27, 30, 17, 21, 15, 36

Procedure: (1) Array scores from highest to lowest. (2) Note how many people received each score.

<table>
<thead>
<tr>
<th>Test Score</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>1</td>
</tr>
<tr>
<td>38</td>
<td>1</td>
</tr>
<tr>
<td>36</td>
<td>1</td>
</tr>
<tr>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>27</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>2</td>
</tr>
</tbody>
</table>

Interpretation: One half of the sample (i.e., 5 people) got 50% or less of the test correct (i.e., scored 20 or less). Only three sample members scored high (i.e., scored 36 or higher). This suggests that the document is not clear to most of the sample and should be revised.

Advantage of this technique: It provides order to test scores. It is easy and fast to do if the sample size is small (15 or less). It provides an overview of how a sample performed on a test and it permits tentative conclusions about a document's effectiveness.
EXHIBIT NO. 9: Grouped Frequency Distributions

If your sample is fairly large (say, over 15 people) it becomes too unwieldy to simply array test scores from highest to lowest. For you to improve the form of presentation and make the scores visually meaningful, you can group test scores into score intervals and note the number of people who fall within each interval. Shown are test scores for a sample of 25 people on a test having 40 possible points. You might use or adapt this material in your instruction.

Test scores received by sample of 25 (40 points possible):
39, 36, 19, 34, 40, 35, 38, 31, 14, 40, 26
39, 30, 35, 36, 23, 39, 35, 37, 27, 31, 36,
35, 32, 33

Procedure: (1) Array test scores from highest to lowest. (2) Select score interval. (3) Construct frequency distribution. (4) Tally sample getting scores within each interval.

<table>
<thead>
<tr>
<th>Score Interval</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>37-40</td>
<td>7</td>
</tr>
<tr>
<td>33-36</td>
<td>9</td>
</tr>
<tr>
<td>29-32</td>
<td>4</td>
</tr>
<tr>
<td>25-28</td>
<td>2</td>
</tr>
<tr>
<td>21-24</td>
<td>1</td>
</tr>
<tr>
<td>17-20</td>
<td>1</td>
</tr>
<tr>
<td>13-16</td>
<td>1</td>
</tr>
</tbody>
</table>

Interpretation: The scores cluster in higher ranges suggesting that the document is clear to most of the sample. Only 3 scored low (i.e., scored under 24). The document is effective.

Advantage of this technique: It gives visual oversight of a large number of test scores. It is easy to do. It permits tentative conclusions about a document's effectiveness.
EXHIBIT NO. 10: Calculating Averages

We have described the steps for calculating the mean and the median for an odd-numbered and an even-numbered set of scores. You might use this material as a model for your instructions.

The Mean

Procedure: (1) Add the test scores. (2) Divide the sum of the test scores by the number of test scores.

<table>
<thead>
<tr>
<th>Test scores</th>
<th>[ \text{Mean} = \frac{80}{7} = 11.42 ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>80</td>
<td></td>
</tr>
</tbody>
</table>

The mean of 11.42 is an index of how the sample as a group performed on the test.

The Median

a. Odd-numbered set of scores

Procedure: (1) Array the scores in order from highest to lowest. (2) Count down (or up) to the midpoint of the set of scores. (3) The midpoint is the median.

<table>
<thead>
<tr>
<th>Test scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
<tr>
<td>13</td>
</tr>
<tr>
<td>13</td>
</tr>
<tr>
<td>12</td>
</tr>
<tr>
<td>11</td>
</tr>
<tr>
<td>9</td>
</tr>
<tr>
<td>7</td>
</tr>
</tbody>
</table>

There are seven scores, so the fourth score, 12, is the median. Three scores are higher, and three scores are lower.

b. Even-numbered set of scores

Procedure: (1) Array the scores in order from highest to lowest. (2) Draw a line between the uppermost score in the lower half and the lowermost score in the upper half. (3) Add the two scores above and below the line and divide the sum by 2. (4) The result is the median.
EXHIBIT NO. 10: Calculating Averages

Test scores

<table>
<thead>
<tr>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
</tr>
<tr>
<td>12</td>
</tr>
<tr>
<td>12</td>
</tr>
<tr>
<td>11</td>
</tr>
<tr>
<td>9</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>5</td>
</tr>
</tbody>
</table>

\[
\text{Median} = \frac{11 + 9}{2} = \frac{20}{2} = 10
\]

Advantages of these techniques: They are easy to calculate. They are indicators of the typical performance of a group of people. They permit tentative conclusions about a document's effectiveness on the basis of group performance.
EXHIBIT NO. 11: Percent Attaining Acceptable Scores

We have described the steps for calculating the cutoff score that represents acceptable performance. The illustration is based on a test worth 40 total points and a sample size of ten. You might use or adapt this material in your instruction.

Test scores received by sample of ten (40 points possible):
21, 38, 15, 40, 27, 30, 17, 21, 15, 36

Procedure:
1. Establish level of acceptable performance.
2. Calculate the score that represents acceptable performance.
3. Array test scores in order from highest to lowest.
4. Tally the number of people who reach or exceed the acceptable performance score.

(1) 90% of total number of points is set as the level of acceptable performance.

(2) .90 x 40 = 36, the score that represents acceptable performance.

(3) Test scores

40
38
36 ← The cutoff score
30
27
21
21
17
15
15

(4) Three people attained or exceeded score for acceptable performance.

Interpretation: Since only 30% of the sample (i.e., 3 of 10) reached or exceeded the score indicating successful performance, the document is not clear to the majority of the sample. The document should be revised and improved.

Advantage of this technique: It is easy to calculate. It provides a very clear statement of acceptable performance.
Performance standards are relative. The purpose of the document dictates how stringent a performance standard should be. You should give your students an opportunity to discuss "appropriate" performance standards for different documents. They also should practice writing performance standards for different document situations and defend their reasoning. We have listed below examples of class exercises that you might use or adapt in your instruction. Note that the second situation requires a more stringent performance standard because of the purpose of the document and the potentially fatal consequences of not understanding the information contained in the document.

Situation 1

Mary designed a reference guide for use in her state's Office of Tourist Information. The guide contains information about the location and dates of festivals, fairs, camping grounds, hunting and fishing opportunities, and other recreational events. Mary intends to validate this reference guide by testing it on a sample of 40 people who come to the tourist office for information.

What performance standard would you use? Why?

Situation 2

Fred designed a label for a household product that is poisonous. The label gives specific steps to follow in case a child or adult swallows the product. Fred will validate the label by testing it on a sample of 30 homemakers who have children under 10-years old.

What performance standard would you use? Why?
Appendix A

A Suggested Syllabus
SYLLABUS

WEEK 1

Logistics - grading procedures

Reasons for Writing
Ask students to write freely for 5-10 minutes to answer the question "Why Write?" After open discussion make the point that this course is concerned with transactional writing, the kind of writing concerned with satisfying the reader who is seeking information. The goal of this course is to help students successfully inform, instruct, and persuade. You may wish to contrast transactional with poetic and expressive writing.

Writing log
So that students can become aware of the demands that are made on them as writers and their weaknesses and strengths, have them establish a writing log (See Chapter 2). You may want students to keep the log for only two or three weeks, or you may want to encourage students to document their work and their development throughout the course.

Case studies
Have students review case studies in Chapter Two. Allow time for discussion of issues about the role writing plays in career advancement. Look at contrasting formats for case studies.
Have students begin work on case studies of professionals in their field. Writing a case study requires considerable skill, but the major purpose of this assignment is to give students first-hand information about on-the-job writing.

Have students collect documents that they have used recently to bring to class in Week 2. Ask for forms, notices, excerpts from texts, leases, brochures, letters, etc.

**Evaluating documents**

It is probably wise to collect your own sample documents to supplement what students might bring in. You will want a fairly wide selection of good and poor documents. Form small groups to read documents in class. Ask each group to identify one good and one poor document. Have students make their criteria for judging the writing explicit. Have someone in each group list their criteria and discuss the groups' findings.

**Writing projects**

At this time you should introduce the writing projects for later in the course. You have at least two options. If students need practice with rhetorical strategies, clear language, revising, reviewing, and editing, you may decide to cover cycles one and two (see Chapter One.) If you cover two cycles only, students will follow all
steps of the process model and rewrite and evaluate a document. If you cover all three cycles, they will also create and evaluate a document. We recommend the full course for advanced, fairly competent writers who have done well in basic writing courses.

The documents that students choose to rewrite should be fairly brief, no more than five pages. The students should be able to gather information about the content without too much difficulty. They must be able to find readers for the document so they can plan, if not conduct, an outside evaluation. They should be fully familiar with their projects by Week 5.

The documents that students create should probably be no more than 8 to 10 pages, directed to an easily accessible audience. Students should be ready to discuss several feasible projects by Week 8. In effect students will be working on their projects while you take up the process model step-by-step. Students can begin right away their search for

- a document they can rewrite and evaluate, and
- a document they can create.

You will want to begin discussing criteria for choosing these documents and lay some ground rules that will help students get their projects underway. You may decide that you will provide the documents yourself.
Writing clear English on the job

At this point you can have students read and respond to the section on clear English and on-the-job writing in Chapter Two. Questions that need raising include "What is Clear Writing?" "What is the Plain English Movement?" "Is Plain English compatible with legal writing, business writing, academic writing?"

WEEK 2

Case Studies
Discuss case studies students are working on. Ask for progress reports and establish a date for completing the studies.

Writing logs
Review writing logs. Have students work in small groups to identify patterns and to discuss the kinds of information the logs are yielding.

Overview of the process model
Present the model (See Chapter Three). The model provides a framework for writing or revising any piece of writing, including forms. Have students contrast the process described by the model with their own writing processes. Explain that they will go step-by-step through the model before tackling a major writing task.
The pre-writing stage
Introduce the five pre-writing questions. Discuss the role of planning in writing. Refer to writing logs: What kind of planning do students now do when they work on assignments?

Pre-writing: What is the message I wish to convey?
Have students practice writing one sentence answers to the question "What is the message I am trying to convey?"
They can use the tasks in Chapter Five or work with actual assignments from their classes.
Select, from your pool of documents, several pieces of writing with different messages. Have students practice writing brief descriptions of these documents.

Generating ideas to get started
Have students try out and practice
  - brainstorming
  - focused free writing
  - using journalists' questions (who, what where, when, how, why), and
  - using different rhetorical techniques for analysis

Give your students a topic such as "Should professionals dictate letters or write them out?" and have different students use each of these techniques to generate ideas. Contrast the results.
How to get content if you don't have it
Discuss interviews, research, ways to discover if content is appropriate and complete.

Short range writing projects
At the end of the second week you should make assignments to be completed over the course of the term that will allow students to become familiar with certain formats that they are likely to use: resumes, letters of application, memos, analytical reports, executive summaries, evaluations. We strongly suggest that these assignments derive from the demands that the students field is likely to make on him or her and that you regularly arrange writing workshops that will allow students to critique each other's writing to establish criteria for assessing their use of formats. If you can draw these assignments from work your students are preparing in other classes or on the job, your students will probably be highly motivated to practice them.

WEEK 3

Case studies
Review students' case studies in class. Have students write a brief in-class report on their findings. At this point you may wish to arrange conferences to review writing logs, case studies, and to discuss their projects individually with students.
Writing projects

Have students propose several documents they want to rewrite (and, if you plan to cover three cycles, the document they plan to create). Allow a full session for establishing criteria for selecting these documents which must include several readers whom students can ask to be subjects of an evaluation. You should establish teams of 2 or 3 if your students are going to collaborate on these projects. Each team member must be responsible for specific tasks: organizing, reading content, editing, etc. All must write. Describe each team member's role and make it clear that all members must write.

By the end of Week 5, students should have selected, and you should have approved, the writing they will do for their major projects. They should submit a proposal for the rewriting project in Week 5 and for the writing project in Week 8.

Pre-writing: Why am I writing this document?
Define terms: transactional, expressive, poetic. Have students work in small groups to determine the purposes of several of the documents they have collected. Note that documents have different purposes for different audiences (See Chapter Four).
Have students try to answer this question for any documents they plan to rewrite or create.
Pre-writing: What is the purpose of the documents?

Review documents in your corpus and have students discuss
- whether its purpose is clear to the reader;
- how effective they think the document is, and
- why it is likely to be effective or ineffective.

Working in groups, students should study the documents they judge to be effective and try to describe the characteristics of the writing. Have groups list features that make a particular document effective or ineffective. Have students analyze the "Dear Patient" card and report briefly on their findings.

Pre-writing: Who will read it?

Have students write letters to different audiences. In class, discuss the effects of audience on these student letters. Study the letters in Chapter Four to show how a writer shapes written language for different audiences. Work on identifying the various readers of a document that has multiple audiences. Have students look at the financial aid form for college students and describe groups who must use the form.

Introduce techniques students can use to meet needs of multiple audiences (summaries vs. full reports; technical appendices; different sections for different readers, etc.). Practice analyzing audiences, using a variety of techniques from intuition, to brainstorming, to the questionnaire
in Chapter Four.
Discuss the notion of reader-based prose: writing that takes into account the needs of the reader.

WEEK 5

Pre-writing: How to address different audiences
Review a number of documents including the short writing assignments students are working on. Have students state the purpose of the document for each audience, select content that is appropriate for each audience; arrange and present the content for different audiences.

Pre-writing: What do I expect readers to do with the document?
Use documents from your corpus to show how readers

- read to understand
- read to locate information
- read to act immediately
- read to answer questions—fill out a form

Have students analyze readers' tasks in each other's short writing assignments. How would a reader use each document? Is it easy to use?
Have students review forms, instructions, reports to see how well writers consider the tasks from the readers' point of view.

Writing workshop
Have students prepare informal proposals for their rewriting projects including a schedule for doing the work, a
rationale for selecting the document. Spend time in class working on the audience, purpose, task. Emphasize that proposals are working papers, to be refined and clarified as the course proceeds.

Constraints on the writer
Review the process model. Discuss the term "contextual constraints." Ask students to describe the constraints they operate under in specific conditions. Writers always work within systems; discuss how organizational systems - large and small - affect the way writers work.

Review short writing assignments, look at systems which require using particular formats. Review the pre-writing/planning stage of the process model in terms of writing projects and samples from your corpus of documents.

WEEK 6

Organization
Look at several different documents and discuss basic patterns of organization. Have students look at each others' writing and try to relate organization to audience and purpose.

Discuss traditional patterns and formats: letters of application, resumes, etc.

Examine specific documents (report, regulation, lease). Do writers provide 'roadmaps' for readers?
Comment on use of titles, tables of contents, headings. Use checklists to analyze several paragraphs from specific documents. Rewrite several paragraphs to improve organization.

Clear writing - overview
Discuss principles that make documents easier to read and three kinds of writing problems (See Chapter Six). Show different versions of a text: discuss the way good writers' awareness of audience and purpose shapes what they write.

WEEK 7
Discuss each of the three major sections on clear writing. Present guidelines and exercises for each guideline. Have students consider samples of their own writing. Review pieces of writing they brought in at the beginning of the course, or samples from writing logs. Have them work in pairs to correct language problems that appear in their own writing.

Reviewing, Revising, Editing
Discuss the importance of collaboration and techniques for revising one's own material, revising what others have written and revising with the input from others. Look at several manuals, guides, and samples of edited papers.

Writing workshop
Review proposals to revise or create documents. At this stage, students should have done most of the planning.
WEEK 8

In the first session, introduce the concept of empirical evaluation and distinguish from typical classroom (academic) evaluations. Clarify the meaning of audience-centered evaluation and the central role of testing documents on samples of intended users. Give students descriptions of several hypothetical documents and their intended purpose and audience. Have students describe appropriate samples for evaluating these documents. Discuss the purpose of tests and test item formats. Distribute Exhibits # 3, 4, 5, and 6. Give students a text of a document (1-2 pages) with purpose identified. Have students, for homework assignments, write 2-3 test items for each of the four formats with assigned values; they should bring these to the second session. In the second session, discuss testing and the development of test items in each format. Critique and discuss students' work. Give students two sets of hypothetical test scores (N=20-30) with acceptable level of performance specified. Assign students to:

1. arrange in descending order
2. create frequency distribution
3. calculate mean, median, percent attaining acceptable performance.
WEEK 9

Distribute Exhibits # 8, 9, 10, and 11 to students. In the third session, discuss how to organize and calculate test scores. Discuss and critique class work. Integrate test scores students worked with.

Graphics -- charts, graphs, illustrations
Present a review of typography and forms design guidelines: typeface, leading, layout, captions, printing constraints, etc.

Writing workshops for rewriting projects
Groups assess audience for documents. Show how they have verified content for documents and content they have gathered. Use checklists to analyze original documents. Present plans for rewriting.

WEEK 10

Writing workshops for projects
Small groups review working drafts of documents. Use peer review of working drafts to check organization and language. If students are going to create a document, they need not conduct an actual evaluation; instead, for the document that students are rewriting, have students prepare a formal evaluation plan. The plan should:

- describe the sample and size that could be used if the evaluation were actually done
- describe how test scores would be organized and analyzed

A-13
• describe how and what they would expect to learn from the evaluation
• explain and justify the audience-centered method they would use
• describe the performance (by validation) and justify.

If you omit cycle 3, students should then implement the evaluation plan they have developed. The sample size should be tempered to meet the realities of the students' time and resources.

Students should write a report summarizing their evaluation plan, the results, and their conclusions. In this case, distribute Exhibit #1 (See Chapter Seven) to students. Critique and discuss evaluation plans in class and with each student.

WEEK 11

Writing workshops for major project

Determine scope of the task: have teams exchange written answers to planning stage questions. If necessary, have them conduct interviews with key people and bring findings to class for discussion.

Have students write one page descriptions of possible constraints connected with their documents, give copies to other members of class and instructor.

Have students gather content and bring answers to letters of inquiry, results of research, and interviews to class.
Work on selecting relevant information for the audience and purpose, making information useful. Have students submit outlines for peer review and for the instructor. This outline should show how students plan to show the organization to the reader.

WEEK 12

Writing workshops for major project (cont'd.)

Teams work on organization. Have students turn in suggestions to each other and instructor.

Bring working drafts to class. Use checklists to review for clear writing. Review, revise, edit.

Have students prepare a brief evaluation plan with some of the information described in the cycle 2 option.

The sample and size of the sample must be obtainable.

Have students implement their evaluation plans and have them write a brief report discussing the procedures they used, the data they collected, the data analyses, and their conclusions.

WEEK 13

Have students complete the outside evaluation, editing, and review. You may want to meet with individual students or with teams to anticipate problems.

By the end of this week students should have their documents ready for typing. (For a class of 25, you might have 7 or 8 documents to assess.)
WEEK 14

At the beginning of the week, have students bring their documents in for peer review and evaluation. You may wish to rank the new documents, allowing students to establish criteria, based perhaps on checklists. Throughout the final week, the class will complete the work of reviewing and assessing the final projects.
Appendix B

An Example of a Redesigned Form
The “FISAP,”
Before and After

by Joanne Landesman

Look at the forms on pages two and three. Which one would you rather fill out?

The “BEFORE” form, on the left inside page of this issue, is one that postsecondary schools must fill out for the Department of Education (ED) in order to participate in several student financial assistance programs. The form, called the “FISAP” for short, functions both as a fiscal operations report for the previous period and as an application to participate in the program during the next period. It also has two audiences: continuing participants and new applicants. (The form comes in a booklet with instructions, which we do not include here.) The people responsible for this form report that many institutions—even those with professional administrators—have problems filling it out. The “AFTER” form, on the right, is our suggested revision—the result of a workshop exercise.

If you look at both forms again you can easily identify some of the problems with the current form. For example, where's the title? The current form makes very little use of differences in size and weight of type, so it is difficult to pick out the title. In fact, the title is very long and is not the first thing you see at the top of the page—nor does it sit by itself on an entire line. It takes up several lines in a box that has several smaller boxes to the right of it.

In a workshop that the Document Design Center developed for the Office of Student Financial Assistance (OSFA), we and OSFA staff examined the FISAP together. Our linguists, writers, and graphic designers wrote a manual for the workshop that was geared specifically to OSFA forms. In the workshop, we taught principles of graphic design and clear writing, using OSFA documents as working models. The OSFA participants then used these principles to criticize their own forms and suggest improvements.

The “AFTER” form is our suggested revision, based on ideas that OSFA staff had during the workshop. The Department of Education has not officially or unofficially adopted our suggestions.

BEFORE The original form is visually confusing; there is no pattern of lines to draw the reader's eye in a given direction. The numbered items begin at different points across the page, so the reader must read across the page to discover where a numbered item begins. It is difficult to find the title, because there are no graphic cues that make it stand out. Extraneous lines and boxes within boxes add to the confusion. Instructions on where to send the completed form appear near the beginning.

AFTER The revised form uses the principle of a grid which visually divides the page into sections. This helps the eye move naturally down the page. All of the numbered headings begin at the far left margin, where the eye would naturally go in the normal left-to-right progression of reading English. The title is on the top of the page, in boldface type, so that it is the
FISCAL OPERATIONS REPORT FOR THE 1979-80 AWARD PERIOD (July 1, 1979-June 30, 1980) AND APPLICATION TO PARTICIPATE July 1, 1981 through June 30, 1982 - NATIONAL DIRECT STUDENT LOAN, SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS AND COLLEGE WORK-STUDY PROGRAMS

GENERAL INFORMATION (SEE INSTRUCTIONS)

ELIGIBILITY

(TO BE COMPLETED BY NONPARTICIPANTS IN THE 12 MONTHS ENDING JUNE 30, 1981)

3. HAVE YOU RECEIVED NOTIFICATION FROM THE DIVISION OF ELIGIBILITY AND AGENCY EVALUATION OF THE DEPARTMENT OF EDUCATION OF YOUR ELIGIBILITY TO PARTICIPATE IN THESE PROGRAMS? □ Yes □ No

IN ORDER TO BE ASSURED OF CONSIDERATION, YOU MUST FILE YOUR APPLICATION AND MUST ESTABLISH ELIGIBILITY BY OCT. 31, 1980.

MAINTENANCE OF EFFORT

(SEE INSTRUCTIONS FOR TYPES OF FINANCIAL AID TO BE INCLUDED)

MAINTENANCE OF EFFORT

(JOB LOCATION AND DEVELOPMENT PROGRAMS)

INSTITUTIONS WHICH OPERATED A JOB LOCATION AND DEVELOPMENT PROGRAM AUTHORIZED FOR THE 1979-80 AWARD PERIOD COMPLETE THIS BLOCK

INSTITUTIONS WHICH ARE OPERATING A JOB LOCATION AND DEVELOPMENT PROGRAM FOR THE FIRST TIME AND USING CWS FUNDS RECEIVED IN THE 1980-81 AWARD PERIOD COMPLETE THESE BLOCKS ACCORDING TO INSTRUCTIONS

INSTITUTIONAL EXPENDITURES FOR THE TWELVE MONTHS ENDING JUNE 30, 1980

$...

INSTITUTIONAL EXPENDITURES

$...

$...

TOTAL

$...

3-YEAR AVERAGE

$...

ED FORM 646 (9/79) Replaces OE Form 646 (9/79) which is obsolete

Simply Stated 15

March 1981
## Fiscal Operations Report
For the 1979-80 Award Period (July 1, 1979-June 30, 1980)

### Application to Participate
(July 1, 1981-June 30, 1982)

**NSDL • SEOGP • CWSP**

### 1. Name of Institution

<table>
<thead>
<tr>
<th>Serial No. (CSGB)</th>
<th>Entity No.</th>
</tr>
</thead>
</table>

**Address** (Include Zip Code)

**Previous Name of Institution**

(If changed during the year)

**Previous Address**

### 2. Institution

#### A. Control

|-----------|-----------------------|---------------|

#### B. Is your institution designated as an "area vocational/technical school"?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

### 3. Duration/Type of Instructional Program

(Select the highest code number that applies)

<table>
<thead>
<tr>
<th>1. Less than one year</th>
<th>2. One year but less than two years</th>
<th>3. Two years but less than three years</th>
<th>4. Three years but less than four years</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Four years (bachelor's degree only)</td>
<td>6. Five years or more</td>
<td>7. Post bachelor's degree only</td>
<td></td>
</tr>
</tbody>
</table>

### 4. Participation

#### A. Did your school participate in any of the National Direct Student Loan, College Work-Study or Supplemental Educational Opportunity Grant Programs in the 12 months ending June 30, 1980?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

#### B. If you check "Yes", do not answer question 5.

### 5. Eligibility

(If you answer this question, do not answer questions 6 and 7.)

#### A. Has the Department of Education's Division of Eligibility and Agency Evaluation notified you that you are eligible to participate in those programs?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

#### B. Is your school participating in any of those programs this year (the 12 months ending June 30, 1981,)?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

#### C. If you answer "No" to both A and B, you must answer questions 6 and 7.

### 6. Financial Aid Expenditures

(See instructions for types of financial aid to be included)

**Answer A at B**

#### A. If your school participated in CWSP or SEOGP in 1979-80, what did it spend for scholarships and student aid from July 1, 1979-June 30, 1980?

<table>
<thead>
<tr>
<th>12 months ending 6/30/79?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 months ending 6/30/80?</td>
<td>3 Year</td>
</tr>
<tr>
<td>Average</td>
<td></td>
</tr>
</tbody>
</table>

#### B. If your school received CWSP or SEOGP Awards for the first time in 1980-81, what did it spend for scholarships and student aid for the

<table>
<thead>
<tr>
<th>12 months ending 6/30/79?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 months ending 6/30/80?</td>
<td>3 Year</td>
</tr>
<tr>
<td>Average</td>
<td></td>
</tr>
</tbody>
</table>

### 7. Job Location and Development Program

**Answer A at B**

#### A. If your school operated a job location and development program and used CWS funds that were authorized for the 1979-80 Award Period, what did it spend for the 12 months ending June 30, 1980?

<table>
<thead>
<tr>
<th>12 months ending 6/30/79?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 months ending 6/30/80?</td>
<td>3 Year</td>
</tr>
<tr>
<td>Average</td>
<td></td>
</tr>
</tbody>
</table>

#### B. If your school is operating a job location and development program for the first time and is using CWS funds that it received in the 1980-81 Award Period, what did it spend for the

<table>
<thead>
<tr>
<th>12 months ending 6/30/79?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 months ending 6/30/80?</td>
<td>3 Year</td>
</tr>
<tr>
<td>Average</td>
<td></td>
</tr>
</tbody>
</table>

### 8. College Work-Study Program – Waiver Request for "Developing Institutions"

Do you want to apply as a "Developing Institution" under Title III of the Higher Education Act of 1965 (as amended) for a partial waiver of the non-federal share of CWS Compensation to Students during the 12 month period ending June 30, 1982? (See instructions)

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

### 9. College Work-Study Program – Waiver Request on the Basis of Parents' Income

Do you want to apply for a partial waiver of the non-federal share of the CWS Compensation to Students during the 12 month period ending June 30, 1982? (You may do so if at least 50% of the students who are enrolled half time or more during the 12 months ending June 30, 1981 have parents whose annual adjusted income does not exceed $7,500 per year.)

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

Complete the appropriate parts of this form and RETURN THE

**ORIGINAL AND ONE COPY, postmarked no later than 10/31/80 to:**

U.S. Department of Education
Office of Student Financial Assistance
Division of Program Operations
Campus and State Grants Branch
RRO No. 3 - Room 4217
Washington, D.C. 20202

March 1981
first thing the reader sees. We have eliminated the boxes and made the mailing address and deadline date the last item on the form, set apart by size and weight of type.

BEFORE There is almost no variation in the size or weight of type. This makes it difficult to pick out important words or phrases or to locate items of interest. Everything is in uppercase type (all capitals). Research has shown that a combination of upper and lowercase type is easier to read, because lowercase letters have distinct outlines that are more readily recognizable. Using all uppercase letters slows reading time by about 15% and takes up about 30% more space than upper and lowercase letters.

AFTER We have printed the name of each item in boldface type two points larger than the type we used in the main text. The numbers in front of each title are large and bold. This makes it easy to identify the separate items. We used a combination of upper and lowercase type throughout the form.

BEFORE Some of the items are confusing because they have no context. For example, item 1 has a space labelled “Control,” but the user must look in the instructions to know what “Control” means and what would be a suitable response. Item 2 presents the same problem.

AFTER We have incorporated some of the instructions into the text of the form. For items 2 and 3 on the new form, all the user must do is to check a box. It is no longer necessary to go to the instructions just to find out what the item refers to.

BEFORE Items that ask for the same kind of information are not written in parallel language. Items 3, 16, 17, and 18 use different structures, even though they are really all “yes/no” questions. Item 3 asks a question and provides two boxes for “yes” and “no” answers. Item 16 is a statement. The user must check the box if the negative statement is true. Items 17 and 18 are imperatives that tell the user to check a box for a positive response. This is very confusing and can lead to errors.

AFTER We have rewritten these items in parallel language. On our revised form, these are now items 5, 4, 8, and 9. Each asks a simple question and has two boxes, one for a “yes” response and one for a “no” response.

BEFORE The form does not create logical “pathways” for the two groups of users, and this increases the burden for both groups. The burden that the form imposes appears even greater than it is, because there are eighteen separate items.

AFTER By reorganizing, we have reduced the burden—both real and apparent—that the form imposes on the user. We have made the old item 16 into the new item 4A and made explicit—as 4B—the question that is implicit in the parenthetical instruction to question 3 on the old form. These changes create separate “pathways” through the form for the two groups of users. The directions we have added in the new items 4, 5, 6, and 7 reinforce the “pathways.” We have also grouped together related items to create a smaller number of items that are divided into parts. With only nine items to complete, the form appears—and is—more manageable.

The “AFTER” form is, of course, a working draft. A form’s final test is in the field.
Appendix C
Exercises for Writing Clearly
Exercise 6.1

Instructions:
Rewrite this section using personal pronouns. Make the text as clear as you can.

Text:
Privacy Act 16.5(3).*

(3) Parents of minors and legal guardians. An individual acting as the parent of a minor or the legal guardian of the individual to whom a record pertains shall establish his or her personal identity in the same manner prescribed in either paragraph (d) (1) or (2) of this section. In addition, such other individual shall establish his or her representative capacity of parent or legal guardian. In the case of the parent of a minor, the proof of identity shall be a certified or authenticated copy of the minor's birth certificate. In the case of a legal guardian of an individual who has been declared incompetent due to physical or mental incapacity or age by a court of competent jurisdiction, the proof of identity shall be a certified or authenticated copy of the court's order.

* (d) (1) and (2) list the documents by which an individual can establish proof of identity.
Exercise 6.2

Circle the correct letter -- A for active or P for passive -- next to each sentence. On the bottom of this sheet, rewrite the passive sentences into active sentences.

1. If this note is secured by a motor vehicle, boat or aircraft, property insurance on the collateral is required. (A P)

2. An insured person or covered dependent shall be entitled to Maternity Benefits only under the High Option Plan. (A P)

3. Written notice of any sickness or injury upon which claim may be based must be given to the Agency within twenty days after the date charges are incurred. (A P)

4. A station may be used or operated anywhere in the United States. (A P)

5. The forms were available from the Office of Management and Budget. (A P)

6. The Director of the Office of Development may be standing by the County Medical Examiner. (A P)

7. This drug may only be prescribed by a medical doctor. (A P)

8. Dear Parent or Guardian:

   ... If at any time medication (including aspirin and other products) is to be administered to your child, the medication must be accompanied by a signed order from the physician. (A P)
Exercise 6.3

Cross out unnecessary words. Underline words that could be simplified and write in a new word above the old one.

1. Pursuant to the provisions of law stated in the aforementioned section, the Metropolitan Police Department is hereby authorized and directed to conduct a full and complete search of the premises. The Commissioner shall prepare a full and complete report on such search.

2. Any and all persons operating motor vehicles of any type and kind whatsoever in the District of Columbia shall obtain liability insurance.

3. Each and every marriage between persons under the age of 16 years is null and void. Said marriage shall have no force and effect.

4. In addition to the duties and powers enumerated elsewhere the Commissioner shall have the power to promulgate rules consistent with this legislation to effectuate its purpose.
Exercise 6.4

Underline the misplaced phrases and rewrite the sentences.

1. (a) The Secretary may issue in accordance with the provisions of section 553 of Title 5 including an opportunity for informal oral presentation, regulations for the safe transportation in commerce of hazardous materials.

2. In the case of a disaster at the Governor's request, the President may declare the State a disaster area.

3. All employees . . . shall submit to the Director of Personnel within 30 days after their entrance on duty a confidential statement of employment and financial interests on Form . . .
Exercise 6.5

A. Shorten each of these sentences without changing the meaning:

1. This will inform you that your eligibility for medical assistance will expire on ___________.

2. It is possible for you to apply for a Basic Grant by completing any of the following five forms . . .

B. First cross out all duplicate wording; then rewrite these sentences as simply and clearly as possible.

1. The findings and determinations hereinafter set forth are supplementary and in addition to the findings and determinations previously made in connection with the issuance of the aforesaid order and of the previously issued amendments thereto; and all of the said previous findings and determinations are hereby ratified and affirmed, except insofar as such findings and determinations may be in conflict with the findings and determinations set forth herein.
2. The failure of Landlord to insist in any one or more instances upon a strict performance of any of the covenants of this lease or of the rules and regulations or to exercise any option herein contained shall not be construed as a waiver or relinquishment for the future of such covenant, rule, regulation or option, but the same shall continue and remain in full force and effect.
Exercise 6.6

Make lists with parallel structure for these paragraphs.

1. TERMS AND CONDITIONS OF CONTRACT -- The Tenant agrees to and as follows . . .

   11. Upon vacating, to pay for all utilities services due and have same discontinued; to see that the property is swept out and all trash or other refuse is removed from the premises; that the doors and windows are properly locked or fastened; and that the key is returned to the Landlord or Agent.

   (continued on the next page)
Exercise 6.6, page 2

2. ABC bus company needs more drivers. You can apply if you are

- over 21 and under 65 and a resident of the state of Maryland
- you must have a valid driver's license
- no points against your license for the last three years
- be willing to work flexible hours.

To apply,

- come in person to the ABC office, 123 Main St.
- you will be required to have a medical certificate before beginning work
- you can get an application by calling 135-2486
- mail your application to Office of Personnel, ABC Co., 123 Main St.
Exercise 6.7: Rewrite in the positive.

1. It is not necessary to delay filing the FAF until the 1978 U.S. income tax return is filed.

2. In no event shall original records of the Department be made available to the individual except under the immediate supervision of the Privacy Act Officer or his designee.

3. This policy shall not be valid unless countersigned by our authorized representative.
Exercise 6.8

Identify by name the features you want to change in these examples. Rewrite the sentences so that they are simpler and clearer.

1. There are four major characteristics that influence consumer information seeking and utilization behavior.

2. This is a request for public comment on a proposal for an industry self-regulated voluntary information labeling program.

3. The government's investigation into the methodologies used by the evaluators in the program survey analysis was met by their refusal in regard to an examination of their documentation.
Exercise 6.8, page 2

4. Nonbusiness Federal Welfare Recipient Employment Incentive expenses incurred by the taxpayer are limited to $5,000 per employee.

5. Students receiving Basic Grants based on incorrect information submitted on the application will have to repay any funds received.

6. The new system of deductions will simplify income eligibility calculations, thus reducing the risk of caseworker errors.
Exercise 6.9

Find the faults in this sentence. Write a sentence (or sentences) with the same meaning, but without these faults.

The amount determined payable pursuant to the decision, less any portion already paid, normally should be paid without awaiting contractor action concerning appeal.

passive verb _____________________________

words you want to change ___________________

noun used as adjective _____________________________

Rewrite: _____________________________

______________________________

______________________________
Exercise 6.10

This paragraph is part of the introduction in a booklet that is addressed to parents and students who want to know how the agency determines how much money a student gets under this program. Do you think that this is as clearly written as it could be for the purpose and audience?

List the faults that you find in this paragraph. Rewrite it so that it is simpler and clearer.

However, since the entitlement nature of the Program requires that all students be treated in a consistent manner on a National basis, a formula has been developed by the Office of Education and approved by Congress which is applied to all students in the same way. Because of the requirement for consistent treatment, there can be no individual discretion exercised to take into account special circumstances of students or their families. Due to the formula nature of the Program, once the eligibility index has been computed based on correct information, discretionary judgment cannot be used to accommodate the special circumstances of any one family.

passive verbs
noun strings
unnecessary words
nominalizations
difficult words
other problems

rewrite: